

# The Core: Entry-Level Massage Education Blueprint

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December 18, 2013

## Statement of Coalition of National Massage Therapy Organizations

"We believe that the efforts of work group members have resulted in an extraordinary, ground-breaking body of work. Their Blueprint, and the underlying process described in the report, gains strength from its intellectual integrity and independence."

The "Coalition of National Massage Therapy Organizations" comprises seven organizations listed at the end of this statement. Our organizations play different roles, each contributing to the betterment of the massage therapy profession while also educating the public about benefits of professional massage therapy. We share a national focus: each of the seven organizations has members or constituents throughout the United States. Each of us seeks a thriving massage therapy profession that enhances the health and well-being of clients throughout the United States. We also share a desire to help our profession beyond serving each organization's self-interest.

Our Coalition initially convened in 2011 to identify and address opportunities to advance the massage therapy profession. Two senior leaders from each organization participated in that initial meeting and three subsequent meetings.

## **Consistency and Portability**

In a healthy profession, effective improvement requires candor in acknowledging current imperfections. When our group of organizations initially assembled, we began by naming and prioritizing profession challenges that required attention. Emerging at the top of the list were two concerns:

- inconsistent quality, depth and focus of entry-level massage therapy education; and
- lack of licensure portability (professional mobility).

Why these two? Numerous participants referenced observed knowledge and skill deficits among many recent school graduates and expressed concern that a resulting potential increase in inconsistent quality massage experiences could dull public enthusiasm for seeking massage therapy. Uncertainty about education quality and how to evaluate transcripts from unfamiliar schools, combined with inconsistent entry-level examinations utilized by different states, impairs state massage board confidence about approving licenses for practitioners moving to a new residence state.

#### **Identifying Entry-Level Skills and Knowledge**

A preliminary proposal advanced at that meeting was refined by participating organizations over the following six months. The objective: identify and gain agreement on what should be core elements of entry-level massage therapy instructional programs – the

knowledge and skills an entrant to the profession should possess to be ready to work safely and competently with clients.

The proposal recommended formation of a seven-person work group composed of massage content experts and two individuals holding credentials in education and instructional design. Each Coalition member had an opportunity to recommend participants and to listen and offer comments during the March 2012 selection process. The aim was to bring together a group possessing objectivity and judgment alongside specific classroom instruction, curriculum development, instructional design, and assessment expertise. A clear instruction to the group was to approach their work with impartiality and integrity, to arrive at sound, research-informed conclusions unconstrained by precedent or political acceptability.

The project was initially estimated to require slightly over one year. As it evolved, participants quickly realized that more time would be required to do the job thoroughly. In the end, it proved to be a 21-month endeavor.

It is our belief that the resulting work product, combined with engagement and courage by leaders throughout the profession, can assist substantially over the next several years in alleviating both entry-level education quality and professional mobility concerns.

The project was titled *Entry-Level Analysis Project* (ELAP). If that title fails to sing, it does accurately identify the project focus. The ELAP process illuminated some predictable strengths in massage education, but also some wide-ranging knowledge and skill gaps. We can't be certain how these skill gaps formed, but we can speculate that educational programs leave out certain subjects, address others in inadequate depth, fail to reinforce particular desirable behaviors, or dilute essential learning with too much focus on other topics.

With such gaps and inconsistencies, exacerbated by frequently vague state education requirements and equally vague education content descriptions on school transcripts, further compounded by diverse profession entry testing options, it is no wonder that some state licensing boards are cautious about licensure portability.

Such education inconsistency frankly also causes some other health care professions to look at massage therapy with a skeptical eye, and to be hesitant about referring patients to massage therapists. Getting to a place where every newly trained massage therapist has completed education in agreed-upon core knowledge and skill development, thereby being positioned to be able to reliably deliver a quality basic massage, can potentially increase confidence among other health care providers. Our profession thrives when primary care

providers recognize the power of evidence-informed massage therapy for the treatment of pain, stress, and other common problems.

## The ELAP Work Group

The Core: Entry-Level Massage Education Blueprint is the product of the seven work group members – Pat Archer, Clint Chandler, Rick Garbowski, Tom Lochhaas, Jim O'Hara, Cynthia Ribeiro, and Anne Williams. While other individuals potentially could also have been constructive work group contributors, we are confident the final group of seven chosen individuals has superbly represented the interests of the massage profession.

The work group was asked to consider a multitude of previously completed massage and bodywork studies and reports, but to aim at constructing from the ground up what they believe should be the fundamental building blocks within every entry-level massage therapy instructional program. Existing studies did contain useful nuggets, however, what is known about learning and delivery means has changed in the interim and, equally important, the kinds of learners populating massage classrooms have changed.

Work group members also reached out to all interested members of the profession for input. They commissioned fresh research to learn practitioner, instructor and employer perspectives. Then, about two-thirds of the way through the project, they provided an opportunity for public comment about which learning objectives and activities should be embraced within core education. That public commentary significantly informed the final product. Where the work group judgment differed from majority perspectives, the work group has clearly articulated those differences and provided a compelling rationale for their choices in the *Project Report* document.

Integrating all this input into the group's work proved a massive undertaking.

#### **Coalition Support**

The group's work was funded by several of the Coalition organizations, but the work group worked independently and arrived at its conclusions independently, with no steering from Coalition organizations. The final report contains a highly comprehensive, detailed education blueprint that provides guidance on essential knowledge and skill components and the depth to which they should be taught. With so much detail, opportunities for divergent views certainly arise. Representatives from our seven organizations indeed may differ on several particulars. As such, neither the Coalition nor its constituent organizations, endorse every specific recommended sub-topic, activity, or proposed weighting in the report.

Those differences aside, we all heartily support the message of *The Core: Entry-Level Massage Education Blueprint* and its companion document *The Core: Entry-Level Analysis Project Report.* We believe the work group processes have been thorough, inclusive, intellectually honest, and defensible. Their instructional design approaches are solidly grounded. Their development of a tailored, innovative learning taxonomy is potentially an important gift to vocational education.

The work group agreed to clear parameters to guide their work. Following initial Coalition guidance, they put aside attachment to any particular philosophies or products to focus on outputs that reflected data findings, feedback from the profession, and the best interests of massage clients.

The Coalition specifically supports important work group choices to include in basic instruction for all massage therapists not only assessment protocols, but also the development of skills necessary to "choose appropriate massage and bodywork application methods to benefit [each] client's unique health picture."

The Coalition also commends the work group for its inclusive bridging approach, in response to profession feedback on the initial draft, to long-standing profession differences about techniques, approaches and language with reference to application methods. Rather than choose between Western and Eastern approaches and vocabulary, or among diverse styles and forms, the work group usefully has organized its recommended content around approaching "application methods and techniques based on ways in which the hands and other anatomical tools ... manipulate ... soft tissue structures."

We believe that the efforts of work group members have resulted in an extraordinary, ground-breaking body of work. Their *Blueprint*, and the underlying process described in the report, gains strength from its intellectual integrity and independence.

#### **Core Outcomes and Instructional Hours Recommendations**

One key focus of the project is to recommend the minimum number of instructional hours schools and proficient educators need to prepare their students for entry into the profession. Instead of attaching a relatively arbitrary number of hours to subjects and topics, the work group approached this task by using data and feedback to define core content first – differentiating foundational learning from advanced theory and practice. It was only in the final month of its endeavors, when the blueprint was complete, that the work group tabulated hours for subjects, topics, and sub-topics by translating learning objectives into recognizable classroom learning experiences as a means to determine timeframes.

That said, the work group's eventual recommendation that approximately 625 classroom hours of capable instruction would be required for students to acquire just core skills and abilities is invigorating. For context, a majority of states with massage regulation (28 of the 45 states including D.C.) now require 500 total education hours; another 7 require between 570 and 600 hours, and 10 require more than 625 hours. Still, the typical distance to be bridged may not be so daunting: a 2012 survey of massage programs revealed that average program length was 697 hours.

The hour estimate is what it is – an honest, objective best estimate by seven instructional design and curriculum experts who thoroughly examined the profession's body of past work in this realm. The elements making up *The Core* were built piece by piece. The 625 hour total represents simply the summing of the instructional hours associated with each of the pieces.

We encourage interested parties to focus less upon the total hours and more on recommended subject matter and subtopics. Indeed, many massage therapy instructional programs already provide more than 625 total education hours. The Coalition recommends that, in addition to meeting the total education hours mandated by individual states, every massage school curriculum include *Core* report recommended subjects, topics and weighting.

This report will require each of the constituent organizations to assess our perspectives on the subject of appropriate education hours. What we do clearly agree upon is that the work group endeavors represent real progress in that its findings are based upon substantive assessment. That is far superior to arbitrary bases and biases that all too frequently have animated past decisions by licensing boards, cities, accrediting bodies, professional associations and others.

#### **Education Costs: Career Impacts**

One other constituency – prospective massage school students – will be impacted should *The Core* gain the breadth of influence we seek. As previously noted, most states now require a minimum of 500 hours of massage instruction to qualify for a license. Adoption of *The Core* would entail a 25% increase in minimum required instructional hours, which will likely translate into more tuition dollars for students.

It is important to note that today 40% - 50% of massage school graduates exit the field within 24 months after graduation. Many factors contribute to this result, including unrealistic expectations about the physical demands of massage work, compensation realities, and evolving life circumstances for 20-somethings. Implementing *The Core* won't cause all attrition from the field to cease, but, by providing a sound knowledge and skill

foundation, a more functional curriculum should materially help to lessen the proportion of massage school graduates having to write off the cost of their massage education just a year or two out from graduation. We believe that use of *The Core* has the potential to lengthen and strengthen the careers of new massage school graduates; that is a cost benefit that will outweigh any increase in tuition from a 500-hour program.

### The Importance of Diversity

It is vital to understand what *The Core* is **not** – it is not a complete massage school curriculum. The contents of this report are seen as the core – the foundational knowledge and skills every beginning massage therapist should possess – that should be *part* of every entry-level massage instructional program, but not the *entirety*. The massage and bodywork profession benefits from diversity in program points of emphasis and features. Diversity and innovation are profession strengths. While we believe that a student completing an instructional program containing just the recommended core elements would be ready to begin practice, we encourage individual schools to add program elements that reflect each school's expertise and philosophy, or to provide greater instructional depth in selected subject areas.

Indeed, the recommended hours allocated to the practice of essential massage and bodywork application methods are independent of any specific modality. The work group listened to profession feedback that insisted that one form of hands-on work is not superior to others. Instead, the defining feature of massage and bodywork is therapeutic, structured touch, regardless of the system through which it is applied. This is a significant departure from previous thinking in our profession, one that builds on valuable diversity and exploration in education.

#### What's Next?

The Coalition believes use of *The Core* will elevate instruction, because it presents clear learning objectives and guidelines. Relatively inexperienced instructors will especially benefit from an improved road map. However, it is important to understand that the ELAP blueprint and the hours allocated to topics define *minimum* classroom hours. The blueprint places an emphasis on practical, real-world learning appropriate for adult education. It assumes that teachers are competent, that learners have average learning ability, that only the defined content is taught, and that class time is well structured and used efficiently.

Clearly, with these caveats, instructor training needs greater focus. Next steps in our profession should focus on helping massage content experts transition into classrooms with effective strategies to support adult learning.

Our desire is that *The Core: Entry-Level Massage Education Blueprint* will have a positive, transforming impact on the massage therapy profession. Our organizations do not have the power to force the re-modeling of massage therapy instructional programs, but we believe that a movement toward adopting the ELAP standards would be beneficial for both massage therapists and massage therapy consumers.

We aspire to have this report influence several profession audiences:

- the Federation of State Massage Therapy Boards, which can use *The Core* as it builds guidelines for a model practice act;
- state licensing boards, which can use *The Core* in setting education requirements for licensees;
- the Alliance for Massage Therapy Education, which can refer to *The Core* in creating teacher-training standards and curricula;
- the National Certification Board for Therapeutic Massage & Bodywork, which can use *The Core* as it identifies beginning vs. advanced knowledge and skills for its Board Certification credential:
- professional membership organizations, which can use *The Core* in shaping membership criteria;
- the Commission on Massage Therapy Accreditation, which can use *the Core* in evaluating massage and bodywork curricula for programmatic accreditation;
- other accrediting organizations, which can use *The Core* in shaping their accreditation criteria;
- school owners, administrators and faculty, who can use *The Core* to strengthen or validate curricula and to adopt consistent learning outcomes;
- and, potential massage therapy students, as they consider where to enroll.

The Core may also influence publishers and writers in the development of new textbooks and teaching materials; continuing education providers who can develop offerings that build onto Core principles; employers, who will be able to rely on graduates of programs that use The Core to have dependable skills; health care providers, who want to make referrals to consistently well-educated massage therapists, and finally the end-users: massage therapy consumers, who will more reliably be able to get the therapeutic massage they are looking for.

The single most powerful lever for change would be a decision by every state massage therapy licensing board to require license applicants to have completed an education program that includes *The Core*. Pragmatically, such a requirement could neither be retroactive nor immediate. Time would be required for schools to implement the new recommendations, for teaching materials to be developed and for creation of a method to identify which programs have implemented *The Core*.

The heavy lifting – identifying and prioritizing the key needed knowledge and skills – is done. However, *The Core* relies upon other stakeholders in the profession to take important next steps.

Experience matters. Committed massage therapy professionals develop advanced skills from working with diverse clients, but this is only possible with a good start in the profession – and that requires a fundamentally sound core education. *The Core* provides a persuasive, comprehensive road map, available for all to use: a gift to the profession. Let us individually and collectively seize this profession improvement opportunity.

## Coalition of National Massage Therapy Organizations:

Alliance for Massage Therapy Education
American Massage Therapy Association
Associated Bodywork & Massage Professionals
Commission on Massage Therapy Accreditation
Federation of State Massage Therapy Boards
Massage Therapy Foundation
National Certification Board for Therapeutic Massage & Bodywork

# **Entry-Level Massage Education Blueprint**

**Total Hours: 625** 

Please note that the hours tabulated for each topic and subject are based on minimum classroom learning hours. The addition of 10 minutes of break time for every hour of lecture time has been added to all lecture hours. The addition of time for set-up, change-over, and cleanup has also been added to activities, demonstrations, and exchanges. Please use Appendix C (Hours Rationale) in the Entry-Level Analysis Project Report for additional information.

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**Note:** Schools can choose to integrate application methods using a Western or Eastern approach or an approach based on their philosophy of massage or bodywork (50 hours total). The ELAP Work Group recommends Swedish massage, myofascial approaches, and neuromuscular approaches because profession stakeholder survey results indicate that these forms are those most widely practiced and valued by professional massage therapists. Swedish massage and "deep tissue" (which incorporates methods from myofascial and neuromuscular approaches) are the forms most widely requested by consumers.

Sample Forms: 50 hours total

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The Entry-Level Analysis Project (ELAP) Entry-Level Massage Education Blueprint (Blueprint) outlines the suggested learning outcomes and learning objectives all people becoming professional massage therapists should achieve, regardless of specialization, to ensure they can work safely and competently in their careers. Created by the ELAP Work Group, the Blueprint also informs the Work Group's recommended total number of minimum hours of entry-level education.

The Blueprint may prove a useful starting place for schools that wish to evaluate and evolve their curricula. The strong instructional design that underlies the Blueprint illuminates how people learn to support instructor best practices in the development of classroom activities, written materials, and educational experiences. The data-informed recommendations for key terms and concepts, hands-on skills, and effective and appropriate language and behaviors; the proper educational scaffolding illuminated by progressive learning objectives; the examples of educational experiences used to tabulate hours; and the organization of information based on increasing levels of knowledge and skill complexity support exceptional curriculum design, content development, and teaching.

Nevertheless, the Blueprint is not meant to mandate specific classroom activities. Rather, it is a model of the essential foundations of massage and bodywork learning. Each school has a unique philosophy that allows it to differentiate itself for prospective learners in the marketplace. Schools are encouraged to teach additional hours and learning objectives in topics outlined by the Blueprint or in other topics based on their individual goals for their graduates.

This introduction explains the terminology and instructional design that underlies the Blueprint's structure and the organization of subjects, topics, and sub-topics to support stakeholder use of the document.

# **Terminology**

- Affective (Feeling) Domain: Learning related to attitudes, values, and motivations established through self-awareness, self-exploration, opportunities to develop new ways to respond, effective role modeling, and classroom experiences.
- **Cognitive (Knowledge) Domain**: Learning related to the acquisition of information, understanding, and mental skills from participation in educational experiences.
- **Competent:** A therapist who performs his or her job properly.
- **Education theory:** Ideas about how to structure learning experiences to facilitate learning.
- **Entry-level education:** Education that prepares a person to enter a profession and continue to develop knowledge and skill through experience.
- Entry-Level Massage Education Blueprint: An outline of suggested learning outcomes and learning objectives all massage therapist students should achieve, regardless of specialization, to ensure they can work safely and competently in their careers.
- **Instructional design**: The process of planning learning experiences to make the acquisition of knowledge and skills more efficient, effective, and appealing.
- Interpersonal (Relating) Domain: Learning related to the development of skills necessary to initiate, maintain, and manage positive relationships with a range of people in a variety of contexts.
- **Learner:** A person who is learning; a student, pupil, apprentice, or trainee.
- **Learning domain:** A defined area or category of learning (cognitive, psychomotor, affective, and interpersonal).
- Learning experiences: Planned educational events or activities in which a learner experiences something that results in a change in his or her thinking, understanding, skills, values, or behaviors.
- **Learning objective:** A focused statement in specific and measurable terms that describes what a learner will know or be able to do as a result of a learning experience.
- **Learning outcome:** A broad statement in specific and measurable terms that describes expected learner integration of knowledge and skills resulting from multiple learning experiences or classes.
- Learning theory: Ideas about how people take in, process, store, recall, and apply information.
- Lesson plan: An instructor's detailed description of content and instructional strategies for one class.
- Psychomotor (Skills) Domain: Learning related to the development of well-coordinated physical
  activity, including the use of effective and professional language and behaviors as a result of
  training, hands-on learning experiences, and practice.
- **Safe Therapist:** In this document, a safe therapist is one who participates in behaviors that protect the health and well-being of clients and self.

# **Instructional Design Basics**

Instructional design (also called instructional systems design) is the process of planning learning experiences that make the acquisition of knowledge and skills more efficient, effective, and appealing. A number of models exist based on various learning and education theories, including Merrill's First Principles of Instruction, the ADDIE Model, the Dick and Carey Systems Approach Model, Kemp's Instructional Design Model, and many more. Usually models outline the steps in a design process based on the learning or education theory undergirding the model. For example, the commonly used ADDIE Model uses these phases:

- Analyze: The instructional designer analyzes the environments in which learning occurs (e.g., brick and mortar classrooms deliver content differently from online environments, etc.), the characteristics of the learners (e.g., generation Y learners learn differently from baby boomer learners, etc.), and the desired outcomes of the learning process (e.g., if the learning is used to prepare a person for a particular career, what knowledge, skills, and attitudes does the learner need to be successful?).
- 2. **Design:** In the design phase, point A and point B of the class, unit, module, course, or program are described. For example, the ELAP group defined point A as a person with a desire to become a massage or bodywork therapist who enrolls in a massage or bodywork training program. Point B is a massage therapist ready to enter the profession and work safely and competently. With points A and B defined, the instructional design team outlines the subjects, topics, and subtopics that comprise the learning areas and writes learning outcomes and objectives to show the step-by-step progression of the learner through the educational process.
- 3. **Develop:** In the development phase, the instructional design team plans learner assessments and outlines learning experiences such as lectures, demonstrations, discussions, projects, and homework assignments. Sometimes these take the form of lesson plans, and materials are developed (e.g., lecture notes) and provided to instructors. Sometimes, instructors are given a lesson plan but develop their own teaching materials. Classroom activities should lead to learner acquisition of the defined learning objectives and outcomes.
- 4. **Implement**: Using developed materials such as a lesson plan, instructors employ a variety of teaching methods to teach the learners the identified knowledge and skills.
- Evaluate: The progress of learners and their ability to demonstrate achievement of the defined outcomes is assessed to measure the effectiveness of the learning experience and the instructional design. The class, unit, model, course, or program is revised when weakness is detected.

The ELAP Work Group selected best practices and methods from a number of instructional design models, learning theories, and current strategies for adult education. They conducted an extensive process to gather information from consumers, employers, educators, and professionals in order to

identify essential knowledge and skill components for safe and competent entry-level education (review the ELAP Final Report for details). They outlined the subjects, topics, and sub-topics that comprise core learning in massage therapy, and wrote learning outcomes and objectives at progressively complex levels to move learners effectively from point A to point B in a model educational blueprint. Finally, they translated learning objectives into learning experiences with defined timeframes. The most significant instructional design elements of the ELAP Blueprint are the ELAP Learning Taxonomy, the use of formal learning outcomes and objectives, and the descriptions of learning experiences and timeframes in the ELAP Hours Rationale document (Appendix C in the Report).

# The ELAP Learning Taxonomy

A learning taxonomy is a model that classifies learning in progressively complex levels. The structure of the Blueprint is based on the ELAP Learning Taxonomy. Most educators are familiar with Bloom's Taxonomy, which outlines six levels of cognitive learning. A number of other education researchers have also developed learning taxonomies in one or more of the four learning domains:

- The Cognitive (Knowledge) Domain: The cognitive domain describes the levels of learning in the acquisition of information, understanding, and mental skills that come from participation in educational experiences.
- The Psychomotor (Skills) Domain: The psychomotor domain describes the levels of learning in the development of well-coordinated physical activity, including the use of effective and professional language and behaviors, as a result of training, hands-on learning experiences, and practice.
- The Affective (Feeling) Domain: The affective domain describes the levels of learning related to attitudes, values, and motivations established through self-awareness, self-exploration, opportunities to develop new ways to respond, effective role-modeling, and classroom experiences.
- The Interpersonal (Relating) Domain: The interpersonal domain describes the levels of learning skills that are necessary to initiate, maintain, and manage positive social relationships with a range of people in a variety of contexts.

Research conducted by the ELAP instructional designers to choose among the most widely accepted forms of each of these different learning taxonomies identified a significant problem. Each taxonomy outlines learning in slightly differing levels, and in numbers of levels, making it impossible for the four taxonomies to be integrated and aligned in a unified, effective instructional design model appropriate for massage therapy. For example, Bloom's Taxonomy has six levels in the cognitive domain, while popular psychomotor, affective, and interpersonal taxonomies consist of three to seven levels depending on the author. Furthermore, most taxonomies separate learning into small, fragmented steps, including some that do not apply in all teaching situations or in all disciplines. While of some theoretical value, such taxonomies make it more difficult to match teaching methods to learning

objectives. The ELAP instructional designers took a bold step and built on the work of established educational research to develop a new, unified learning taxonomy that reflects standardized key levels of learning and teaching aligned across the four domains (Figure 1). Because of its coherence, simplicity, and practicality, this new learning taxonomy has the potential to positively influence education beyond massage and bodywork.

FIGURE 1: ELAP LEARNING TAXONOMY

Domains	Cognitive	Psychomotor	Affective	Interpersonal
Level 1 Receive and Respond	Attain and Comprehend	Observe and Imitate	Receive and Respond	Seek and Support
Level 2	Use and	Practice and	Value	Communicate and
Apply	Connect	Refine		Negotiate
Level 3	Choose and Plan	Naturalize	Integrate and	Compromise and
Problem Solve		and Adapt	Internalize	Resolve

Learners learn and master new knowledge and skills in all domains through a process that generally occurs at three levels:

- 1. **Level 1 Receive and Respond:** In the initial stage of learning, learners receive information by attending to the words and actions of the instructor, reading written materials and/or watching or listening to material in other media formats, observing demonstrations of skills, noticing their own feelings and responses to new information, and listening to peer contributions, and then being able to respond in an initially simple way.
  - a. **Cognitive Domain:** In the cognitive domain, learners attain basic terms, facts, and key concepts. They demonstrate learning at this level by recalling information and showing their basic comprehension. Sample learning objectives:
    - i. Define the term *effleurage*.
    - ii. List three physiological effects of effleurage strokes.
  - b. **Psychomotor Domain**: In the psychomotor domain, learners observe the movements, language, and behaviors of instructors. They demonstrate learning at this level by imitating the skills they observe in a simple, mostly rote manner. Sample learning objectives:
    - i. Apply effleurage strokes at three speeds (slow, moderate, and fast).
    - ii. Imitate the language an instructor uses to minimize the power differential with a client during a client interview.

- c. **Affective Domain:** In the affective domain, learners begin to recognize attitudes, feelings, and values appropriate for a massage or bodywork professional. They demonstrate learning at this level by attending classes in a receptive state, being open to new thoughts and feelings, and attending to their own feelings and responses. Sample learning objectives:
  - i. Recognize components of dignity and respect.
  - ii. Outline the elements of trust in a therapeutic relationship.
- d. **Interpersonal Domain:** In the interpersonal domain, learners seek improved relationships with others, are receptive to alternative viewpoints to enhance their understanding of people or situations, and begin to improve their relationship skills. They demonstrate learning at this level by actively listening to instructors and peers and by supporting the ideas and feeling of others. Sample learning objectives:
  - i. Listen carefully to others in order to understand their feelings and points of view.
  - ii. Express one's own ideas willingly, openly, and honestly.
- 2. **Level 2 Apply:** Following the initial stage of learning, learners start to use and apply received information in new ways, to practice and refine their new skills, to refine their values and attitudes in a professional manner, and to build stronger interpersonal relationships with peers and instructors through more effective communication and negotiation skills.
  - a. **Cognitive Domain:** In the cognitive domain, learners now analyze and discuss information, compare and contrast concepts, place ideas into categories or broader contexts, and use the information they have gained in new ways. They demonstrate learning at this level by applying what they know in new situations. Sample learning objectives:
    - i. Compare and contrast the characteristics of therapeutic relationships, social relationships, and dual relationships.
    - ii. Analyze client-therapist scenarios to distinguish between therapist behaviors that demonstrate ethical professional touch and therapist behaviors that demonstrate unethical, unprofessional touch.
  - b. **Psychomotor Domain**: In the psychomotor domain, learners practice and refine their skills based on feedback from instructors and peers. They demonstrate their learning at this level by showing improving skills in practice situations. Sample learning objectives:
    - i. Practice making fluid transitions between different Swedish strokes.
    - ii. Refine one's language skills to determine if deep work is being applied at a comfortable depth for the client.
  - c. Affective Domain: In the affective domain, learners personalize values and attitudes appropriate for the profession; their motivation is enhanced, and they are setting personal goals. They demonstrate their learning at this level by showing willingness to challenge their own assumptions and to personally adopt professional ethics and values. Sample learning objectives:
    - i. Attend to and control one's own emotional state in a challenging situation.
    - ii. Demonstrate respect for all clients and their human dignity.
  - d. **Interpersonal Domain:** In the interpersonal domain, learners communicate honestly and assertively and calmly defend their opinions while being open to new ideas. They

demonstrate learning at this level by negotiating outcomes with others through effective communication and discussion. Sample learning objectives:

- i. Seek feedback from peers and instructors to work through problems.
- ii. Disagree respectfully and openly when one's own views differ from those held by peers and instructors.
- 3. **Level 3 Problem Solve:** At the highest level, learners are progressing with self-confidence to synthesize information and use it to solve problems, develop a personal style, adapt techniques in unique situations, integrate their feelings and understanding to grow on a personal level, and develop an ability to lead and teach others.
  - a. Cognitive Domain: In the cognitive domain, learners evaluate choices, make decisions, plan strategies, defend their choices, self-evaluate, and respectfully comment on the choices of others. They demonstrate learning at this level by identifying or creating solutions, evaluating best practices, and beginning to contribute to new knowledge. Sample learning objectives:
    - i. Hypothesize about one way a client's attitudes, beliefs, and expectations might influence the results of a massage session.
    - ii. Present the results of a 1-hour full-body massage session including findings from the client's health intake process and interview, session planning to sequence body areas, palpation findings during the massage, and client feedback from the session.
  - b. **Psychomotor Domain**: In the psychomotor domain, physical skills now feel natural and learners are developing their own style for techniques. They adapt techniques based on each client's needs and responses. They may develop unique massage strokes or sequencing ideas. They demonstrate their learning at this level by confidently showing professional skills in practice situations. Sample learning objectives:
    - i. Modify massage methods to meet the needs of each client.
    - ii. Coordinate one's body mechanics for effective and efficient application of massage methods.
  - c. **Affective Domain:** In the affective domain, learners internalize their feelings and attitudes about learning and massage therapy such that an integrated positive value system guides their professional behavior. They demonstrate their learning at this level by speaking and behaving in a manner suggesting they have aligned their personality with professional values. Sample learning objectives:
    - i. Respect all individuals and the inherent worth of all clients.
    - ii. Weigh cause-effect outcomes to determine how to act in any situation.
  - d. **Interpersonal Domain:** In the interpersonal domain, learners are willing to compromise with others, resolve issues or conflicts, and facilitate positive interactions with others. They demonstrate their learning at this level with an ability to effectively lead or teach others, including peers and clients. Sample learning objectives:
    - i. Work through differences with another to arrive at an agreement.
    - ii. Effectively lead a client to an understanding of how lifestyle habits may support the benefits of massage.

One of the goals of all learning taxonomies is to guide the structuring of educational experiences in a manner appropriate for how people actually learn. The ELAP Learning Taxonomy helped the Work Group develop learning objectives at progressively complex levels to suggest appropriate learning experiences taught in an effective sequence to improve learner comprehension and skill.

# **Learning Objectives and Learning Outcomes**

Appropriate use of the Blueprint depends on understanding the purpose and educational use of learning objectives and outcomes. Learning objectives and outcomes are the primary way that educators state and communicate to others the knowledge and skills they expect their learners to acquire. Well-constructed learning objectives and outcomes leave little doubt about what a successful learner should know and be able to do at the conclusion of a classroom activity, class, course, or program. They help educators plan effective and meaningful teaching strategies and learning experiences, teach topics to the appropriate depth, develop fair assessments, and organize classes, courses, and programs that provide effective continuity and sequencing for learners.

Learning outcomes and objectives both have three parts:

- 1. **Conditions:** Condition statements describe the circumstances in which learning occurs. They can be general (e.g., *Having completed 20 hours of instruction*, or *having read assigned materials*, etc.) or very specific (e.g., *Having analyzed three client scenarios depicting behaviors that cross therapists' boundaries*, etc.), depending on the particular objective.
- 2. Behaviors: The verb in the objective or outcome specifies what measurable action the learner must take to demonstrate the acquired knowledge, skill, or behavior. Verbs like know, understand, grasp, and appreciate are not used in objectives because they are difficult to measure. For example, how would an educator know if a learner "appreciates" a concept? What exactly does it mean for a learner to "understand" the lymphatic system? Instead, verbs like list, identify, imitate, discuss, analyze, compare, practice, refine, choose, plan and integrate help instructional designers clarify measurable learning.
- 3. **Criteria:** Criteria phrasing in an objective specifies how well the learner must perform the behavior. For example: *Having participated in practice sessions, the learner will demonstrate proper draping methods that are <u>neat, secure, and modest</u>. In some cases, criteria are implied or it is assumed that the learner will perform a skill <i>correctly* or following a prescribed protocol.

In the Blueprint, learning outcomes are defined for each topic. Outcomes describe broad aspects of knowledge, skills, and behaviors expected to be attained over several learning experiences or classes. Outcomes are usually formally assessed, such as through a written examination, practical evaluation, verbal examination, or graded activity. For example: *Having completed 80 hours of instruction and practice in Swedish massage techniques, the learner will effectively perform a full-body Swedish massage* 

demonstrating proper draping, correct application of strokes, smooth transitions, professional client communication, and good body mechanics on a practical evaluation.

Learning objectives are more highly focused statements of intent that describe specific units of knowledge or of a particular skill, rather than broader outcomes. Objectives can typically be accomplished in short time periods, and most can be informally assessed (e.g., instructor observation and feedback rather than a graded activity). For example: *The learner will apply petrissage strokes to the posterior leg.* Many different specific learning objectives add up to the knowledge or skill integrated into a learning outcome.

Well-written learning objectives clarify the extent or depth necessary for acceptable knowledge and skill acquisition. A poorly written learning objective might state, "Know the nerve plexuses of the body." In a massage educational program, such a learning objective might lead an instructor to teach more depth than is reasonable and needed for assuring safe and competent massage practice. Instead, specific learning objectives would be written as "Define the term *nerve plexus*" and "List the four spinal nerve plexuses from memory." Now the instructor better understands how much teaching is required. In class, the instructor will likely define the term, review each of the spinal nerve plexuses briefly, and provide one or two examples that are relevant for massage therapists. For instance, learners might be directed to pay special attention to the brachial plexus because it can be damaged in areas of caution if strokes are applied too forcefully.

Learning objectives in the Blueprint are written at progressively complex levels within the ELAP Learning Taxonomy, again to expedite the most efficient learning. For example, we'll show what progressively complex levels look like in the concept of professionalism. In level 1, learners might participate in a lecture/discussion where behaviors related to professionalism are described one by one so that learners gain a full picture of professional standards. The instructor might check learners' knowledge by asking them to list four behaviors that demonstrate professionalism. Learners who can complete this task have attained the level 1 learning they need to continue progressing. In level 2, learners begin to personalize, explore, apply, use, and connect the terms and concepts from level 1. For example, learners might be asked to discuss how they embody and practice professional behaviors in their own life, or they might be asked to analyze client-therapist scenarios to identify professional or unprofessional behaviors in a massage practice context. Finally, in level 3, learners might be asked to self-evaluate by comparing their own behaviors with established standards of professionalism and identifying their weaknesses in order to set goals for self-improvement. This "scaffolding" of learning objectives is essential for good instructional design and effective teaching. In contrast, if learners were asked to jump right in and evaluate their own behaviors by comparing themselves to standards they have not yet learned and explored, they might rightly feel confused and irritated and disengage from the learning experience.

# **Learning Experiences**

Learning experiences are events or activities in which learners experience something that results in a change in their thinking, understanding, skills, values, or behaviors. Learning experiences are sometimes designed based on the education theory adopted by a school. For example, brain-based learning theory advocates three primary instructional techniques to facilitate learning:

- Relaxed alertness the classroom and learning experiences should be nonthreatening because learner stress is believed to be counterproductive to learning.
- Orchestrated immersion learners should actively participate in realistic, interactive, and multifaceted educational experiences that cover the same information from many vantage points.
- Active processing learners should regularly share their feelings and ideas about learning by processing classroom activities in discussion groups.

Learning experiences in a brain-based learning environment might include stress-reducing warm-up activities, the opportunity to work in peer groups to solve problems, and lots of discussion time. Compare those experiences to the types of learning experiences in a program based on the Lewinian Experiential Learning Model:

- Here-and-now experience Immediate, concrete personal experience is the focal point for learning. Learners explore concepts and skills on their own before any formal teaching takes place, or instead of formal teaching.
- Observation and reflection Learners observe their experiences and reflect on their learning.
   They share data about their experiences with peers.
- **Testing implications of concepts** Learners make conclusions based on their observations and test the implications of concepts in new situations. They plan modifications of their behavior to improve subsequent experiences or outcomes.

Learning experiences in this model are more learner directed, flowing, and exploratory. For example, learners might be asked to explore how to keep a client covered for modesty while exposing the necessary areas for massage. Over time, they would learn draping skills through trial and error experiences. This would not likely involve the "relaxed alertness" of the first model (especially for the classmates acting as clients), but learning objectives could be met in this manner over time.

No single theory fully explains the diversity of human learning or adult learning, so instructional designers draw on many models when planning learning experiences. The Blueprint design suggests learning experiences at each of the three levels of the ELAP Learning Taxonomy to ensure learners are exposed to the right level of challenge as they progress from lower-order to higher-order thinking and skills.

#### **Cognitive Learning Experiences**

As mentioned previously, at level 1 of the ELAP Learning Taxonomy, learners receive information and respond to it in a relatively simple way. Cognitive learning experiences focus on terms, facts, and concepts. Learners might participate in a lecture and ask questions, read assigned material, take notes, and/or complete a basic written activity such as matching terms to their written descriptions, labeling a diagram of a bone, recalling a fact, giving an example, or making a list of items.

A look at the list of terms at the beginning of each topic section in the Blueprint makes it clear that massage therapy students must memorize an enormous number of new words during their training program. Terminology therefore should probably be taught systematically and explicitly. The ability to define key terms or restate information in their own words supports learners as they move into level 2 learning.

In level 2 of the cognitive domain, learning experiences are designed to help learners apply concepts, make connections, anticipate the consequences of particular actions, and approach problems effectively. Discussion is an important activity because it helps learners personalize content and think about its particular relevance and immediate real-life applications. When people discuss issues and concepts, they pay attention and absorb information, process it internally, connect it to previous experience, predict outcomes, and express their ideas to peers. Peer reaction to sharing provides important input that helps shape individual thinking and behaviors.

Written activities and peer work support learners as they identify relevant information, utilize outside data sources, break down complex concepts or models to examine their component parts, and/or brainstorm possible solutions to problems. Learners might analyze client-therapist scenarios to determine effective or ineffective therapist behaviors, or contrast alternative methods or procedures to predict therapeutic outcomes. These activities help prepare learners to move into level 3 learning where they use their knowledge to solve problems.

Level 3 learning experiences support learners as they think critically to choose safe and appropriate massage and bodywork methods and plan sessions with clients. Activities might include simulations in which learners rule out contraindications or plan session adaptions based on analysis of mock client health forms. They might write up session plans to think through the adaptations they might make based on a client's pathology. Sharing plans with peers and receiving feedback, and giving good feedback to peers, supports lateral thinking, self-evaluation, goal setting, and growth.

Note that some material is taught only to level 1, some to level 2, and some up to level 3 depending on the level of learning necessary to ensure safe and competent practice at the entry-level. Level 3 involves moving into a level of mastery that sometimes goes beyond the entry-level as noted in the Blueprint by

the phrase; there are no relevant learning objectives for level 3 of this sub-topic. The learning taxonomy and structure of the Blueprint reflects the whole learning process, but for learners who are just entering practice they don't need to attain mastery in every sub-topic in a foundation program. Level 3 learning in some cases, will happen as the new graduate gains professional experience or takes continuing education classes. Schools teaching longer training programs or advanced programs can add to the Blueprint by writing additional learning objectives at level 3 in some content areas.

#### **Interactive Lecture**

The ELAP Blueprint often utilizes interactive lecture as a primary teaching strategy because it is a time-efficient method for level 1 and level 2 cognitive learning within an effective and meaningful learning experience. Interactive lecture is different from traditional lecture in that it follows a prescriptive formula to teach terms and concepts in a highly structured fashion. Lectures last no longer than 10 minutes and use strong visual aids to help learners create mental constructs of information. Short written activities and small group discussion opportunities are interspersed throughout and between short lectures to increase learner personalization, engagement, and recall.

#### **Psychomotor Learning Experiences**

In level 1 of the psychomotor domain of the ELAP Learning Taxonomy, learners observe instructor demonstrations and imitate client positioning methods, draping skills, massage and bodywork methods, body mechanics, and appropriate and effective professional language and behaviors.

In level 2, learning experiences involve structured practice time in which learners can safely explore variations in strokes, the use of language, and the use of professional behavior, with feedback from an instructor or peers. Role-playing activities help ensure that learners can handle challenging client situations on the fly and put their knowledge of ethics, boundaries, and professional communication to practical use.

At some points in the Blueprint, condition statements indicate that certain learning objectives, especially those related to ethics, be reinforced with "on-the-spot" practice. On-the-spot practice (described in the literature by various names such as "in-context learning," "orchestrated immersion," and "emotional-context learning") is a teaching method that knowingly places learners under some pressure. In many traditional massage programs, it is common practice to keep learners safe and comfortable. They learn about things like dealing with a hostile coworker, responding to a client complaint, or dealing with a sexual boundary-crossing in the calm, supportive environment of their classroom. When they are actually confronted in later practice by a hostile coworker, angry client, or sexual boundary crosser, however, they are often unable to implement an effective protocol in the moment because of the stress created by the situation. On-the-spot practice provides opportunities for learners to decrease the

emotional charge of stressful situations and repeatedly practice effective responses. Following is an example of on-the-spot practice in a massage classroom.

Your learners have completed their training in ethics. They have created scenes demonstrating how to respond to challenging client situations, boundary-crossing behaviors, emotional release, sexual arousal responses, and other relevant scenarios, and all have passed a written examination on ethical terms and concepts. Now they are exploring massage and bodywork application methods in a hands-on practice class. You walk up to a pair of learners and say, "Sarah, I'm going to ask you to pause your practice for a moment and imagine that your exchange partner has just asked you out on a date. I'd like you to demonstrate appropriate and effective language and behavior to decline the date and reestablish the boundaries of a therapeutic relationship—go!" Sarah is now under pressure and may or may not respond appropriately and effectively this first time. However, over time, if you continue to give learners on-the-spot practice situations, she will likely learn to cope with the emotional pressure of the moment and develop automatic and effective methods for dealing with such challenging situations.

As learners continue to practice their skills, strokes, professional language, and appropriate and effective behaviors, they start to feel natural. In level 3, learning experiences provide opportunities for learners to integrate numerous individual skills into fluid wholes. They can now manage a client throughout a session from the greeting, to the health intake process, through the session, to the session close and collection of the payment. Massage and bodywork is now fluid and delivered with a variety of methods that have been chosen or adapted to match the requests of the individual client. Learners are flexible and can modify a plan moment-by-moment during application to address unforeseen client needs. Learners are now ready to participate in the school's student clinic and work with members of the public.

#### **Learning Experiences and Hours**

The ELAP Work Group has outlined learning experiences in Appendix C of the Entry-Level Analysis Report titled, "Hours Rationale". The primary goal was to tabulate the amount of time it takes an average adult learner to achieve the learning objectives and outcomes defined for that topic. Hour recommendations at the topic level, and summed at the subject level, inform the Work Group's final recommendation of minimum education hours.

The ELAP Blueprint suggests the use of interactive lectures, written activities, discussions, peer work, demonstrations, structured hands-on practice time, role-playing, written session planning, and simulations of massage and bodywork sessions as primary methods to move learners from point A to point B. However, other types of learning experiences could easily be substituted for those in the Blueprint in roughly the same time periods. It is important to point out that the ELAP Work Group chose

familiar learning experiences in order to tabulate time and that creative alternatives are encouraged as long as they are practical and appropriate for adult learners.

The ELAP Work Group recognizes that educators hold varying philosophies of education and encourage progressive teaching strategies and unique ways to approach information whenever it makes sense to do so. In the experiential learning example described earlier, an instructor chose to have learners explore safe and modest draping through trial and error rather than by providing a formal demonstration and structured practice. As long as learners have enough practice time to adapt their methods based on previous errors and feedback from peers, it is likely that this instructional strategy would eventually produce safe and competent draping skills. On the other hand, this method of instruction might prove more time consuming than teaching draping more conventionally, and it might feel like a waste of time to adults who tend to be pragmatic learners. Sometimes exploration is useful, and sometimes learners just want to know the best way to do something and then move on.

While progressive and experimental approaches to learning are often valuable, especially as our understanding of adult education evolves, educators must remain practical. We are preparing graduates for a profession, and clients and employers have established expectations. This type of education, and therefore its instructional design, thus tends to be more pragmatic than many broad education models used in K-12 programs. A good rule of thumb is that any learning experience should feel meaningful and relevant to adult learners and meet defined learning objectives in a reasonable timeframe.

#### Homework

Homework is not indicated in the ELAP Blueprint, nor are instructional hours assigned to tasks that might happen outside of the classroom. The ELAP Work Group recommends that schools teach the defined learning objectives during classroom hours and follow the guidelines for homework outlined by Raymond J. Wlodkowski in *Enhancing Adult Motivation to Learn*. In summary, Wlodkowski points out that adult learners in vocational education programs are different from adult learners in university programs and should not be exposed to the same levels of academic rigor related to homework as their university counterparts. Adult learners in vocational programs often work full- or part-time jobs, have children at home, and/or have other family obligations. Research shows that requiring these learners to do more than 1 hour of homework per night leads to higher program attrition levels and lower academic scores. Instead of out-of-class assignments that teach learners new concepts, homework should be used to reinforce classroom learning through review of important terms and concepts and to prepare for written examinations.

# **Abilities in Massage Education**

Abilities is the term used in postsecondary education to refer to learners' preparedness for learning. In the ELAP Blueprint, abilities are defined as natural or acquired information, understanding, and mental and physical skills that enable a person to participate effectively in a massage and bodywork training program, obtain the knowledge and skills presented in the program, and successfully meet the school's requirements for graduation. It is expected that learners' abilities will develop and strengthen over the course of the education program through regular use. Following is an outline of key abilities related to massage therapy and bodywork education.

- 1. **Basic academic abilities**: A person with the basic academic abilities necessary for success in a massage and bodywork training program is able to:
  - a. Read English at a basic 12<sup>th</sup> grade level as defined by the National Assessment of Educational Progress (NAEP). Note that reading levels at each grade are described as basic, proficient, or advanced. Reading aptitude research conducted in 2009 on 12<sup>th</sup> grade students nationally by NAEP reports that only 38% of 12<sup>th</sup> grade students actually achieve reading proficiency for their grade. Descriptions of reading level abilities are described in reading resources available at the NAEP website (www.nces.ed.gov).
  - b. Write English to a basic 9<sup>th</sup> grade level as defined by the NAEP. Note that writing aptitude research conducted in 2009 by the NAEP nationally reports that only 21% of 12th grade students achieve writing proficiency for their grade. Descriptions of writing level abilities are described in writing resources available at the NAEP website (www.nces.ed.gov).
  - c. Complete math computations to a basic 7<sup>th</sup> grade level as defined by the NAEP.
  - d. Use technology at a basic level for postsecondary students as defined by the (NETS).

    Descriptions of technology abilities are described in various resources at www.iste.org.
- 2. **Goal setting:** A person with the goal-setting abilities necessary for success in a massage and bodywork training program is able to:
  - a. Determine his or her personal goals related to school, career, health, family and friends, and finances
  - b. Write long-term, intermediate, and short-term goals based on a goal-writing method (e.g., SMART).
  - c. Identify and list in sequential order the tasks and actions required to achieve goals.
  - d. Troubleshoot obstacles and challenges to goal achievement.
  - e. Track progress in achieving goals.
  - f. Evaluate success or failure and determine next steps.
  - g. Modify goals as interests and understanding changes.

- 3. **Time management:** A person with the time-management abilities necessary for success in a massage and bodywork training program is able to:
  - a. Write monthly, weekly, and daily schedules (e.g., use an appointment book or app).
  - b. Use a syllabus and look ahead to schedule study sessions.
  - c. Write detailed study plans (what the learner intends to study during a study session).
  - d. Plan time to accomplish tasks and activities related to goals.
  - e. Make weekly and daily to-do lists.
  - f. Prioritize tasks to meet deadlines.
  - g. Make effective use of downtime (walking, driving, or other "dead" time) for study.
  - h. Recognize procrastination and use personal motivation methods to avoid it.
- 4. **Study abilities:** A person with the study abilities necessary for success in a massage and bodywork training program is able to:
  - a. Use effective methods to identify and learn new words:
    - i. Identify unknown words (highlight in reading assignments, ask for definitions during lectures, etc.).
    - ii. Keep vocabulary lists of new words with definitions.
    - iii. Use a glossary or dictionary to look up words.
    - iv. Ask for correct pronunciation of words and practice pronouncing new words aloud.
    - v. Create flash cards or use picture cards to associate new words to pictures or to known words.
    - vi. Regularly attempt to integrate words into communications with teachers and peers.
  - b. Take effective notes from reading assignments:
    - i. Understand textbook features and how to use them (e.g., learning objectives, key words, chapter outlines, tables, charts, graphs, and figures, summaries, review questions, etc.).
    - ii. Regularly utilize an effective reading system (i.e., a systematic method for accomplishing reading assignments that usually includes a preview component, an active reading component, and a review component).
    - iii. Identify key words and concepts and capture them in written notes.
    - iv. Utilize an effective note format (use of note forms, graphic organizer, etc.).
  - c. Take effective notes from lectures, demonstrations, discussions, and classroom activities:
    - i. Listen actively.
    - ii. Share ideas.
    - iii. Ask questions and follow-up questions to clarify understanding.

- iv. Use a consistent note-taking format (e.g., outline method, block form, use of note forms, use of graphic organizer, etc.).
- d. Complete homework on or before homework deadlines:
  - i. Write down homework deadlines.
  - ii. Clarify expectations by reading directions carefully and asking follow-up questions to instructor.
  - iii. Schedule adequate time to complete homework assignments.
- e. Prepare for written guizzes, exams, and verbal practical examinations effectively:
  - i. Use effective memorization strategies to move information into long-term memory.
  - ii. Schedule adequate time to learn material.
- f. Use effective test-taking strategies to achieve good evaluation scores:
  - i. Demonstrate methods to reduce test anxiety.
  - ii. Approach test taking strategically (e.g., answer every question even with a best guess, underline key words, cross out wrong answers, etc.).
  - iii. Learn from graded tests (e.g., identify where test content is sourced, identify flaws in vocabulary, etc.).
- 5. **Critical and creative thinking abilities**: A person with the basic critical and creative thinking abilities necessary for success in a massage and bodywork training program is able to (based on the Tricia Armstrong Model):
  - a. Observe: The ability to use the senses analytically to gather information.
  - b. Generate ideas: The ability to focus attention, enliven prior knowledge, and generate new thoughts.
  - c. Ask questions: The ability to identify what information is useful and needed and elicit it from instructors or resource materials.
  - d. Connect: The ability to see and make connections by linking objects, ideas, processes, and concepts.
  - e. Make analogies: The ability to compare two dissimilar objects, ideas, or processes by focusing on qualities they have in common.
  - f. Recognize patterns: The ability to identify arrangements of qualities, forms, styles, shapes, colors, and designs to explore the interrelationship of parts in a whole.
  - g. Solve problems: The ability to identify and define problems, generate possible solutions, make decisions, select the best solution, and test new solutions to make adaptations or refinements.
  - h. Transform: The ability to internalize information and present it in a different way.
  - i. Synthesize: The ability to put parts together to form wholes.

- **6. Interpersonal and relating abilities:** A person with the basic interpersonal and relating abilities necessary for success in a massage and bodywork training program is able to:
  - a. Establish healthy, mutually beneficial relationships with others.
  - b. Treat others with respect and listen to their points of view.
  - c. Manage interpersonal conflicts effectively.
  - d. Demonstrate appropriately assertive behavior.
  - e. Seek help from others when needed.
  - f. Offer assistance to others.
  - g. Share goals with others or with groups and work cooperatively with others, including people with different points of view.
- 7. **Personal development abilities:** A person with the basic personal development abilities necessary for success in massage and bodywork training programs is able to:
  - a. Assess, articulate, and acknowledge personal skills, abilities, and growth areas.
  - b. Use self-knowledge to make decisions.
  - c. Articulate the rationale for personal behavior and explore the values and principles involved in personal decision making.
  - d. Seek and consider feedback from others.
  - e. Reflect to gain insight and learn from past experiences.
  - f. Act in congruence with professional values and beliefs.
  - g. Function without the need for reassurance from others.
  - h. Balance the needs of self with the needs of others.
  - i. Accept personal accountability for choices, actions, and outcomes.
- 8. **Personal health and self-care:** A person with the basic personal health and self-care abilities necessary for success in massage and bodywork training programs is able to:
  - a. Practice regular personal hygiene.
  - b. Understand how choices related to food selection and exercise influence health.
  - c. Commit to getting enough sleep.
  - d. Identify responsible health behaviors and demonstrate strategies to improve or maintain personal health.
  - e. Set personal health goals and track progress.
  - f. Use self-determined methods to reduce stress.

While abilities are understood in the ELAP Blueprint as the skills learners have ideally acquired *before* enrolling in the massage and bodywork training program, schools regularly report that enrolled learners

often do not possess the requisite abilities to achieve the academic level necessary for graduation from their program. It is suggested therefore that schools recognizing incoming learning ability gaps in their student population provide a preparatory course of study to develop these abilities in learners before they begin their massage and bodywork training. Abilities can and should be systematically and regularly reinforced at predetermined points during the program.

# The Entry-Level Massage Education Blueprint Structure

The Blueprint is divided into the subjects, topics, and sub-topics that data analysis suggests belong in entry-level massage education. For a detailed look at hours tabulations based on learning experiences developed from the Blueprint learning objectives, please review Appendix C in the Entry-Level Analysis Project Report, "Hours Rationale."

- **Subjects:** Subject sections provide an overview of topics and sub-topics and a recommendation for the education hours allotted to the subject. At the subject level, instructional time is rounded to the nearest hour.
- **Topics:** Topic sections of the Blueprint state the time necessary to teach the learning objectives in all sub-topics, as part of the condition statement for the topic's learning outcomes. This section also includes a list of key terms and concepts and clarifies the use here of any terms that are not used consistently within the profession.
- **Sub-Topics:** Sub-topic sections provide the conditions for learning and define specific learning objectives in the cognitive (knowledge) and psychomotor (skills) domains at each of the three levels of the ELAP Learning Taxonomy, as appropriate. (As noted previously, some information is covered only to level 1, such as when learners need only recognize a term, while some is covered through level 2 or level 3.) Note that sub-topics do not correspond to class periods or other specific time periods. Rather, they include all the key learning objectives for closely related knowledge or skills, which might be covered in just a portion of one class or in multiple classes.

### Massage and Bodywork Learning in the Affective Domain

As detailed earlier, the affective domain describes the levels of learning related to attitudes, values, and motivations established through self-awareness, self-exploration, opportunities to develop new ways to respond, effective role modeling, and classroom experiences. To date, we know of no published statement of attitudes and values that all massage and bodywork professionals hold and agree are essential for the profession. While we can point to shared values in some areas, such as professional ethics, the profession is diverse, as reflected by our varied belief systems and preferences. Educators are encouraged to review these learning objectives in the Blueprint and add their own based on the school

philosophy. Affective domain learning objectives are not assigned separate instructional hours but are reinforced throughout a training program to develop and reinforce positive attitudes and values that enhance professional motivation, life-long learning, and career success in the massage and bodywork profession.

#### Massage and Bodywork Learning in the Interpersonal Domain

The interpersonal domain involves skills that are necessary to initiate, maintain, and manage positive social relationships with a range of people in a range of contexts. Learners learn interpersonal skills by modeling the effective behaviors of peers and instructors, developing enhanced communication skills, practicing relating skills in various contexts (e.g., group projects), and receiving feedback via instructor coaching. The Work Group decided to separate general interpersonal domain learning objectives from the primary ELAP Blueprint to prevent redundancy, since many interpersonal skills coexist with other cognitive and psychomotor learning. Those interpersonal skills are taught in the Career Development subject of the ELAP Map. General learning objectives related to interpersonal skills are not assigned separate instructional hours but can be reinforced throughout the training program to support efforts to develop learner professionalism and communication for entry-level practice.

### **Conclusions**

The primary purpose of the ELAP Blueprint is to precisely define what a person must know and be able to do to work safely and competently at the entry level and to provide a means to tabulate minimum classroom hours based on the time it takes an average student to learn the defined content through competent instruction. The ELAP Work Group hopes, however, that this document will prove more than a simple rationale for hours requirements.

In all, we reviewed survey information related to entry-level education from 21,814 unique respondents self-identified as students, school administrators, instructors, professional therapists, employers of massage therapists, and other massage industry professionals. We consulted over 100 books and articles written by the profession's most notable authors and researchers, we analyzed important work already done by other work groups in past projects, and we used best practices in modern instructional design to produce this Blueprint.

We have no illusion that successful completion of this project will by itself transform massage education and the quality of massage being provided to clients. Other important work, such as strengthening the teaching abilities of all instructional personnel, and using these evidence-informed recommendations for minimum education standards in regulation commands parallel attention if the Entry-Level Analysis Project and this Blueprint are to have meaningful impact.

With these caveats, and acknowledging both the need and opportunity for improvement throughout the massage profession, we believe this project comprises one important foundational step upon which additional curriculum, teacher preparation, and regulatory standards can build. We hope this document supports your efforts and goals, whether you are a school administrator, teacher, student, massage therapist, textbook author, employer, continuing education provider, regulator, organization, or other massage industry professional.

The animating spirit of this project is not to criticize the past but to contribute to the construction of a more solid and consistent educational foundation that will help those entering the massage therapy and bodywork profession to thrive in their careers while ensuring their practice is safe and beneficial for all clients.

# **Summary of Learning Outcomes**

### Point A:

A person with a desire to become a massage or bodywork therapist who enrolls in a massage or bodywork training program.

**Conditions:** Having completed 1.5 hours of instruction on the evolution of massage and bodywork, the learner is expected to:

 Demonstrate knowledge of the terms and concepts related to the evolution of massage and bodywork including historical events, knowledge of the current structure of the massage and bodywork profession including massage as part of health care, relevant organizations, work environments, client types, and their needs and wants, on a written examination.

Conditions: Having completed 3 hours of instruction on research literacy, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to research literacy on a written examination.
- Work with a peer group to analyze two research articles, discriminate between reliable and unreliable research, and determine two massage forms or session adaptations that demonstrate efficacy based on research, and share findings with classmates on a graded activity.

**Conditions:** Having completed 7 hours of instruction on massage benefits and effects, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to massage benefits and effects including differentiation of the types of benefits and effects; physiological, psychological, and energetic benefits and effects; and massage indications on a written examination.
- Demonstrate knowledge of the physiological and psychological mechanisms underpinning massage as an effective stress reduction and stress management strategy on a written examination.
- Demonstrate knowledge of the physiological and psychological mechanisms underpinning massage as an effective pain reduction and pain management strategy on a written examination.

**Conditions:** Having completed 15.5 hours of instruction on massage cautions and contraindications, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to massage cautions and contraindications including endangerment areas, medications and side effects, and contraindications on a written examination.
- Demonstrate the use of a clinical reasoning process to identify contraindications, an understanding of when there is a need for increased therapist caution, and the capacity to choose appropriate adaptive measures for session planning on a written examination.
- Demonstrate the integration of knowledge and skills from other topics with this topic including the
  use of health intake forms, pathology reference books, drug reference books, and research literacy
  when determining if conditions are contraindicated or require caution, a physician's release, or
  adaptations on a graded assignment.
- Correctly adapt massage strokes and techniques in endangerment areas or based on client feedback on a practical evaluation.
- Obtain training and certification from the American Red Cross in adult first aid, cardiopulmonary resuscitation (CPR), and use of an automated external defibrillator (AED).

**Conditions:** Having completed 2.5 hours of instruction on equipment and session environments, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to massage equipment and session environments, including types of equipment and features, lubricants, supplies, and factors for creating a comfortable, inviting, and safe session space, on a graded assignment.
- Correctly set up, organize, adjust for comfort and safety, sanitize, and properly use massage
  equipment, lubricants, and supplies related to the practice of massage therapy on a practical
  evaluation.

**Conditions:** Having completed 5.5 hours of instruction on preventing disease transmission, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to preventing disease transmission, including methods by which infectious diseases are spread, therapist hygiene, sanitation of the facility and equipment, good housekeeping practices, and standard precautions, on a written examination.
- Demonstrate proper therapist hygiene, correct hand-washing procedure, proper use of gloves, the sanitation of massage equipment, proper cleanliness and management of massage linens, and proper cleanliness and management of lubricants and supplies on a practical evaluation.

**Conditions:** Having completed 4 hours of instruction on massage laws and regulations, the learner is expected to:

• Demonstrate knowledge of the terms and concepts related to massage laws and regulations including requirements to obtain and maintain credentials, state laws and regulations, scope of practice, limits to scope of practice, and supervision of therapists in the state in which one intends to practice, on a written examination.

**Conditions:** Having completed 8 hours of instruction on personal health, body mechanics, and self-care, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to personal health, body mechanics, and self-care on a written examination.
- Demonstrate a useful self-care warm--up, and adjust personal body mechanics in response to instructor feedback during a practical evaluation.

**Conditions:** Having completed 20 hours of hands-on practice in massage and bodywork application methods classes (these hours are counted elsewhere in the Blueprint), the learner is expected to:

 Demonstrate the integration of body mechanics principles into hands-on work, including the regular use of a self-care warm-up, and correct body mechanics during the application of massage methods, on practical evaluations.

**Conditions:** Having completed 4.0 hours of instruction on the relationship of therapist and client, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to characteristics of positive therapeutic relationships and preventing transference and countertransference on a written examination.
- Use effective and appropriate therapist language and behaviors to redirect client behaviors related to transference on a graded classroom activity.

**Conditions:** Having completed 18.0 hours of instruction on ethics and the therapeutic relationship, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to ethics and the therapeutic
  relationship, including the purpose of ethics, use of an ethical decision-making model, ethical
  principles commonly adopted by the massage profession, behaviors that lead to ethical violations,
  and adherence to a defined code of ethics, on a written examination.
- Use effective and appropriate therapist language and behaviors to uphold standards of ethical practice, including declining a client massage treatment when appropriate, representing massage qualifications and the limits of massage honestly, referring clients to other health care providers when appropriate, obtaining the client's informed consent, responding appropriately to client sexual innuendo, on a practical evaluation.

**Conditions:** Having completed learning in other classes (these hours are tabulated elsewhere in the blueprint), the learner is expected to:

 Demonstrate effective language and behaviors to deal professionally and appropriately with ethical dilemmas, and to uphold ethical principles in therapist/client situations when presented with onthe-spot scenarios by instructors in graded activities.

**Conditions:** Having completed 18.0 hours of instruction on boundaries in a therapeutic relationship, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to boundaries in a therapeutic relationship, including establishing and maintaining boundaries, responding to boundary violations, avoidance of behaviors that violate the boundaries of clients, managing personal and client emotions during sessions, and managing issues related to touch, intimacy, and sexual arousal responses effectively and professionally, on a written examination.
- Demonstrate effective and appropriate language and behaviors to establish boundaries, respond to boundary violations, manage a client's emotional release process, respond professionally to clients experiencing unwanted sexual arousal responses, and respond professionally to clients seeking sexual gratification from the massage session, on a practical evaluation.

**Conditions:** Having completed learning in other classes (these hours are tabulated elsewhere in the blueprint), the learner is expected to:

 Demonstrate effective language and behaviors to deal professionally and appropriately with boundary crossings, client emotional release, or client situations that require a therapist to manage intimacy, touch, and sexual arousal responses, when presented with on-the-spot scenarios by instructors in graded activities. **Conditions:** Having completed 13 hours of instruction on an orientation to the human body, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to using health care terminology, including the ability to break down unknown words into word elements, use a medical dictionary, positional and directional terms, body planes and movements, body regions, cavities, and abdominal quadrants, on a written examination.
- Demonstrate knowledge of the terms and concepts related to basic anatomy and physiology, including the structural levels of the body and the structure and function of cells, tissues, and membranes, on one or more written examinations.
- Demonstrate knowledge of the terms and concepts related to health, well-being, and disease, including aspects of well-being and predisposing causes of disease, on a written examination.

**Conditions:** Having completed 5 hours of instruction on the integumentary system, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to the structure, function, and pathologies of the integumentary system, on a written examination.
- Demonstrate the use of a clinical reasoning model to determine appropriate massage session action for an integumentary pathology (e.g., determine it is a contraindication and decline massage, determine it is a local contraindication, determine that another session adaptation is required, etc.), on a graded activity.

**Conditions:** Having completed 10 hours of instruction on the skeletal system, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to the structure and function of the skeletal system, including bones, bony landmarks, and joints and pathologies of the skeletal system, including fractures, dislocations, and subluxations, on one or more written examinations.
- Demonstrate the use of a clinical reasoning model to determine appropriate massage session
  actions for a skeletal system pathology (e.g., determine it is a contraindication and decline
  massage, determine it is a local contraindication, determine that another session adaptation is
  required, etc.), on a graded activity.

Conditions: Having completed 6 hours of instruction on the fascial system, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to the structure and function of the fascial system, on a written examination.
- Demonstrate knowledge of the terms and concepts related to myofascial dysfunction on a written examination.

**Conditions:** Having completed 13 hours of instruction on the muscular system, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to the structure, function, and pathologies of the muscular system, on a written examination.
- Demonstrate the use of a clinical reasoning model to determine appropriate massage session action for a skeletal system pathology (e.g., determine it is a contraindication and decline massage, determine it is a local contraindication, determine that another session adaptation is required, etc.), on a graded activity.

**Conditions:** Having completed 16 hours of instruction on the nervous system, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to the structure and function of the
  nervous system, including the central nervous system, peripheral nervous system, autonomic
  nervous system, somatic nervous system, the anatomy of pain, and nervous system pathologies, on
  written examinations.
- Demonstrate the use of a clinical reasoning model to determine appropriate massage session action for a nervous system pathology (e.g., determine it is a contraindication and decline massage, determine it is a local contraindication, determine that another session adaptation is required, etc.), on a graded activity.

**Conditions:** Having completed 4 hours of instruction on the cardiovascular system, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to the structure, function, and pathologies of the cardiovascular system, on a written examination.
- Demonstrate the use of a clinical reasoning model to determine appropriate massage session
  action for a cardiovascular pathology (e.g., determine it is a contraindication and decline massage,
  determine it is a local contraindication, determine that another session adaptation is required,
  etc.), on a graded activity.

**Conditions:** Having completed 13.0 hours of instruction on the lymphatic, immune, digestive, respiratory, endocrine, reproductive, and urinary systems, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to the structure, function, and pathologies of the lymphatic, immune, digestive, respiratory, endocrine, reproductive, and urinary systems, on written examinations.
- Demonstrate the use of a clinical reasoning model to determine appropriate massage session
  action for selected pathologies of the lymphatic, immune, digestive, respiratory, endocrine,
  reproductive, and urinary systems (e.g., determine it is a contraindication and decline massage,
  determine it is a local contraindication, determine that another session adaptation is required,
  etc.), on a graded activities.

Conditions: Having completed 43.5 hours of instruction on client assessment, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to health forms, client interviews, general observation, palpation assessment, posture assessment, range of motion assessment, pain assessment and functional limitations assessment, on written examinations.
- Correctly administer a health form and conduct a client interview to rule out contraindications and plan a safe massage session, on a graded activity or practical evaluation.
- Conduct a competent palpation assessment and make four defensible observations about the
  quality of skin, fascia, muscles, tendons, and joint movements to inform session planning, on a
  graded activity or practical evaluation.
- Correctly perform a posture assessment and make two defensible observations about muscular imbalance to inform session planning, on a graded activity or practical evaluation.
- Correctly perform active and passive range of motion assessments on two joints and make two
  defensible observations about movement quality to inform session planning, on a graded activity or
  practical evaluation.
- Correctly administer a pain assessment asking effective follow-up questions to inform session planning, on a graded activity.
- Correctly administer a functional limitations assessment and set two defensible short-term and two
  defensible long-term functional goals with a client, on a graded activity.

**Conditions:** Having completed 6.5 hours of instruction on documentation and client files, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to key principles in documentation, maintenance of client files, and SOAP charting and other documentation formats as determined by the school, on a written examination.
- Demonstrate knowledgeable use of SOAP charting by documenting five practice massage sessions on SOAP forms and correctly completing each section of the form using proper abbreviations and symbols, on a graded homework assignment or during practical evaluations in hands-on classes.
- If appropriate, demonstrate knowledgeable use of an alternative method of charting (as determined by the school) by documenting five practice massage sessions correctly on the appropriate form, as part of a graded homework assignment or during practical evaluations in hands-on classes.

**Conditions:** Having completed 13 hours of instruction in foundation principles and skills, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to an overview of massage/bodywork forms and styles, positioning, and draping, on a written examination.
- Correctly bolster clients safely and comfortably in the prone, supine, side-lying, and semi-reclined positions, on a practical evaluation.
- Correctly drape clients modestly and comfortably while exposing appropriate body areas for massage/bodywork, on a practical evaluation.
- Correctly assist a client on and off a massage table while keeping the client draped, on a practical evaluation.

**Conditions:** Having completed 82 hours of instruction in the application of massage and bodywork methods, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to massage and bodywork application, forces and soft-tissue deformation, gliding, torsion, shearing, elongation, oscillating, percussive, static, joint movements, and hot and cold methods, on written examinations.
- Demonstrate the correct application of gliding, torsion, shearing, elongation, oscillating, percussive, static, joint movement, and hot and cold methods, including variations in methods, the use of appropriate pace, depth, rhythm, therapeutic intent, proper body mechanics, correct client positioning methods, modest draping, and effective client communication, on practical evaluations.

**Conditions:** Having completed 30 hours of instruction in the massage or bodywork session, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to an overview of a massage session, session planning, customization of a session, and suggesting client self-care activities, on a written examination.
- Demonstrate a fluid and enjoyable 1-hour session including effective methods for opening the session, sequencing body regions, sequencing strokes, and using an enjoyable 10-minute face routine and 20-minute foot routine, on a practical evaluation.
- Effectively negotiate a customized session and deliver the agreed session via a massage integrating
  an effective opening, sequencing of body regions to meet the client's specifications, techniques and
  depth of work to meet the client's specifications, an effective closing, and the suggestion of one
  appropriate client self-care activity, on a practical evaluation.

**Note:** Schools can choose to integrate application methods using a Western or Eastern approach or an approach based on their philosophy of massage or bodywork (50 hours total). The ELAP Work Group recommends Swedish massage, myofascial approaches, and neuromuscular approaches because profession stakeholder survey results indicate that these forms are those most widely

practiced and valued by professional massage therapists. Swedish massage and "deep tissue" (which incorporates methods from myofascial and neuromuscular approaches) are the forms most widely requested by consumers.

**Conditions:** Having completed 50 hours of instruction and practice integrating application methods from a Western paradigm, including Swedish massage, myofascial approaches, and neuromuscular approaches, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to Swedish massage, myofascial
  approaches, and neuromuscular approaches, their therapeutic paradigms, their specific strokes,
  their physiological effects, their variations, conditions that require cautious work or session
  adaptations and contraindications, on a written examination.
- Work from a Swedish massage therapeutic paradigm to integrate application methods in a fluid 1-hour general Swedish massage session with an effective opening, with the traditional sequencing of Swedish strokes, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics, on a practical evaluation.
- Work from a myofascial therapeutic paradigm to integrate application methods in a fluid 1-hour general myofascial massage session with an effective opening, with the correct application and sequencing of myofascial methods, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics, on a practical evaluation.
- Work from a neuromuscular therapeutic paradigm to integrate application methods in a 1-hour general neuromuscular session using an effective opening, appropriate warm up of the tissue, the correct application and sequencing of neuromuscular methods, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics, on a practical evaluation.

Or:

**Conditions:** Having completed 50 hours of instruction and practice integrating application methods from an Eastern paradigm, including shiatsu, tuina, and Thai massage, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to Traditional Chinese/Japanese
  Medicine concepts that underlie many Asian bodywork therapies and basic concepts related to
  shiatsu, tuina, and Thai massage, their therapeutic paradigms, their specific strokes or methods,
  their physiological effects, their variations, conditions that require cautious work or session
  adaptations and contraindications, on a written examination.
- Work from an Eastern therapeutic paradigm to integrate application methods in a 1-hour general shiatsu session demonstrating the correct application of instructor-selected methods, and with attention to time management, safe and comfortable client positioning, professional and effective client communication, and proper body mechanics, on a practical evaluation.

- Work from an Eastern therapeutic paradigm to integrate application methods in a 1-hour general
  tuina session demonstrating the correct application of instructor-selected methods, and with
  attention to time management, safe and comfortable client positioning, professional and effective
  client communication, and proper body mechanics, on a practical evaluation.
- Work from an Eastern therapeutic paradigm to integrate application methods in a 1-hour general
  Thai massage session demonstrating the correct application of instructor-selected methods, and
  with attention to time management, safe and comfortable client positioning, professional and
  effective client communication, and proper body mechanics, on a practical evaluation.

**Conditions:** Having completed 4 hours of instruction on an orientation to palpation and movement, the learner is expected to:

• Demonstrate knowledge of the key terms and concepts related to the development of palpation skills and the basics of human movement on a written examination.

**Conditions:** Having completed 9.5 hours of instruction on the shoulder and arm, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the shoulder and arm, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles and identify muscle fiber direction and muscle actions, on a practical evaluation.

**Conditions:** Having completed 9.5 hours of instruction on the elbow, forearm, wrist, and hand, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the elbow, forearm, wrist, and hand, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles and identify muscle fiber direction, and muscle actions, on a practical evaluation.

**Conditions:** Having completed 9.5 hours of instruction on the spine and thorax, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the spine and thorax, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles and identify muscle fiber direction and muscle actions, on a practical evaluation.

**Conditions:** Having completed 9.5 hours of instruction on the head, neck, and jaw, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the head, neck, and jaw on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles and identify muscle fiber direction and muscle actions of the head, neck, and jaw, on a practical evaluation.

**Conditions:** Having completed 9.5 hours of instruction on the pelvis and hip, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the pelvis and hip, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles and identify muscle fiber direction and muscle actions of the pelvis and hip, on a practical evaluation.

Conditions: Having completed 9.5 hours of instruction on the thigh and knee, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the thigh and knee, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles and identify muscle fiber direction and muscle actions of the thigh and knee, on a practical evaluation.

**Conditions:** Having completed 9.5 hours of instruction on the leg, ankle, and foot, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the leg, ankle, and foot on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles and identify muscle fiber direction and muscle actions of the leg, ankle, and foot, on a practical evaluation.

**Conditions:** Having completed 11 hours of instruction on adapting sessions for the stages of healing, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to the acute stage, subacute stage, and maturation stage of healing, on a written examination.
- Plan and conduct one-hour sessions for clients with different injuries in the acute stage, subacute stage, and maturation stage of healing, demonstrating the ability to adapt sessions appropriately, choose effective application methods, and address compensating structures on graded activities or practical evaluations.

**Conditions:** Having completed 40 hours of instruction on adapting sessions for clients with common pathologies, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to common pathologies including arthritis, bursitis, cancer, diabetes, fibromyalgia, fasciitis, tendinopathies, headaches, nerve compression syndromes, osteoporosis, skin cancer, stress, sprains, and strains, on graded activities, or written examinations.
- Plan and conduct one-hour sessions for clients with instructor-selected pathologies, demonstrating
  the ability to adapt sessions appropriately and choose effective application methods, on graded
  activities or practical evaluations.

**Conditions:** Having completed 29 hours of instruction on adapting sessions for special populations, the learner is expected to:

- Demonstrate knowledge of the terms and concepts related to special populations including clients over 55 years of age, clients who are obese, clients who are children, clients who are pregnant, clients who are athletes or fitness oriented, clients who are at the end of life, and clients with disabilities, on graded activities or written examinations.
- Plan and conduct 1-hour sessions for instructor-selected special populations, demonstrating the ability to adapt sessions appropriately and choose effective application methods, on graded activities or practical evaluations.

**Conditions:** Having completed 7 hours of instruction on interpersonal skills, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to interpersonal skills, including assertive communication and conflict resolution, on a written examination.
- Demonstrate effective assertive communication skills during a role-playing activity in response to client-therapist scenarios assigned by the instructor, on a graded activity.
- Demonstrate the steps in a conflict resolution process using assertive communication skills and appropriate therapist behaviors during a role-playing activity in response to a client-therapist scenario assigned by the instructor, on a graded activity.

Conditions: Having completed 50 hours of instruction in the student clinic, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to working in the school's student clinic, including professionalism, session management, and clinic management, on a written examination.
- Demonstrate effective and professional therapist language and behaviors to interact with student clinic clients, peers, and instructors during participation in the school's student clinic as evidenced by client, peer, and instructor feedback forms.
- Follow student clinic policies and procedures and represent the school in a professional manner during participation in the school's student clinic, as evidenced by a graded student clinic evaluation conducted by a supervisor.
- Plan sessions in accordance with client's goals, wants, and needs while integrating session adaptations based on cautions or contraindications as evidenced by client feedback forms.
- Integrate skills including draping, bolstering, use of equipment and sanitation practices, application
  of strokes and methods, professionalism, and communication, in safe, effective, and enjoyable
  sessions, as evidenced by client feedback forms.

**Conditions:** Having completed 25 hours of instruction on career planning, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to career planning, including envisioning a massage career, working as an employee, and the basics of starting a private practice, on a written examination.
- Write a personal 1-year career plan on a graded assignment.
- Demonstrate principles of good interviewing skills and effectively answer sample interview questions, in a graded activity.

## Point B:

A massage or bodywork therapist ready to enter the profession and work safely and competently.

	Entry-Level Massage Education Blueprint  Massage Theory and Principles	
Topic	Evolution of Massage and Bodywork	
Sub-Topics	<ul><li>Historical Roots of Massage</li><li>Massage and Bodywork Today</li></ul>	
Topic	Research Literacy	
Sub-Topics	<ul><li>Evidence-Based Practice</li><li>Basics of Research</li></ul>	
Topic	Massage Benefits and Effects	
Sub-Topics	<ul> <li>Types of Benefits and Effects</li> <li>Physiological Benefits and Effects</li> <li>Psychological and Other Benefits and Effects</li> <li>Massage Indications</li> </ul>	
Topic	Massage Cautions and Contraindications	
Sub-Topics	<ul> <li>Endangerment Areas</li> <li>Contraindications</li> <li>Medications and Massage</li> <li>American Red Cross Adult First Aid/CPR/AED Certification</li> </ul>	

### **Topic: Evolution of Massage and Bodywork**

# Learning Outcomes

**Conditions:** Having completed 1.5 hours of instruction on the evolution of massage and bodywork, the learner is expected to:

 Demonstrate knowledge of the key terms and concepts related to the evolution of massage including historical events, knowledge of the current structure of the massage profession including massage as part of health care, relevant organizations, work environments, client types, and their needs and wants, on a written examination.

### **Key Terminology and Concepts**

- Alliance for Massage Therapy Education
- Alternative medicine
- American Massage Therapy Association
- Associated Bodywork & Massage Professionals
- Bodywork\*
- Client
- Commission on Massage Therapy Accreditation
- Complementary medicine
- Conventional medicine
- Federation of State Massage Therapy Boards
- Galer
- Health-care-oriented massage\*
- Hippocrates
- Holistic health care
- Human potential movement
- Integrative medicine
- Johan Mezger
- Massage\*
- Massage Therapy Foundation
- Medicine person (witchdoctor, medicine man, shaman, etc.)
- National Center for Complementary and Alternative Medicine
- National Certification Board for Therapeutic Massage & Bodywork
- Pehr Henrik Ling
- Special population
- Swedish gymnastics
- Touch Research Institute
- Wellness-oriented massage\*

### **Use of Terms**

\*These terms are not used consistently in the massage profession at this time. Curriculum designers are encouraged to use the terminology specific with their school's philosophy or the definitions of similar terms used in their textbooks. For the purposes of this document, these terms are defined as:

**Bodywork:** A broad term that refers to many forms, methods, and styles including massage, that positively influence the body through various methods that may or may not include soft-tissue deformation, energy manipulation, movement reeducation, and postural reeducation.

**Health-care-oriented massage:** Massage performed in medical or health-care-oriented environments to facilitate therapeutic change, condition management, or symptom management.

**Massage:** The ethical and professional application of structured, therapeutic touch to benefit soft-tissue health, movement, posture, and neurological patterns.

**Wellness-oriented massage:** Massage performed in wellness- or relaxation-oriented environments to facilitate stress reduction, relaxation, or wellness.

### **Sub-Topics**

- Historical Roots of Massage
- Massage and Bodywork Today

### **Sub-Topic: Historical Roots of Massage**

Level 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- If appropriate based on school philosophy, give one example of massage associated with medicine or magic in ancient times (e.g., many cultures had a medicine person, shaman, witch, priest, midwife, etc.).
- If appropriate based on school philosophy, give one example of how massage was used by the Greeks, Romans, or Arabs in classical times.
- List four events that occurred before 2000 that promoted the evolution of the massage profession (e.g., Swedish gymnastics, massage in nursing, the human potential movement, the decline of massage in the 1950s, the influence of Eastern bodywork, influence of new systems/forms, etc.).
- If appropriate based on school philosophy, match the names of these people to written descriptions of their contributions to the field of massage: Galen, Hippocrates, Pehr Henrik Ling, Johan Mezger (note, other important names that a program may want to discuss are Andreas Vesalius, Charles Fayette Taylor, Florence Nightingale, George Henry Taylor, Ibn Sina, John Harvey Kellogg, Mondino de Luzzi).
- List two practices from Eastern cultures that influenced the evolution of massage in the west.
- If appropriate based on school philosophy, in one's own words, outline the key events in the development of Swedish massage.

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>If appropriate based on school philosophy, discuss briefly massage in ancient times, in classical times, and in the East.</li> </ul>	
	<ul> <li>Discuss instructor-selected events that promoted the evolution of the massage profession.</li> </ul>	
	<ul> <li>Analyze factors that led to the decline of massage due to public skepticism after World War II (e.g., massage associated with prostitution in the late 1950s and early 1960s).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

### Sub-Topic: Massage and Bodywork Today

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these terms to their written descriptions: complementary medicine, integrative medicine, alternative medicine, holistic health care, conventional medicine, massage, bodywork, wellness-oriented massage, health-care-oriented massage.
- Explain in one's own words the difference between massage and bodywork.
- Match these organizations to written descriptions of their roles in the massage profession: Alliance for Massage Therapy Education, American Massage Therapy Association, Associated Bodywork & Massage Professionals, Commission on Massage Therapy Accreditation, Federation of State Massage Therapy Boards, Massage Therapy Foundation, National Certification Board for Therapeutic Massage & Bodywork.
- List three reasons people seek massage therapy.
- List four environments where massage is practiced (e.g., spa, clinic, etc.).
- Describe one special population that might use massage therapy.
- Identify two reasons some people do not get massage or bodywork.
- Name five forms of massage or bodywork commonly practiced in the US today.

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Compare and contrast wellness-oriented massage with health-care-oriented massage.</li> </ul>	
	<ul> <li>Discuss the role of massage in complementary medicine.</li> </ul>	
	<ul> <li>Share one's ideas about desirable massage work situations and career hopes.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Topic: Research Literacy**

# Learning Outcomes

**Conditions:** Having completed 3 hours of instruction on research literacy, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to research literacy on a written examination.
- Work with a peer group to analyze two research articles, discriminate between reliable and unreliable research, and determine two massage forms or session adaptations that demonstrate efficacy based on research, and share findings with classmates on a graded activity.

### **Key Terminology and Concepts**

- Abstract
- Case report/study
- Case series
- Case-control study
- Clinical trial
- Correlation study
- Empirical evidence
- Evidence-informed massage practice
- Massage Therapy Foundation
- Meta-analysis
- Methods/methodology
- National Center for Complementary and Alternative Medicine
- Placebo effect
- PubMed
- References
- Reliability
- Research
- Research literacy
- Results/findings
- Systematic review
- Touch Research Institute

### **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

### **Sub-Topics**

- Evidence-Informed Practice
- Basics of Research

# **Sub-Topic: Evidence-Informed Practice**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

### Receive Respond

**Note:** Learning objectives for reinforcing the importance of an evidence-based practice are integrated in other subjects, topics, and subtopics of the ELAP Blueprint where appropriate.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *evidence-informed massage* practice.
- Describe three reasons why developing an evidence-informed practice is important.
- Outline the skills a massage therapist needs to build an evidence-informed practice (e.g., ability to find, understand, and critically evaluate research to apply it to session planning with clients).
- List one traditional source of knowledge in the massage profession (e.g., empirical evidence, textbook authors, well-known teachers).
- List one modern source of knowledge in the massage profession (e.g., research articles).
- Outline the steps one would take to locate information about a particular condition.
- Outline the steps one would take to locate information about the efficacy of a particular massage technique.

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	Discuss the concept of an evidence-informed practice including what it is, why it is important, and what skills a therapist needs.	
	<ul> <li>Discuss methods for locating information when a therapist is faced with an unknown pathological condition.</li> </ul>	
	Discuss methods for locating information when a therapist wants to find out about the efficacy of a particular massage technique.	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Basics of Research**

evel 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

### Receive Respond

**Note:** Learning objectives for reinforcing research literacy are integrated in other subjects, topics, and sub-topics of the ELAP Blueprint where appropriate.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term research.
- Match these research study types to their written descriptions: case report/case study, case series, correlation study, case-control study, clinical trial, systematic review, metaanalysis.
- Match these sections of a research article to their written descriptions: abstract, introduction, methods/methodology, results/findings, discussion, references.
- List two places to obtain research information (e.g., Massage Therapy Foundation, PubMed, Touch Research Institute, National Center for Complementary and Alternative Medicine website, etc.).
- List two indicators that a research study is reliable.
- List two indicators that a research study is not reliable.

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	• Discuss the ways massage therapy research affects the massage profession.	
	• Discuss the placebo effect and its implications for research.	
	<ul> <li>Work with peers to determine the reliability of two research articles.</li> </ul>	
	<ul> <li>Work with peers to review the results of a reliable instructor-selected research study and share findings with classmates.</li> </ul>	
	<ul> <li>Speculate about the types of techniques used or adaptations made in a massage session based on the results of the reviewed research study.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: Massage Benefits and Effects**

# Learning Outcomes

**Conditions:** Having completed 7 hours of instruction on massage benefits and effects, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to massage benefits and effects including differentiation of the types of benefits and effects; physiological, psychological, and energetic benefits and effects; and massage indications on a written examination.
- Demonstrate knowledge of the physiological and psychological mechanisms underpinning massage as an effective stress reduction and stress management strategy on a written examination.
- Demonstrate knowledge of the physiological and psychological mechanisms underpinning massage as an effective pain reduction and pain management strategy on a written examination.

### **Key Terminology and Concepts**

- Anxiety
- Benefit
- Body-mind effect\*
- Combined effect
- Cumulative effect\*
- Depression
- Energetic effect
- Gate control theory
- Indication
- Insomnia
- Long-term effect
- Mechanical effect
- Mental clarity
- Pain
- Pain management
- Pain-spasm-pain cycle theory
- Parasympathetic nervous system response
- Physiological effect
- Primary effect
- Psychological effect
- Reflexive effect
- Secondary effect
- Short-term effect
- Somatic reflexes
- Stress
- Stress management
- Stretch reflex

- Structural effect
- Systemic effect
- Tendon reflex

### **Use of Terms**

\*These terms are not consistently used or consistently defined in the massage profession at this time. Curriculum designers are encouraged to use the terminology specific with their school's philosophy or the definitions of similar terms used in their textbooks. For the purposes of this document, these terms are defined as:

**Body-mind effect**: Body-mind effect is also described in some textbooks as a whole-body effect and refers to the belief that massage affects the body physiologically and psychologically at the same time.

**Cumulative effect**: Cumulative effect is also described in some textbooks as a multipledose effect and refers to the belief that regular massage leads to improved health over time.

### **Sub-Topics**

- Types of Benefits and Effects
- Physiological Benefits and Effects
- Psychological and Other Benefits and Effects
- Massage Indications

Sub-Topic: Types of Benefits and Effects		
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	<b>Note:</b> Learning objectives for reinforcing massage benefits and effects are integrated in other subjects, topics, and sub-topics of the ELAP Blueprint where appropriate.	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.
	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	
	<ul> <li>Match these terms to their written descriptions: benefit, effect, mechanical effect, reflexive effect, primary effect, secondary effect, short-term effect, long-term effect, structural effect, systemic effect, cumulative effect, combined effect, physiological effect, psychological effect, body-mind effect, energetic effect.</li> <li>Label five different types of effects based on their written descriptions (e.g., range of motion is increased post massage is labeled as a mechanical effect, while the client experiencing feelings of well-being is be labeled a psychological effect, etc.).</li> <li>Explain in one's own words two ways massage is beneficial for clients.</li> </ul>	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	Discuss different types of benefits and effects brought about by massage and bodywork.	
	Contrast a mechanical effect with a reflexive effect.	
	<ul> <li>Contrast a physiological effect with a psychological effect.</li> </ul>	
	<ul> <li>Contrast a primary effect with a secondary effect.</li> </ul>	
	Contrast a systemic effect with a structural effect.	

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Subject – Massage Theory and Principles, Topic – Massage Benefits and Effects

# Sub-Topic: Physiological Benefits and Effects

**Knowledge: Attain and Comprehend Skills: Observe and Imitate** Receive **Conditions:** Having participated in an interactive There are no relevant learning objectives for this lecture or classroom activity, the learner will be sub-topic in level 1 of the psychomotor domain. Respond able to: Review the term *physiological effect*. Review the term benefit. Give two general examples of physiological effects of massage application methods. Give two general examples of massage benefits for clients. List two effects of massage for each body system: integumentary system, muscular system, nervous system, endocrine system, cardiovascular system, lymphatic system and immunity, respiratory system, digestive system, reproductive system, and urinary system. Explain in one's own words how massage supports the body at the cellular and tissue level. List two ways massage might decrease sensations of pain. Define the term *parasympathetic nervous* system response. List two physiological effects of massage that support stress reduction and management. Define the term somatic reflexes. Give one example of a somatic reflex that can be manipulated by massage application methods to positively affect the body (e.g., stretch reflex).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	Discuss the general effects of stress on the body.	
	<ul> <li>Discuss the tendon reflex, stretch reflex, and two instructor-selected massage techniques that manipulate somatic reflexes to produce an effect on soft-tissue.</li> </ul>	
	<ul> <li>Discuss historical pain models that have influenced the massage profession (e.g., pain-spasm-pain cycle may not exist according to Travel, gate control theory which has been superseded by more modern theories of pain, etc.).</li> </ul>	
	<ul> <li>Discuss current hypotheses of an instructor- selected pain model and pain control model (e.g., central sensitization: nociceptor inputs can trigger a prolonged but reversible increase in the excitability of neurons in the central nociceptive pathways that will respond to treatments that produce analgesia by normalizing hyperexcitable central neural activity).</li> </ul>	
	<ul> <li>Discuss one instructor-selected research article that concludes that massage has a positive effect on the muscular system.</li> </ul>	
	<ul> <li>Discuss one instructor-selected research article that concludes that massage has a positive effect on stress.</li> </ul>	
	<ul> <li>Discuss one instructor-selected research article that concludes that massage reduces pain.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Sub-Topic: Psychological and Other Benefits and Effects**

Level 1 Knowledge: Attain and Comprehend

#### Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term psychological effect.
- List one psychological effect of massage.
- Define the term benefit.
- List one psychological benefit of massage.
- Match these terms to their written descriptions: psychological effect, psychological benefit, anxiety, depression, mental clarity, energetic effect.
- Describe one general effect of stress on mental and emotional health.
- Define these terms: anxiety, depression, mental clarity.
- List three psychological effects of massage for anxiety, depression, or mental clarity.

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

#### Level 2

### **Knowledge: Use and Connect**

### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss one way the psychological effects of massage influence client stress reduction and management.
- Discuss one way the psychological effects of massage influence pain reduction and pain management.
- Discuss the ways that the physiological effects of massage influence a client's psychological response to massage (e.g., people are likely to experience positive emotions to massage because massage tends to increase dopamine levels, which is a physiological effect).
- Discuss two instructor-selected research articles that conclude that massage has a positive effect on anxiety, depression, hyperactivity, or insomnia.

There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.

- Discuss components of a massage session that would support a client with anxiety, depression, or insomnia.
- Discuss the controversy surrounding a belief or disbelief in energetic effects of massage.
- Discuss the ethical violations that occur when therapists practice energetic bodywork methods without a client's informed consent (e.g., if the client seeks massage they are unlikely to expect energetic bodywork methods instead; a therapist should not practice energetic bodywork without asking the client's permission; chanting over a client, praying over a client, channeling energy to a client or away from a client, balancing chakras or energy fields, etc. without a client's permission is unethical, etc.).

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Sub-To	Sub-Topic: Massage Indications		
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate	
Receive Respond	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Define the term <i>indication</i> as it relates to the practice of massage.</li> </ul>	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.	
	<ul> <li>Identify three conditions that benefit from massage.</li> <li>Recognize three special populations that benefit from massage.</li> </ul>		
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine	
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.	
	<ul> <li>Discuss stress reduction as a way to positively influence many symptoms related to specific medical conditions.</li> </ul>		
	<ul> <li>Discuss two instructor-selected research articles that conclude that massage has a positive effect on one of these conditions: Alzheimer's disease, attention deficit hyperactivity disorder (ADHD), cancer, chronic fatigue syndrome, eating disorders, or high blood pressure.</li> </ul>		
	<ul> <li>Discuss two instructor-selected research articles that conclude that massage has benefits for two of these special populations: athletes, older adults, pregnant women, or infants.</li> </ul>		
	<ul> <li>Compare and contrast massage indications with massage contraindications.</li> </ul>		
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt	
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.	

## **Topic: Massage Cautions and Contraindications**

# Learning Outcomes

**Conditions:** Having completed 15.5 hours of instruction on massage cautions and contraindications, including American Red Cross Adult First Aid/CPR/AED training, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to massage cautions and contraindications including endangerment areas, medications, and side effects, and contraindications on a written examination.
- Demonstrate the use of a clinical reasoning process to identify contraindications, an
  understanding of when there is a need for increased therapist caution, and the
  capacity to choose appropriate adaptive measures for session planning on a written
  examination.
- Demonstrate the integration of knowledge and skills from other topics with this topic including the use of health intake forms, pathology reference books, drug reference books, and research literacy when determining if conditions are contraindicated or require caution, a physician's release, or adaptations on a graded assignment.
- Correctly adapt massage strokes and techniques in endangerment areas or based on client feedback on a practical evaluation.
- Obtain training and certification from the American Red Cross in adult first aid, cardiopulmonary resuscitation (CPR), and use of an automated external defibrillator (AED).

### **Key Terminology and Concepts**

- Absolute contraindication
- Acute inflammation
- Adaptive measures
- Advanced understanding/special training
- American Red Cross
- Analgesic
- Anticoagulant
- Antidepressant
- Antidiabetic medication
- Anti-inflammatory
- Automated external defibrillator (AED)
- Blood vessel
- Bony prominence
- Cancer
- Cardiopulmonary resuscitation (CPR)
- Caution
- Clinical reasoning
- Clinical reasoning model\*

- Fever
- First aid
- General contraindication
- Health form
- High blood pressure
- Local contraindication
- Low blood pressure
- Lymph nodes
- Muscle relaxants
- Nausea
- Nerves
- Older adults
- Osteoporosis
- Over-the-counter medication
- Pharmacology
- Physician's release
- Prescription medication
- Rescue breath
- Severe bleeding

- Conscious choking
- Contraindication
- Critical thinking model
- Diabetes
- Drug
- Drug reference
- Edema
- Endangerment area\*

- Side effect
- Skin conditions
- Steroids
- Stroke
- Supplement
- Surgery
- Unconscious choking
- Vein

## **Use of Terms**

\*These terms are not consistently used or consistently defined in the massage profession at this time. Curriculum designers are encouraged to use the terminology specific with their school's philosophy or the definitions of similar terms used in their textbooks. For the purposes of this document, these terms are defined as:

**Clinical reasoning model:** Clinical reasoning model or critical thinking models are both used to describe a step-by-step process of working through client information in order to plan a safe and competent massage for the client.

**Endangerment area:** Endangerment area, endangerment site, area of caution, and cautionary site are terms used by different authors to describe regions of the body where delicate structures like nerves, bony prominences, arteries, veins, and organs are superficial and unprotected. These are areas where lighter massage strokes and careful technique application are needed to ensure client comfort and safety.

#### **Sub-Topics**

- Endangerment Areas
- Contraindications
- Medications and Massage
- American Red Cross Adult First Aid/CPR/AED Certification

Sub-Topic: Endangerment Areas		
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Respond	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:         <ul> <li>Match these terms to their written descriptions: endangerment area, blood vessel, vein, bony prominence, nerves, lymph node, clinical reasoning, clinical reasoning model (also called critical thinking model).</li> </ul> </li> <li>List five types of structures that might be damaged if strokes are applied too forcefully in endangerment areas (e.g., blood vessels, veins, bony prominences, nerves, organs).</li> <li>Recall two structures in each of these endangerment areas that require caution: face, neck, trunk, upper extremity, lower extremity.</li> <li>Outline the borders of these endangerment areas: anterior triangle of the neck, posterior triangle of the neck, femoral triangle, and popliteal region.</li> </ul>	<ul> <li>Conditions: Having viewed an instructor demonstration of massage over endangerment areas and participated in a practice session, the learner will be able to:         <ul> <li>Imitate the adaptations the instructor makes to massage strokes when working in each of these endangerment areas: anterior triangle of the neck, posterior triangle of the neck, femoral triangle, popliteal region.</li> <li>Imitate instructor methods for how to lighten a stroke without loss of fluidity while working in endangerment areas.</li> </ul> </li> <li>Respond to client feedback and adapt strokes for client comfort during massage practice.</li> </ul>
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:         <ul> <li>Discuss one way each of these structures might be damaged by strokes applied too forcefully in endangerment areas: blood vessels, veins, bony prominences, nerves, organs.</li> <li>Discuss four general principles for working safely in endangerment areas.</li> <li>Describe one adaptation appropriate for a client whose feedback suggests that a stroke is uncomfortable.</li> </ul> </li> </ul>	<ul> <li>Conditions: Having completed a practice session, the learner will be able to:</li> <li>Demonstrate safe and fluid massage in each endangerment area.</li> <li>Demonstrate how to lighten a stroke without loss of fluidity while working in endangerment areas.</li> </ul>

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	Conditions: Having participated in a classroom activity, the learner will be able to:  Create a diagram outlining each endangerment area and its delicate structures.	<ul> <li>Conditions: Having completed practice sessions in other classes, and when asked by an instructor, the learner will be able to:</li> <li>Modify strokes without loss of fluidity based on client feedback.</li> <li>Coordinate stroke application so that adaptations in stroke depth over endangerment areas feels fluid and enjoyable to clients.</li> </ul>

## **Sub-Topic: Contraindications**

evel 1 Knowledge: Attain and Comprehend

## Skills: Observe and Imitate

## Receive Respond

**Note:** Learning objectives for reinforcing knowledge related to contraindications are integrated in other subjects, topics, and subtopics of the ELAP Blueprint where appropriate.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term contraindication.
- Match these common symptoms/conditions to their written definitions: acute inflammation, recent surgery, high blood pressure, low blood pressure, stroke, fever, nausea, edema, skin conditions, osteoporosis, cancer, diabetes.
- Match these terms to their written descriptions: absolute contraindication (also called general contraindication), local contraindication, physician's release, caution, adaptive measures.
- Explain how each of these resources might help identify contraindications or the need for caution: health form, drug reference books, pathology reference books, research articles, Internet resources.
- List five conditions that absolutely contraindicate the application of massage.
- List three conditions that contraindicate the application of massage in a local region.
- List three conditions that require a therapist to have advanced understanding or specialized training to provide massage or bodywork.
- List three conditions for which a physician's release is required to provide massage.
- Describe three adaptive measures a therapist might make to ensure a client's safety during a massage session.
- Outline the steps to take when a health intake form lists a condition that is unfamiliar to the therapist.

- Outline the process for acquiring a release for a client from a physician.
- Review the steps in the school-selected clinical reasoning process.

#### Level 2 Knowledge: Use and Connect Skills: Practice and Refine

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss cautions and contraindications related to working with older adults.
- Discuss cautions and contraindications related to working with clients with diabetes.
- Analyze a list of conditions and correctly categorize each as an absolute contraindication, local contraindication, need for physician release, or caution.
- Analyze a list of skin conditions and correctly categorize each as an absolute or local contraindication.
- Determine if an unfamiliar condition is a contraindication by using reference books or the Internet for research.
- Work in a peer group to apply a clinical reasoning process to five client conditions to determine if they are contraindications, require a physician's release, or require adaptive measures during the session.

There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.

#### Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

## Problem Solve

**Conditions:** Working on one's own, without help from peers or instructors, the learner will be able to:

 Use a clinical reasoning process to analyze two mock client health forms and determine if the client has a condition that contraindicates massage, requires a physician's release, or requires adaptive measures during the session.

## **Sub-Topic: Medications and Massage**

evel 1

Knowledge: Attain and Comprehend

Skills: Observe and Imitate

## Receive Respond

**Note:** Learning objectives for reinforcing knowledge related to medications and massage are integrated in other subjects, topics, and subtopics of the ELAP Blueprint where appropriate.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these terms to their written descriptions: pharmacology, drug, prescription medication, over-the-counter medication, supplement.
- Explain in one's own words the meaning of the term *side effect*.
- List two ways massage could potentially increase the severity of side effects caused by medications.
- List two ways massage could potentially soothe the severity of side effects caused by medications.
- Match these classifications of drugs to their written descriptions: analgesic, antiinflammatory, anticoagulant, antidepressant, antidiabetic medication, muscle relaxants, steroids.
- Explain in one's own words the importance of having a drug reference available in the massage practice.
- Recall two medication types that indicate that the client's condition may be very complex or serious and therefore requires a physician's release (e.g., narcotic analgesics, antipsychotic medications, cancer medications).
- Review the steps in the school-selected clinical reasoning process.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	Conditions: Having participated in an interactive	There are no relevant learning objectives for this
	lecture or classroom activity, the learner will be able to:	sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss measures that ensure client safety when clients are using over-the-counter or prescription analgesics (narcotic, non- narcotic, over-the-counter, etc.),</li> </ul>	
	<ul> <li>Discuss measures that ensure client safety when clients are using over-the-counter or prescription anti-inflammatories.</li> </ul>	
	<ul> <li>Discuss measures that ensure client safety when clients are using prescription anticoagulant medications.</li> </ul>	
	<ul> <li>Discuss measures that ensure client safety when clients are using prescription antidepressant medications.</li> </ul>	
	<ul> <li>Discuss measures that ensure client safety when clients are using prescription antidiabetic medications.</li> </ul>	
	<ul> <li>Discuss measures that ensure client safety when clients are using prescription muscle relaxants.</li> </ul>	
	<ul> <li>Discuss measures that ensure client safety when clients are using prescription steroids.</li> </ul>	
	<ul> <li>Discuss measures that ensure client safety for clients reporting these common side effects: reduced sensitivity to physical sensations, drowsiness, fainting, dizziness, low blood pressure, anxiety, and compromised tissue (e.g., bone density issues, soft-tissue integrity loss as occurs with long-term use of corticosteroids, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having worked with a peer group and analyzed five client health forms listing different medications that are unfamiliar, the learner will be able to:</li> <li>Effectively research unknown medications and side effects (e.g., use appropriate resources, know how to search, etc.).</li> </ul>	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.
	<ul> <li>Choose one session adaptation to support the safety of each client.</li> </ul>	

## Sub-Topic: Red Cross Adult First Aid/CPR/AED Certification

Level 1

Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

## Receive Respond

Note: The American Red Cross does not publish learning objectives for the Adult First Aid/CPR/AED certification. The following learning objectives are based on the certification manual and meant to provide an overview of course components. They are not comprehensive and may not address all learning that takes place in a Red Cross course. Speak to an American Red Cross representative for details of courses at www.redcross.org.

**Conditions:** Having participated in an American Red Cross Adult First Aid/CPR/AED program, the learner will be able to:

- Define the term *first aid*.
- Define the term severe bleeding.
- List two indicators that an adult is injured, ill, apparently unconscious, and in need of assistance (e.g., a person is lying face down without moving in an unlikely place).
- List two items of as personal protective equipment (e.g., gloves).
- Outline response steps for giving care to an adult who is injured or ill or appears to be unconscious (e.g., check the scene for safety, use personal protective equipment if possible, check the person for responsiveness, call 911, etc.).
- List two methods used to open the airway of an adult (e.g., tilt the head, lift the chin).
- State how long a responder checks for breathing in an adult who is injured or ill or appears unconscious (e.g., no more than 10 seconds).
- Define the term conscious choking (e.g., the person is conscious but cannot cough, speak, or breathe).
- Outline the response steps when a responder encounters a person who is consciously choking (e.g., give five back blows, give five abdominal thrusts, if the person loses consciousness call 911, etc.).

**Conditions:** Having participated in an American Red Cross Adult First Aid/CPR/AED program, and viewed an instructor demonstration, the learner will be able to:

Imitate the steps and methods the instructor used to:

- Respond appropriately to a situation in which an adult appears to be unconscious.
- Use personal protective equipment correctly.
- Open the airway of an adult.
- Check for breathing.
- Respond to an adult who is consciously choking.
- Respond to an adult who is unconsciously choking.
- Provide CPR to a person who is not breathing.
- Use AED equipment properly to provide a shock to an adult and continue with CPR.
- Control external bleeding until medical personal can take over.
- Respond to a an adult with a burn until medical personal can take over.
- Respond to suspected poisoning until medical personal can take over.
- Respond to suspected stroke until medical personal can take over.

- Define the term rescue breath.
- Define the term unconscious choking (e.g., a person who is not conscious and the chest does not rise with rescue breaths).
- Outline response steps when a responder encounters a person who is unconsciously choking (e.g., give rescue breaths, give 30 chest compressions, look for and remove object, etc.).
- Define the term cardiopulmonary resuscitation (CPR).
- Describe the proper method for giving chest compressions (e.g., push hard and fast in the middle of the chest at least 2 inches deep and at least 100 compressions per minute, with the person on a firm, flat surface).
- Outline response steps for using CPR (e.g., give 30 chest compressions, give 2 rescue breaths, do not stop until another trained responder takes over, etc.).
- Define the term automated external defibrillator (AED).
- List two important guidelines for using an AED (e.g., don't use pediatric AED pads or equipment on adults and don't use adult AED equipment on children under 8 years of age or weighing less than 55 pounds, etc.).
- Outline response steps for using an AED (e.g., turn on the AED, follow voice and/or visual prompts, wipe a bare chest dry, attach pads, etc.).
- Outline the response steps for controlling external bleeding (e.g., cover the wound, apply direct pressure, etc.).
- Outline the response steps for dealing with burns until trained medical personal take over (e.g., remove from the source of burn, cool the burn, cover loosely with sterile dressing, etc.).
- Outline response steps for suspected poisoning (e.g., call 911 or the poison control hotline, provide care based on conditions, etc.).
- Outline response steps for suspected head, neck or spinal injuries (e.g., call 911, minimize movement of the head, neck, or

spine, stabilize the head in the position it was found, etc.).

- Define the term *stroke*.
- Outline response steps to suspected stroke using the acronym F.A.S.T. (e.g., Face, Arm, Speech, Time).

#### Level 2 Knowledge: Use and Connect Skills: Practice and Refine

#### Apply

**Conditions:** Having participated in an American Red Cross Adult First Aid/CPR/AED program, the learner will be able to:

- Discuss response steps when adults are injured or ill or appear to be unconscious.
- Discuss the use of personal protective equipment in emergency situations.
- Discuss methods to open the airway of an adult or provide rescue breathing.
- Discuss response steps for conscious choking and unconscious choking.
- Discuss methods for performing cardiopulmonary resuscitation (CPR).
- Discuss response steps for performing CPR.
- Discuss guidelines for using automated external defibrillator (AED) equipment.
- Discuss response steps for using an AED in emergency situations.
- Discuss response steps for controlling external bleeding or managing burns until medical personal take over.
- Discuss response steps for suspected poisoning.
- Discuss response steps for suspected head, neck or spinal.
- Discuss response steps for suspected stroke and the use of the acronym F.A.S.T.

**Conditions:** Having participated in an American Red Cross Adult First Aid/CPR/AED program, and viewed an instructor demonstration, the learner will be able to:

Demonstrate the proper steps and correct methods to:

- Respond appropriately to a situation in which an adult appears to be unconscious.
- Use personal protective equipment correctly.
- Open the airway of an adult.
- Check for breathing.
- Respond to an adult who is consciously choking.
- Respond to an adult who is unconsciously choking.
- Provide CPR to a person who is not breathing.
- Use AED equipment properly to provide a shock to an adult and continue with CPR.
- Control external bleeding until medical personal can take over.
- Respond to a an adult with a burn until medical personal can take over.
- Respond to suspected poisoning until medical personal can take over.
- Respond to suspected stroke until medical personal can take over.

# Problem There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain. Knowledge: Choose and Plan Skills: Naturalize and Adapt There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

	Entry-Level Massage Education Blueprint  Massage Professional Practices
Topic	Massage Equipment and Environment
Sub-Topics	<ul><li>Equipment and Supplies</li><li>Session Environments</li></ul>
Topic	Preventing Disease Transmission
Sub-Topics	<ul> <li>Understanding Disease</li> <li>Therapist Hygiene</li> <li>Infection Control</li> <li>Standard Precautions</li> </ul>
Topic	Laws and Regulations
Sub-Topics	<ul> <li>Obtaining and Maintaining Credentials</li> <li>Adhering to Laws and Regulations</li> <li>Supervision of Therapists</li> </ul>
Topic	Personal Health, Body Mechanics, and Self-Care
Sub-Topics	<ul> <li>Personal Health and Self-Care</li> <li>Body Mechanics Principles</li> <li>Preventing Work-Related Injury</li> </ul>

## **Topic: Massage Equipment and Environment**

# Learning Outcomes

**Conditions:** Having completed 2.5 hours of instruction on equipment and session environments, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to massage equipment and session environments, including types of equipment and features, lubricants, supplies, and factors for creating a comfortable, inviting, and safe session space, on a graded assignment.
- Correctly set up, organize, adjust for comfort and safety, sanitize, and properly use massage equipment, lubricants, and supplies related to the practice of massage therapy on a practical evaluation.

## **Key Terminology and Concepts**

- Allergy
- Aromas
- Bolster
- Carrying case
- Cream
- Face cradle
- First aid kit
- Gel
- General liability
- Hydrocollator
- Linens
- Lotion
- Lubricant
- Massage table
- Massage table cart
- Massage tools
- Music
- Oil
- Reference library
- Skin sensitivities
- Stool
- Ventilation
- Warmth

## **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

#### **Sub-Topics**

- Equipment and Supplies
- Session Environments

Subject- Massage Professional Practices, Topic – Equipment and Environment

## **Sub-Topic: Equipment and Supplies**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

## Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Recognize this equipment: massage table, face cradle, carrying case, massage table cart, stool or Fitball used to sit, linens, bolsters.
- Match these lubricant types to their written descriptions: oil, lotion, cream, gel.
- Identify three causes of sensitivity or allergy to lubricants (e.g., synthetic fragrance, dyes, nut-based products, etc.).
- Describe one storage method for supplies, lubricants, and linens.
- List three key items that should be in a session room first aid kit.
- Identify key types of books therapists should have available in a professional reference library (e.g., medical dictionary, drug reference, pathology reference, etc.).
- Recognize two other pieces of equipment a massage therapist might use in a practice (e.g., hydrocollator, microwavable warm packs, tools to protect their hands, etc.).
- Define the term general liability (slip and fall).
- List two methods for reducing general liability in a massage practice (e.g., tighten leg bolts before each client).

**Conditions:** Having viewed an instructor demonstration of equipment set-up and breakdown, the learner will be able to:

- Imitate the methods the instructor used to:
  - Set up a portable massage table and correctly adjust the table height for therapist comfort.
  - Sanitize the table and dress it with linens.
  - Check the table for safety (e.g., tighten leg bolts).
  - Adjust the face cradle properly for client safety and comfort.
  - Clean and break down massage equipment properly after sessions.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Compare and contrast the benefits and drawbacks of oils, lotions, creams, and gels used as massage lubricants.</li> <li>Discuss the types of linens needed in a massage practice (e.g., sheets, blankets, face cradle covers, bolster covers, draping material, towels, etc.).</li> <li>Discuss useful session supplies (e.g., clock, music system, wastebasket, gel hand sanitizer, hydrocollator, microwavable packs, etc.)</li> <li>Discuss two different types and shapes of bolsters and their uses.</li> <li>Discuss safety methods that reduce the occurrence of general liability claims in a massage practice (e.g., tighten bolts on table legs before each session).</li> </ul>	Conditions: Having participated in a practice session, the learner will be able to:  Demonstrate the correct set-up and breakdown of massage session equipment:  Set up a portable massage table and correctly adjust the table height for therapist comfort.  Sanitize the table and dress it with linens.  Check the table for safety (e.g., tighten leg bolts).  Adjust the face cradle properly for client safety and comfort.  Clean and break down massage equipment properly after sessions.  Use oil, cream, lotion, and gel as massage lubricants based on client preferences.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having participated in ongoing massage practice sessions, the learner will be able to:</li> <li>Demonstrate correct and consistent habits in the set-up and break-down of massage session equipment.</li> <li>Choose specific lubricants based on personal preferences, massage style, and client preferences.</li> </ul>

Sub-To	opic: Session Environments	
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>List three things that make a session space feel inviting and comfortable.</li> </ul>	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.
	<ul> <li>List three factors related to ventilation and aromas to consider when planning a session space.</li> </ul>	
	<ul> <li>Explain one method for keeping a client warm during a session.</li> </ul>	
	• Recognize elements of music that enhance sessions or cause client distraction/irritation.	
	<ul> <li>Identify three safety issues to consider when planning a massage business space (e.g., lights shouldn't be too dim when client gets on and off table, remove lubricant from client's feet before getting up, no exposed extension cords or area rugs clients might trip over, etc.).</li> </ul>	
Level 2	Knowledge: Use and Connect	CLIII D. III LD.C
	Kilowiedge. Ose and Connect	Skills: Practice and Refine
Apply	Conditions: Having participated in an interactive lecture, the learner will be able to:  Discuss elements that make a session space feel inviting and comfortable.	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
Apply	Conditions: Having participated in an interactive lecture, the learner will be able to:  Discuss elements that make a session space	There are no relevant learning objectives for this
Apply	<ul> <li>Conditions: Having participated in an interactive lecture, the learner will be able to:</li> <li>Discuss elements that make a session space feel inviting and comfortable.</li> <li>Discuss factors related to ventilation and aromas to consider when planning a session</li> </ul>	There are no relevant learning objectives for this
Apply	<ul> <li>Conditions: Having participated in an interactive lecture, the learner will be able to:</li> <li>Discuss elements that make a session space feel inviting and comfortable.</li> <li>Discuss factors related to ventilation and aromas to consider when planning a session space.</li> <li>Discuss methods for keeping a client warm</li> </ul>	There are no relevant learning objectives for this
Apply	<ul> <li>Conditions: Having participated in an interactive lecture, the learner will be able to:</li> <li>Discuss elements that make a session space feel inviting and comfortable.</li> <li>Discuss factors related to ventilation and aromas to consider when planning a session space.</li> <li>Discuss methods for keeping a client warm during a session.</li> <li>Discuss elements of music that enhance</li> </ul>	There are no relevant learning objectives for this
Apply  Level 3	<ul> <li>Conditions: Having participated in an interactive lecture, the learner will be able to:         <ul> <li>Discuss elements that make a session space feel inviting and comfortable.</li> </ul> </li> <li>Discuss factors related to ventilation and aromas to consider when planning a session space.</li> <li>Discuss methods for keeping a client warm during a session.</li> <li>Discuss elements of music that enhance sessions or cause client distraction/irritation.</li> <li>Discuss safety issues to consider when</li> </ul>	There are no relevant learning objectives for this

## **Topic: Preventing Disease Transmission**

# Learning Outcomes

**Conditions:** Having completed 5.5 hours of instruction on preventing disease transmission, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to preventing disease transmission, including methods by which infectious diseases are spread, therapist hygiene, sanitation of the facility and equipment, good housekeeping practices, and standard precautions, on a written examination.
- Demonstrate proper therapist hygiene, correct hand-washing procedure, proper use of gloves, the sanitation of massage equipment, proper cleanliness and management of massage linens, and proper cleanliness and management of lubricants and supplies on a practical evaluation.

## **Key Terminology and Concepts**

- Autoimmune
- Acute
- Antiseptic
- Bacteria
- Bleach solution
- Blood spill
- Body fluids
- Cancerous
- Center for Disease Control (CDC)
- Chronic
- Deficiency
- Direct contact
- Disease
- Disease transmission
- Disinfectant
- Fungus
- Genetic
- Hand washing
- Hepatitis A
- Hepatitis B
- Hepatitis C
- HIV/AIDS

- Housekeeping
- Indirect contact
- Infection control
- Infectious disease
- Lice
- Metabolic
- Mites
- Pathogen
- Personal hygiene
- Phenols
- Protozoa
- Quats
- Sanitation
- Signs
- Standard precautions (formally universal precautions)
- Subacute
- Symptoms
- Tuberculosis
- Vector transmission
- Vehicle transmission
- Virus

#### **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted. The term *standard precautions* replaces the term *universal precautions* in current CDC terminology (2011).

Sub-Topics
<ul> <li>Understanding Disease</li> <li>Therapist Hygiene</li> <li>Infection Control</li> <li>Standard Precautions</li> </ul>

	Subject- Massage Professional	Practices, Topic – Preventing Disease Transmission
Sub-To	opic: Understanding Disease	
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:  Define the term <i>disease</i> .	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.
	<ul> <li>Match these disease terms to their written descriptions: autoimmune, cancerous, deficiency, genetic, infectious, metabolic.</li> </ul>	
	<ul> <li>Match these pathogens to their written descriptions: bacteria, virus, fungus, protozoa, lice, mites.</li> </ul>	
	<ul> <li>Define the term disease transmission.</li> <li>Match these modes of disease transmission to their written descriptions: direct contact, indirect contact, vehicle transmission, vector transmission.</li> </ul>	
	• Match these disease-related terms to their written descriptions: <i>signs, symptoms, acute, subacute, chronic</i> .	
	<ul> <li>Identify one type of bacteria that causes disease and could be spread in a massage practice (e.g., staph infection, strep throat, etc.).</li> </ul>	
	<ul> <li>Identify one type of virus that causes disease and could be spread in a massage practice (e.g., common cold, herpes simplex, etc.).</li> </ul>	

•	Identify one type of fungus that causes disease and could be spread in a massage practice (e.g., tinea group that causes ringworm, athlete's foot, jock itch, scalp conditions, etc.).
	Knowledge: Use and Connect

	•	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	• Explain in one's own words how infectious diseases are spread from one person to another person.	
	• Compare and contrast lice and mites, how they spread, and how they are prevented.	
	<ul> <li>Discuss the steps a therapist must take if lice or mites are discovered present in the massage practice.</li> </ul>	
	<ul> <li>Compare and contrast direct contact transmission with indirect contact transmission.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Sub-Topic: Therapist Hygiene		
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	<ul> <li>Conditions: Having completed an interactive lecture or classroom activity, the learner will be able to:</li> <li>Recognize standards of personal hygiene appropriate for health care providers.</li> <li>Outline the steps of a proper hand-washing procedure.</li> <li>List two methods a smoker can use to ensure clients are not exposed to lingering smells of cigarette smoke.</li> <li>Discuss two methods therapists with allergies can use to protect client safety during allergy season.</li> </ul>	Conditions: Having viewed an instructor demonstration of hand-washing procedures following CDC guidelines, the learner will be able to:  Duplicate the step-by-step hand-washing procedure following CDC guidelines shown by the instructor.
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:         <ul> <li>Discuss health care standards of personal hygiene related to cleanliness of the body and hair, appropriate clothing, proper care of nails, and proper hand-washing procedures.</li> </ul> </li> <li>Discuss issues of personal hygiene for smokers.</li> <li>Discuss issues of personal hygiene for therapists living with allergies.</li> </ul>	Conditions: Having practiced proper handwashing procedure as outlined by the CDC, the learner will be able to:  Perform a hand-washing procedure before or after a massage session for an instructor.  Correct one's hand-washing procedure in response to instructor feedback based on CDC guidelines.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having completed a self-assessment of personal hygiene practices in relationship to hygiene practices for professional therapists, the learner will be able to:         <ul> <li>Evaluate the gaps between one's personal hygiene practices and the practices of a professional health care provider.</li> </ul> </li> <li>Develop a plan for improving one's personal hygiene practices to match the hygiene practices of a professional health care provider.</li> </ul>	Conditions: Having practiced proper handwashing, the learner will be able to:  • Consistently demonstrate correct handwashing habits before and after every massage session.

## **Sub-Topic: Infection Control**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

## Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *infection control*.
- Match these cleaning terms to their written descriptions: antiseptic, disinfectant, phenols, quats, bleach solution, sanitation, housekeeping.
- Identify two methods for protecting the eyes, skin, and respiratory system from cleaning products used in a health care setting.
- Explain in one's own words what a therapist should do if sick on a work day.
- Describe two situations that require clean-up with a disinfectant (e.g., at the end of each workday for deep cleaning, if blood or body fluids are present, etc.).
- Recognize the difference between general housekeeping activities and sanitation activities.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate cleaning and sanitation tasks shown by the instructor:
  - Wipe down hard surfaces including massage equipment with an approved antiseptic before and after sessions.
  - Handle soiled massage linens properly.
  - Disinfect the lubricant container properly.
  - Disinfect massage tools properly (e.g., stone massage stones, foot soaking basins, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Compare and contrast antiseptic cleaning products with disinfectant cleaning products.</li> <li>Discuss guidelines for the sanitation of the session room before and after sessions.</li> <li>Discuss therapists who are sick and methods to protect clients for contagious diseases like the cold or flu.</li> <li>Discuss the proper handling of linens, storage of linens, and management of laundry to prevent the spread of disease in a massage practice.</li> <li>Discuss the proper handling of lubricants to prevent the spread of disease in a massage practice.</li> <li>Outline weekly housekeeping activities that ensure the general cleanliness of the facility.</li> </ul>	Conditions: Having participated in massage sessions, the learner will be able to:  Perform cleaning and sanitation tasks correctly before and after massage sessions when asked by the instructor:  Wipe down hard surfaces including massage equipment with an approved antiseptic before and after sessions.  Handle soiled massage linens properly.  Disinfect the lubricant container properly.  Disinfect massage tools properly (e.g., stone massage stones, foot soaking basins, etc.).
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having participated in ongoing massage practice sessions, the learner will be able to:  Consistently demonstrate correct habits in the use of cleaning and sanitation tasks before and after massage sessions:  Wipe down hard surfaces including massage equipment with an approved antiseptic before and after sessions.  Handle soiled massage linens properly.  Disinfect the lubricant container properly.  Disinfect massage "tools" properly (e.g., stone massage stones, foot soaking basins, etc.).

## **Sub-Topic: Standard Precautions**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

## Receive Respond

**Conditions:** Having participated in an interactive lecture, the learner will be able to:

- Define the term *standard precautions*.
- Match these terms to their written descriptions: HIV/AIDS, hepatitis A, hepatitis B, hepatitis C, tuberculosis, blood spill, body fluids.
- In one's own words, describe the purpose of standard precautions for health care workers.
- Identify when standard precautions should be applied in a massage practice as defined by the CDC (e.g., broken skin on therapist's hands or on the client, client or therapist with an acknowledged bloodborne pathogen, etc.).
- Explain two instances when gloves should be worn during a massage session (based on CDC recommendations).
- Recognize important components of standard precautions (e.g., correctly using gloves, properly cleaning up linen soiled with blood or body fluid, properly cleaning hard surfaces soiled with blood or body fluid, etc.).

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

 Imitate the steps shown by the instructor to properly put on and take off gloves following standard precautions guidelines.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture, the learner will be able to:</li> <li>Discuss how HIV/AIDS is spread from one person to another.</li> <li>Compare and contrast the ways hepatitis B and hepatitis C are spread from one person to another.</li> <li>Discuss issues for health care workers regarding tuberculosis.</li> <li>Discuss the proper use of gloves during a massage session.</li> <li>Discuss the steps to properly clean linens soiled with blood or body fluids.</li> <li>Discuss the steps to properly clean blood or body fluids on hard surfaces.</li> </ul>	<ul> <li>Conditions: Having participated in a practice session for proper glove use, the learner will be able to:</li> <li>Demonstrate the proper steps and methods for putting on and taking off gloves following standard precautions when requested by an instructor.</li> <li>Adapt glove use procedures based on instructor feedback.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having completed a classroom activity, the learner will be able to:</li> <li>Appraise three massage session scenarios and decide when standard precautions are necessary, then outline the steps for safe practice related to each scenario.</li> </ul>	Conditions: Having participated in ongoing massage practice sessions, the learner will be able to:  • Consistently demonstrate good habits regarding glove use including use of gloves when required (e.g., anytime a student "client" has broken skin or anytime the therapist has broken skin or hangnails on the fingers, etc.), and correct methods for putting on and taking off gloves.

## **Topic: Laws and Regulations**

# Learning Outcomes

**Conditions:** Having completed 4 hours of instruction on massage laws and regulations, the learner is expected to:

 Demonstrate knowledge of the key terms and concepts related to massage laws and regulations including requirements to obtain and maintain credentials, state laws and regulations, scope of practice, limits to scope of practice, and supervision of therapists in the state in which one intends to practice, on a written examination.

### **Key Terminology and Concepts**

- Background check (required in some states)
- Board of Massage\*
- Certification\*
- Chiropractic adjustment
- Consumer complaint
- Continuing education
- CPR/FA training (required in some states)
- Diagnose
- Disciplinary action
- Education requirements
- Exemptions to the law
- Grandfathering provision
- Health Insurance Portability and Accountability Act (HIPAA)
- HIV/AIDS training (required in some states)
- Jurisprudence exam (required in some states)
- Law
- Liability insurance (required in some states)
- Licensing
- Limits to scope of practice
- Maintenance of credentials
- Massage & Bodywork Licensing Examination (MBLEx)
- Massage credentials
- Mental health counseling
- NCBTMB Board Certification Exam
- NCBTMB Entry-Level State Licensure Exam
- Prescribe
- Portability
- Public protection
- Practical examination (required in some states)
- Registration
- Regulation
- Revocation/suspension of credentials

- Scope of practice
- State-approved massage program

#### **Use of Terms**

\*These terms are not consistently used or consistently defined in the massage profession at this time. Curriculum designers are encouraged to use the terminology specific with their school's philosophy or the definitions of similar terms used in their textbooks. For the purposes of this document, these terms are defined as:

**Board of Massage**: Most states have a board of massage that supervises the practice of massage by reviewing therapist applications, investigating complaints, and overseeing therapists in the state. Sometimes massage is supervised by another health care board, such as a nursing board or board of chiropractic examiners.

**Certification:** The term *certification* is used in a variety of ways in the massage profession. Schools should discuss the different types of certification therapists might obtain and use these terms specifically in their educational programs for clarity. For example, required state certification to practice massage (states that use the designation *Certified Massage Therapist* or CMT) is different from *National Certification* offered by NCBTMB.

### **Sub-Topics**

- Obtaining and Maintaining Credentials
- Adhering to Laws and Regulations
- Supervision of Therapists

## **Sub-Topic: Obtaining and Maintaining Credentials**

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

## Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *public protection*.
- Explain the education requirements for one's own state.
- State the title of the state-approved exam taken to obtain massage credentials (e.g., Massage & Bodywork Licensing Examination [MBLEx], National Certification Examination for Therapeutic Massage [NCETM], National Certification Examination for Therapeutic Massage & Bodywork [NCTMB]).
- Describe other requirements to obtain massage credentials as required by the state (e.g., completion of a state-approved massage training program, jurisprudence exam, practical exam, background check, proof of CPR/FA training, proof of HIV/AIDS training, proof of liability insurance, etc.).
- Identify the correct massage credential designation or title used for massage in the state of practice (e.g., Licensed Massage Therapist, Registered Massage Therapist, etc.).
- Define the term maintaining credentials.
- Define the term continuing education.
- List three ways a massage therapist can maintain credentials in the state of practice.
- Match these phrases that describe the many uses of the term *certification* in the massage profession to their written descriptions: required state certification to practice massage/bodywork, voluntary governmental certification, association certification, national certification, registered or trademarked continuing education certification.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Analyze the education requirements for a massage therapist in the state in which one intends to practice.</li> </ul>	
	<ul> <li>Outline content areas tested on the state- approved examination.</li> </ul>	
	<ul> <li>Outline in detail the massage credentialing process for the state in which one intends to practice (e.g., complete state education requirements, pass the state-approved test, pass jurisprudence exam, complete a background check, submit application to the state, etc.).</li> </ul>	
	<ul> <li>Discuss requirements for maintaining massage credentials in one's state (e.g., continuing education, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Sub-Topic: Adhering to Laws and Regulations**

level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

## Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term law.
- Define the term *regulation*.
- Define the term scope of practice.
- Match these common limits to scope of practice to their written descriptions: diagnose, prescribe, chiropractic adjustments (joint adjustments), mental health counseling, and others as described by the specific state.
- Identify three techniques included in the state scope of practice for massage.
- Identify three techniques that are outside the state scope of practice for massage.
- List two ramifications of not adhering to the state scope of practice for massage (e.g., liability insurance does not cover restricted activities, therapist could lose massage credentials, etc.).
- Define the term exemptions to the law.
- Define the term *portability*.
- Define the term *grandfathering provision*, if applicable to the state of practice.
- Define the term *Health Insurance Portability* and Accountability Act (HIPAA).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	• Review the appropriate laws in one's state of practice.	
	• Review the appropriate regulations in one's state of practice.	
	<ul> <li>Discuss the state scope of practice for massage.</li> </ul>	
	<ul> <li>Review a list of methods, techniques, and applications and label each item as "in scope" or "out of scope" for massage in one's state.</li> </ul>	
	• Discuss exemptions to the law, portability issues, and grandfathering provisions in one's state.	
	<ul> <li>Discuss HIPAA regulations and their application in one's state.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## Subject- Massage Professional Practices, Topic – Massage Laws and Regulations **Sub-Topic: Supervision of Therapists Knowledge: Attain and Comprehend Skills: Observe and Imitate** Receive **Conditions:** Having participated in an interactive There are no relevant learning objectives for this Respond lecture or classroom activity, the learner will be sub-topic in level 1 of the psychomotor domain. able to: Define the term *Board of Massage* (or other as appropriate for the state). List three activities conducted by the board of massage in one's state. Define the term consumer complaint. List two reasons a consumer might file a complaint against a therapist. List two reasons a therapist might file a complaint against a colleague. Define the term disciplinary action. List three reasons why a therapist's credentials might be revoked or suspended by the state board of massage. Look up and read the complaints page on the state board of massage website. Level 2 **Knowledge: Use and Connect Skills: Practice and Refine** Apply **Conditions:** Having participated in an interactive There are no relevant learning objectives for this lecture or classroom activity, the learner will be sub-topic in level 2 of the psychomotor domain. able to: Discuss the activities conducted by the state board of massage in the state where one will work. Discuss the disciplinary actions states might take against massage therapists when necessary. Discuss methods consumers use to file complaints about massage therapists. Discuss methods therapists use to file complaints reporting the misconduct of colleagues. Discuss the disciplinary actions the state board of massage has taken against massage

therapists in the past six months.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having participated in a classroom activity, the learner will be able to:</li> <li>Report on one disciplinary action taken by the state board of massage toward a massage therapist in the last six months.</li> </ul>	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## Topic: Personal Health, Body Mechanics, and Self-Care

## Learning Outcomes

**Conditions:** Having completed 8 hours of instruction on personal health, body mechanics, and self-care, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to personal health, body mechanics, and self-care on a written examination.
- Demonstrate a useful self-care warm-up, and adjust personal body mechanics in response to instructor feedback during a practical evaluation.

**Conditions:** Having completed 20 hours of hands-on practice in massage and bodywork application methods classes (these hours are counted elsewhere in the Blueprint), the learner is expected to:

 Demonstrate the integration of body mechanics principles into hands-on work, including the regular use of a self-care warm-up and correct body mechanics during the application of massage, on an additional practical evaluation.

## **Key Terminology and Concepts**

- Body awareness
- Body mechanics
- Bow stance\*
- Burnout
- Cardiovascular fitness
- Centeredness\*
- Flexibility
- Horse stance\*
- Nutrition
- Personal health
- Physical fitness
- Range of motion
- Repetitive stress injury\*
- Self-care
- Sleep schedule
- Stances\*
- Strength
- Stress reduction
- Structural alignment\*
- Use of body weight
- Use of breath
- Warm-up

#### **Use of Terms**

\*These terms are not consistently used or consistently defined in the massage profession at this time. Curriculum designers are encouraged to use the terminology specific with their school's philosophy or the definitions of similar terms used in their textbooks. For the purposes of this document, these terms are defined as:

**Bow stance:** The terms *archer stance, lunge position,* and *asymmetrical stance* are also used to denote a position of the lower body in which one foot is positioned in front of the other with the body weight centered between the two feet.

**Centeredness:** The term *grounding* is also commonly used to denote a physical, mental, and emotional state in which the therapist is ready to perform a client-centered massage session while remaining attentive to sensations felt in one's own body related to body mechanics.

**Horse stance:** The terms *warrior stance* and *symmetrical stance* are also used to denote a position of the lower body in which the feet are positioned shoulder-width apart and facing the same direction.

**Repetitive stress injury:** The terms *repetitive motion injury* and *overuse injury* are also commonly used to describe injuries sustained by therapists during repeated massage application.

**Stances:** Refers to foot, knee, and hip positions assumed during the application of massage/bodywork. Some textbooks use this term while others avoid it.

**Structural alignment:** A general term used to describe the correct alignment of body parts with other parts during the application of massage (e.g., structural alignment of the back, neck, and head while seated and applying foot massage). The term *stacking the joints* is also used in some situations to suggest structural alignment, especially of the wrists and fingers.

#### **Sub-Topics**

- Personal Health and Self-Care
- Body Mechanics Principles
- Preventing Work-Related Injury

# **Sub-Topic: Personal Health and Self-Care**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *personal health*.
- Define the term *self-care*.
- List two reasons why personal health and self-care are important for massage therapists (e.g., massage is physical and demanding, therapists need good health and self-care to prevent burnout or injury, etc.).
- Define the term *nutrition*.
- List three principles or guidelines for nutritious eating.
- Define the term *physical fitness*.
- List two ways to improve one's strength.
- List two ways to improve one's cardiovascular fitness.
- List two ways to improve one's flexibility.
- Define the term body awareness.
- List two ways to develop greater body awareness.
- Describe three benefits of a consistent sleep schedule.
- Describe two strategies therapists can use for stress reduction.
- Define the term centeredness.
- Explain one client-centered reason therapists become centered before sessions (e.g., to remain more client-focused, to stay more present to the client's moment-by-moment needs, etc.).
- Explain one self-care reason therapists cultivate centeredness before sessions (e.g., to have greater body awareness so as to prevent injuries though greater mindfulness).
- Define the term warm-up.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods for becoming centered before a session.
- Imitate the instructor's methods for warming up the hands, wrists, and body before a session.

- Explain one reason to warm up the hands and body before providing massage.
- Outline five ways to increase self-care related to one's own health.

#### Level 2 Knowledge: Use and Connect Skills: Practice and Refine

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss methods for achieving:
  - Basic nutritional health to support the practice of massage.
  - Basic cardiovascular fitness to support the practice of massage.
  - Basic muscular strength to support the practice of massage.
  - Basic flexibility to support the practice of massage.
  - A consistent sleep schedule to support the practice of massage.
- Discuss methods to become centered before a massage session.
- Discuss methods to warm up before providing a massage session.
- Share ones thoughts or goals related to personal health related to the practice of massage.

**Conditions:** Having explored options for grounding, centering, and warming up, the learner will be able to:

- Demonstrate personal methods for becoming centered before a session.
- Demonstrate personal methods for warming up the hands, wrists, and body before a session.

# Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

# Problem Solve

**Conditions:** Having participated in a classroom activity, the learner will be able to:

 Develop a 5-minute warm-up routine that supports flexibility and centeredness and prepares the body to deliver massage methods during a session. **Conditions:** Having participated in ongoing practice classes, the learner will be able to:

- Consistently use personal methods for becoming centered before a session.
- Consistently use personal methods for warming up the hands, wrists, and body before a session.

# **Sub-Topic: Body Mechanics Principles**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term body mechanics.
- Match these terms to their written descriptions: structural alignment, stances, bow stance, horse stance, use of body weight, use of breath.
- List four principles of good body mechanics (e.g., use proper table height, wear clothing that moves, warm up before providing massage, use movement, stretching, and a variety of techniques, pay attention to personal structural alignment, use body weight, breath, etc.).
- Describe one method to use body weight effectively during the application of massage methods.
- Identify one way that therapists can use their breath during application of methods to support good body mechanics.
- List two ways variety and movement during the application of techniques supports good body mechanics (e.g., reduces repetitive stress on the therapist's body, helps the therapist stay relaxed and breath, etc.).

**Conditions:** Having watched instructor demonstrations, the learner will be able to:

- Imitate the instructor's body mechanics in these areas:
  - Proper alignment of the feet, knees, and hips when using stances, moving around the treatment table, or sitting.
  - Proper alignment of the back, neck, and head when applying methods from a standing or seated position.
  - Proper alignment of the shoulders, arms, wrists, fingers, and thumbs when applying methods from a standing or seated position.
  - Proper alignment of the body while lifting client's extremities during range of motion or stretching techniques.
  - Effective use of body weight during the application of methods from a standing or seated position.
  - Effective use of breath during the application of methods.
  - Effectively use movement and variety during the application of methods.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:  Discuss methods to maintain proper structural alignment during the application of massage methods for these areas of the therapist's body:  The feet, knees, and hips including proper use of common stances.  The back, neck, and head.  The shoulders, arms, wrists, fingers, and thumbs.  Discuss proper body position during the application of massage methods from these therapist positions: standing, sitting, bending, lifting and moving the client's extremities for range of motion techniques.	<ul> <li>Conditions: Having participated in massage practice sessions, the learner will be able to:         <ul> <li>Practice body mechanics during application of massage methods:</li></ul></li></ul>

variety during the application of

Adapt body mechanics based on instructor

methods.

or peer feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having participated in ongoing massage practice sessions in other classes, the learner will be able to:
		<ul> <li>Perfect body mechanics during the application of massage methods:</li> </ul>
		<ul> <li>Consistently demonstrate proper alignment of the feet, knees, and hips when using stances, moving around the treatment table, or sitting.</li> </ul>
		<ul> <li>Consistently demonstrate proper alignment of the back, neck, and head when applying methods from a standing or seated position.</li> </ul>
		<ul> <li>Consistently demonstrate proper alignment of the shoulders, arms, wrists, fingers, and thumbs when applying methods from a standing or seated position.</li> </ul>
		<ul> <li>Consistently demonstrate proper alignment of the body while lifting client's extremities during range of motion or stretching techniques.</li> </ul>
		<ul> <li>Consistently show effective use of body weight during the application of methods from a standing or seated position.</li> </ul>
		<ul> <li>Consistently show effective use of breath during the application of methods.</li> </ul>
		<ul> <li>Consistently show the effective use of movement and variety during the application of methods.</li> </ul>

Sub-Topic: Preventing Work-Related Injury		
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.
	• Define the term repetitive stress injury.	
	• List three types of repetitive stress injuries that occur in massage careers.	
	• List two signs of therapist burnout.	
	<ul> <li>Outline three ways to reduce the occurrence of repetitive stress injury through good self- care.</li> </ul>	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss reasons massage therapists are injured on the job (e.g., poor body mechanics, poor health, high stress levels, too many clients, too little time between sessions, too few days off, transporting equipment on site, etc.).</li> <li>Discuss proactive self-care activities that prevent injury (e.g., always adjust the table height correctly, recognize pain and tension and adjust, plan self-care activities, work to improve one's physical health and fitness</li> </ul>	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	levels, stretch before and after sessions, etc.).	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

	Entry-Level Massage Education Blueprint  The Therapeutic Relationship
Topic	The Relationship of Therapist and Client
Sub-Topics	<ul> <li>Characteristics of Positive Therapeutic Relationships</li> <li>Preventing Transference and Countertransference</li> </ul>
Topic	Ethics and the Therapeutic Relationship
Sub-Topics	<ul> <li>Ethical Principles</li> <li>Code of Ethics and Standards of Ethical Practice</li> </ul>
Topic	Boundaries in the Therapeutic Relationship
Sub-Topics	<ul> <li>Establishing and Maintaining Professional Boundaries</li> <li>Managing Emotions in a Therapeutic Relationship</li> <li>Managing Intimacy, Touch, and Sexual Arousal Responses</li> </ul>

# **Topic: The Relationship of Therapist and Client**

# Learning Outcomes

**Conditions:** Having completed 4.0 hours of instruction on the relationship of therapist and client, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to characteristics
  of positive therapeutic relationships and preventing transference and
  countertransference on a written examination.
- Demonstrate effective and appropriate therapist language and behaviors to redirect client behaviors related to transference on a graded classroom activity.

# **Key Terminology and Concepts**

- Client-centered session
- Countertransference
- Ethical professional touch
- Power differential
- Therapeutic intent
- Therapeutic relationship
- Transference

# **Use of Terms**

The terms used in the topic appear to be consistent and widely accepted.

### **Sub-Topics**

- Characteristics of Positive Therapeutic Relationships
- Preventing Transference and Countertransference

# **Sub-Topic: Characteristics of Positive Therapeutic Relationships**

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *therapeutic relationship*.
- List five primary characteristics of a positive therapeutic relationships (e.g., the session is client-centered, the therapist seeks to decrease the power differential, the client and therapist agree to clear session goals, the therapist has clear positive therapeutic intent and provides ethical professional touch, etc.).
- Define the term *client-centered session*.
- List two therapist behaviors that are not client-centered (e.g., chatting about a personal issue during the session, not following the agreed session plan, etc.).
- Define the term *power differential*.
- List two reasons it is important to decrease the power differential with clients (e.g., because clients are then able to take an active role in planning sessions that match their needs, alert therapists if techniques are uncomfortable, maintain their boundaries and personal power, take greater responsibility for personal health, etc.).
- List three ways therapists decrease the power differential with clients (e.g., listening carefully to client needs and wants, giving clients choices such as type of lubricant, body regions treated, type of music, etc.).
- List two ways power differentials are unhealthy for clients (e.g., clients turn over healing power to the therapist, are less able to speak up when techniques feel uncomfortable, etc.).
- List two responsibilities of therapists in therapeutic relationships (e.g., keep sessions client-centered, set and maintain boundaries, responsible for all interactions, etc.).

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the language an instructor uses to decrease the power differential with a client.
- Imitate the language and behaviors an instructor uses to set session goals with a client.
- Pay attention to one's own thoughts and feelings that indicate a clear and positive therapeutic intent when providing massage and bodywork.

- List two ways to involve the client in session goal setting.
- List three characteristics of ethical, professional touch (e.g., it is skilled, purposeful, respectful, holds positive therapeutic intent, etc.).
- List two types of touch that are unethical and unprofessional (e.g., touch with hostile intent, touch with sexual intent, etc.).
- Define the term therapeutic intent (e.g., refers to the state of the therapist's mind during the session - a therapist who intends to benefit the client with massage is more likely to benefit the client than a therapist who doesn't care or who is not actively working with positive intent, etc.).

### Level 2 Knowledge: Use and Connect

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Compare and contrast the characteristics of therapeutic relationships with social relationships.
- Outline the responsibilities of the therapist in a therapeutic relationship.
- Describe two methods a massage therapist might use to decrease the power differential during a session.
- Contrast a client-centered session to a session where the therapist has not kept the client in focus.
- Contrast therapist behaviors that demonstrate ethical professional touch from therapist behaviors that demonstrate unethical, unprofessional touch.

### **Skills: Practice and Refine**

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Practice using effective language to decrease the power differential.
- Practice working with clear positive therapeutic intent while providing ethical professional touch.
- Simulate behaviors that keep a session client-centered (e.g., treat the classmate acting as a client as if really a client, no gossiping or chatting during table time, etc.).
- Refine language and behaviors based on instructor and peer feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having participated in ongoing practice sessions in other classes, the learner will be able to:
		<ul> <li>Consistently use one's own language for decreasing the power differential during massage exchange sessions.</li> </ul>
		Consistently demonstrate massage applied with attention to ethical, professional touch.
		Manage massage exchanges so that sessions remain client-centered.

Subject- The Therapeutic Relationship, Topic – The Relationship of Therapist and Client

# **Sub-Topic: Preventing Transference and Countertransference**

Level 1 Knowledge: Attain and Comprehend Skills: Observe and Imitate

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term transference.
- List four client behaviors that signal transference (e.g., asking the therapist questions about personal life, bringing the therapist a gift or leaving large tips, giving the therapist too much credit for personal progress, trying to involve the therapist in a friendship or romantic relationship, etc.).
- List three emotions clients might experience because of transference (e.g., disappointment, anger, shame, rejection, etc.).
- List two factors that tend to increase client transference behaviors (e.g., state of mind of the client, level of personal self-awareness, level of client autonomy, amount of emotional or physical pain client is experiencing, etc.).
- List two methods a therapist might use to manage a client experiencing transference.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

 Imitate the language an instructor uses to support, reframe, or redirect clients when they demonstrate transference behaviors.

- Define the term countertransference.
- List four therapist behaviors that signal countertransference (e.g., any strong feelings or emotions towards clients that are excessively positive or negative, emotional anticipation of sessions with the client such as elation or anxiety, feelings of anger, depression, or disappointment if the client doesn't show up for a session, encouraging the client to share personal information, sharing personal information with the client, etc.).
- List two factors that tend to increase therapist countertransference behaviors (e.g., therapists perceive client as like oneself, therapist subconsciously working through emotions related to similar person from the past, therapist self-awareness levels, therapist degree of emotional or physical pain, etc.).
- List one self-management strategy for therapists suspecting that they are experiencing countertransference (e.g., talk to a supervisor or mentor, refer the client to another therapist, etc.).

### Skills: Practice and Refine

#### Apply

Level 2

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

**Knowledge: Use and Connect** 

- Discuss client behaviors that signal transference.
- Discuss the factors that tend to increase client transference behaviors.
- Discuss therapist behaviors that signal countertransference.
- Discuss factors that tend to increase therapist countertransference behaviors.

Conditions: Having worked with a peer to develop a scene in which the learner acting as the client demonstrates transference and the learner acting as the therapist responds effectively and appropriately to support a positive therapeutic relationship, the learner will be able to:

- Act out language and behaviors appropriate to redirect a client demonstrating transference behaviors in order to support a positive therapeutic relationship.
- Modify language and behaviors based on feedback or suggestions from peers and instructors.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	Conditions: Having worked with a peer to develop a scene in which the learner acting as the client demonstrates transference and the learner acting as the therapist responds effectively and appropriately in order to support a positive therapeutic relationships, the learner will be able to:  • Plan behaviors that redirect a client demonstrating transference in order to support a positive therapeutic relationship.  • Evaluate the scenes of peers and identify therapist behaviors that were effective and useful for maintaining positive therapeutic relationships.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: Ethics and the Therapeutic Relationship**

# Learning Outcomes

**Conditions:** Having completed 18.0 hours of instruction on ethics and the therapeutic relationship, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to ethics and the therapeutic relationship, including the purpose of ethics, use of an ethical decision-making model, ethical principles commonly adopted by the massage profession, behaviors that lead to ethical violations, and adherence to a defined code of ethics, on a written examination.
- Use effective and appropriate therapist language and behaviors to uphold standards of ethical practice, including declining a client massage treatment when appropriate, representing massage qualifications and the limits of massage honestly, referring clients to other health care providers when appropriate, obtaining the client's informed consent, responding appropriately to client sexual innuendo, on a practical evaluation.

**Conditions:** Have completed learning in other classes, the learner is expected to:

 Demonstrate effective language and behaviors to deal professionally and appropriately with ethical dilemmas, and to uphold ethical principles in therapistclient situations when presented with on-the-spot scenarios by instructors in graded activities.

### **Key Terminology and Concepts**

- Character traits
- Client rights
- Code of ethics
- Commitment to high-quality care
- Confidentiality
- Conflict of interest
- Desexualize massage
- Do no harm
- Ethical decision-making model\*
- Ethical dilemmas\*
- Ethical principles
- Ethical violation
- Ethics
- Honest representation of qualifications
- Honesty in business
- Informed consent
- Inherent worth of all people
- Kickback
- Law
- Limits of training

- Professional conduct
- Referral
- Respect dignity and rights of all
- Rights
- Sexual abuse
- Sexual impropriety
- Standards of ethical practice\*
- Therapist Responsibilities
- Values

### **Use of Terms**

\*These terms are not consistently used or consistently defined in the massage profession at this time. Curriculum designers are encouraged to use the terminology consistent with their school's philosophy or the definitions of similar terminology used by their adopted textbooks. For the purposes of this document these terms are defined as:

**Ethical decision-making model:** Ethical decision-making models are also commonly referred to as *ethical decision-making guidelines* and are defined for the purposes of this document as a step-by-step method to work through ethical dilemmas.

**Ethical dilemmas:** Ethical dilemmas are also commonly referred to as *ethical conflicts* or *ethical questions* and are defined for the purposes of this document according to the definition provided by Benjamin and Sohnen-Moe: an occasion when two or more principles are in conflict, and regardless of the choice made, something of value is compromised.

**Standards of ethical practice:** Standards of ethical practice are also commonly referred to as *standards of practice* and are defined for the purposes of this document as professional guidelines based on ethical principles that describe the behaviors and language of ethical practice.

# Sub-Topics

- Ethical Principles
- Code of Ethics and Standards of Ethical Practice

# **Sub-Topic: Ethical Principles**

Level 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *ethics*.
- Outline the purpose of ethics in a massage practice (e.g., creates an environment where the client can feel safe, encourages excellent treatment, ensures the rights of clients and therapists are protected, provides structure for therapists in challenging situations, etc.).
- Define the term *values*.
- List two commonly held values of massage professionals (e.g., worth of all people, right to positive touch, etc.).
- Define the term *character traits*.
- List two character traits that might positively influence the practice of good ethics in a massage practice (e.g., autonomy, honesty, self-control, etc.).
- List two character traits that might negatively influence the practice of good ethics in a massage practice (e.g., need to please others, lack of self-confidence, etc.).
- Define the term *client rights*.
- List two rights of clients in a therapeutic relationship (e.g., the right to determine what happens to one's own body, the right to end the session if one feels uncomfortable, etc.).
- Define the term therapist responsibilities.
- List two therapist responsibilities in a therapeutic relationship (e.g., to set and maintain appropriate boundaries, to ensure sessions stay client-centered, etc.).
- Review the definition of the term *law*.
- List one difference between ethics and laws.
- Define the term *ethical dilemma*.

**Conditions:** Having viewed an instructor demonstration depicting different appropriate responses to common ethical dilemmas, the learner will be able to:

- Imitate the language and behaviors an instructor uses to:
  - Avoid counseling a client even when the client attempts to get counseling from the therapist.
  - Refuse a client massage due to a condition that contraindicates treatment.
  - Refuse a client massage because the therapist suspects the client is under the influence of an illegal drug or alcohol.
  - Require a parent or guardian to be present during massage of a minor when the parent or guardian seeks to drop the child off alone during the session.
  - Respond to a client's request for a date.

- List two possible ethical dilemmas that might arise in a massage practice.
- Outline the steps in the school-selected ethical decision-making model.

### Level 2 Knowledge: Use and Connect

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the purpose of ethics in massage practice.
- Discuss commonly held values of massage professionals.
- Discuss the influence of one's personal values and character traits on the ethical practice of massage.
- Discuss the rights of therapists and clients in therapeutic relationships.
- Discuss therapist responsibilities in therapeutic relationships.
- Brainstorm with peers about possible ethical dilemmas that might arise in a massage practice.
- Work with peers to examine four ethical dilemmas in a therapeutic relationship and work through the dilemmas using the schoolselected ethical decision-making model.

#### Skills: Practice and Refine

**Conditions:** Having been presented with scenarios depicting different ethical dilemmas, the learner will be able to:

- Practice responding with appropriate language and behaviors to each of these situations:
  - Avoid counseling a client even when the client attempts to get counseling from the therapist.
  - Refuse a client massage due to a condition that contraindicates treatment.
  - Refuse a client's request for massage because the therapist suspects the client is under the influence of an illegal drug or alcohol.
  - Require a parent or guardian to be present during massage of a minor when the parent or guardian seeks to drop the child off alone during the session.
  - Respond to a client's request for a date.

### Level 3 Knowledge: Choose and Plan

### Problem Solve

Apply

**Conditions:** Having completed a classroom activity in which the learner is presented with an ethical dilemma related to therapeutic relationships, the learner will be able to:

 Problem solve using an ethical decisionmaking model and state one's intended course of action to instructors and peers.

# **Skills: Naturalize and Adapt**

**Conditions:** During hands-on practice sessions and at any time as requested by the instructor, the learner will be able to:

 Demonstrate effective language and behaviors to deal professionally and appropriately with ethical dilemmas, when presented with on-the-spot scenarios by an instructor.

# Sub-Topic: Code of Ethics and Standards of Ethical Practice

level 1

Knowledge: Attain and Comprehend

Skills: Observe and Imitate

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term code of ethics.
- List two organizations that provide codes of ethics for the massage profession.
- Match these common ethical principles to their written descriptions: commitment to high-quality care, inherent worth of all people, honest representation of qualifications, practice within limits of training, do no harm, respect dignity and rights of all people, practice confidentiality, uphold appropriate boundaries, practice honesty in business and finances, maintain the highest standards of professional conduct.
- Define the term standard of ethical practice.
- Match each ethical principle to a written description of its standards of practice (e.g., the ethical principle to respect the inherent worth of all people might be matched to a written description that states, treat all clients with respect, regardless of personal beliefs related to ethnicity, politics, or religion and strive to understand and identify discriminatory or prejudicial thoughts or actions and eliminate them).
- List two therapist behaviors that desexualize massage (e.g., wear a uniform and name tag, cover the upper chest area, etc.).
- Define the term *ethical violation*.
- List three ethical violations therapists should avoid.
- List two behaviors of a therapist who fails to practice confidentially with clients.
- Define the term *conflict of interest* as it relates to a therapeutic relationship.
- Define the term kickback.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the language and behaviors an instructor used to:
  - Decline a client massage when appropriate.
  - Represent therapist massage qualifications honestly and point out the limitations of massage treatment.
  - Refer clients to other health care providers when appropriate.
  - Obtain the client's informed consent to massage treatment.
  - Redirect a client who is talking heatedly about political or religious affiliations.
  - Redirect a client who calls the therapist by a nickname that may have a sexual connotation (e.g., sweetheart).

- List three therapist behaviors that demonstrate a lack of attention to sexual innuendo (e.g., making complimentary comments about a client's body or accepting client compliments about the face, body, or hair, having nude artwork anywhere in the massage practice, making sexual jokes or allowing clients to make sexual jokes, etc.).
- List four therapist behaviors that demonstrate sexual impropriety and lead to sexual harassment or sexual assault charges (e.g., any immodest behavior or behavior that encourages immodesty in clients, draping loosely or not using a drape, using nicknames of a sexual or romantic nature with clients or allowing clients to use a nickname for the therapist, telling or allowing sexual jokes, requests for a date or accepting a request for a date, etc.).
- Define the term sexual abuse as it relates to a therapeutic relationship (e.g., any sexual innuendo or impropriety on the part of a therapist is sexual abuse because of the power differential at play in a therapeutic relationship).
- List two possible outcomes of sexual abuse allegations by clients (e.g., jail, payment of damages, loss of massage credentials, etc.).
- Review the information in an informed consent form.
- Define the term *referral*.
- List two instances where referral to another health care provider demonstrates ethical practice (e.g., when the massage therapist does not believe massage can benefit the client or the client needs treatment beyond the ability of massage to benefit the condition, etc.).

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss these concepts: do no harm, inherent worth of all people, honest representation of qualifications, client referral, client rights, informed consent, practice confidentiality, honesty in business, sexual impropriety, sexual abuse, conflict of interest, kickback, professional conduct.
- Discuss when it is appropriate to decline massage to a client.
- Review the elements that should appear on an informed consent document (e.g., description of massage, its limitations, description of scope of practice, description of specific business policies, etc.).
- Analyze the codes of ethics from the American Massage Therapy Association (AMTA), Associated Bodywork & Massage Professionals (ABMP), and the National Certification Board for Therapeutic Massage & Bodywork (NCBTMB) and determine seven or more commonly held ethical principles.
- For each ethical principle, describe three behaviors a therapist would undertake to uphold the principle in a massage practice.
- For each ethical principle, determine two therapist behaviors that would violate the principle.
- Examine the disciplinary actions of the board of massage in one's state on the board of massage website.
- Fine one example of an ethical violation for each school-selected ethical principle or standard and identify the therapist behaviors that led to the violation.

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Demonstrate using effective language and behavior to:
  - Decline a client massage when appropriate.
  - Represent one's massage qualifications honestly and point out the limitations of massage treatment.
  - Refer clients to other health care providers when appropriate.
  - Obtain the client's informed consent to massage treatment.
  - Redirect a client who is talking heatedly about political or religious affiliations.
  - Redirect a client who calls the therapist by a nickname that may have a sexual connotation (e.g., sweetheart).
- Refine skills and behaviors based on instructor and peer feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: During hands-on practice sessions and at any time as requested by the instructor, the learner will be able to:  Demonstrate effective and appropriate language and behavior to:
		<ul> <li>Decline a client massage when appropriate.</li> </ul>
		<ul> <li>Represent one's massage qualifications honestly and point out the limitations of massage treatment.</li> </ul>
		<ul> <li>Refer clients to other health care providers when appropriate.</li> </ul>
		<ul> <li>Obtain the client's informed consent to massage treatment.</li> </ul>
		<ul> <li>Redirect a client who is talking heatedly about political or religious affiliations.</li> </ul>
		<ul> <li>Redirect a client who calls the therapist by a nickname that may have a sexual connotation (e.g., sweetheart).</li> </ul>
		Consistently model ethical behavior in the massage classroom.

# **Topic: Boundaries In the Therapeutic Relationship**

# Learning Outcomes

**Conditions:** Having completed 18.0 hours of instruction on boundaries in the therapeutic relationship, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to boundaries in a
  therapeutic relationship, including establishing and maintaining boundaries,
  responding to boundary violations, avoidance of behaviors that violate the boundaries
  of clients, managing personal and client emotions during sessions, and managing
  issues related to touch, intimacy, and sexual arousal responses effectively and
  professionally, on a written examination.
- Demonstrate effective and appropriate language and behaviors to establish boundaries, respond to boundary violations, manage a client's emotional release process, respond professionally to clients experiencing unwanted sexual arousal responses, and respond professionally to clients seeking sexual gratification from the massage session, on a practical evaluation.

**Conditions:** Have completed learning in other classes, the learner is expected to:

Demonstrate effective language and behaviors to deal professionally and appropriately
with boundary crossings, client emotional release, or client situations that require a
therapist to manage intimacy, touch, and sexual arousal responses, when presented
with on-the-spot scenarios by instructors in graded activities.

# **Key Terminology and Concepts**

- Boundaries
- Boundary form
- Boundary type
- Boundary violation
- Dual relationship
- Embodiment
- Emotion
- Emotional boundary
- Emotional intelligence
- Emotional release
- Emotional release process
- Impermeable boundary
- Intimacy
- Mental boundary
- Permeable boundary
- Personal space
- Physical boundary
- Semipermeable boundary
- Sexual arousal response
- Sexual boundary
- Spiritual boundary

Use of Terms
The terms used in this topic appear to be consistent and widely accepted.
Sub-Topics
<ul> <li>Establishing and Maintaining Professional Boundaries</li> <li>Managing Emotions in a Therapeutic Relationship</li> <li>Managing Intimacy, Touch, and Sexual Arousal Responses</li> </ul>

# **Sub-Topic: Establishing and Maintaining Professional Boundaries**

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term boundaries.
- Explain in one's own words the meaning of personal space.
- Match these types of boundaries to their written descriptions: permeable, semipermeable, impermeable.
- Give one example of when to use each of these types of boundaries: permeable, semipermeable, impermeable (e.g., use a permeable boundary with close friends and family, a semipermeable boundary with most clients, an impermeable boundary with a client who is crossing therapist boundaries, etc.).
- Match these boundary forms to their written descriptions: physical, emotional, mental, spiritual, sexual.
- Define the term boundary violation (or boundary crossing).
- Give one example of a way a therapist might cross each of these client boundaries: physical, emotional, mental, spiritual, sexual (e.g., a therapist might cross a client's physical boundary by hugging the client without having enough history with the client to warrant that level of physical intimacy, a therapist might cross a client's spiritual boundary by sharing personal views of religion or by practicing energetic bodywork on the client without informed consent, etc.).
- List four ways massage therapists can desexualize massage during client interactions.
- Explain one client behavior that might violate a therapist's boundary during a massage session.
- State two methods that help clients establish healthy boundaries during a massage session.

**Conditions:** Having viewed an instructor demonstration on setting boundaries, the learner will be able to:

- Imitate the language and behaviors an instructor used when demonstrating methods to establish boundaries at the beginning of a massage session.
- Imitate the language and behaviors an instructor used when redirecting or managing a client attempting to violate the therapist's boundaries in these situations (other situations may be substituted or added at the discretion of the instructor):
  - A client keeps reaching out during the massage session to touch the therapist on the arm, leg, or hand.
  - A client tells a therapist a story and becomes emotional, raising the voice and swearing excessively.
  - A client shares political views in opposition to the therapist's views.
  - A client shares religious views in opposition to the therapist's views.
  - A client states to a therapist, "I don't know what I would do without you.
     You are the only good thing in my world. I would be devastated without you!"

- Recall three therapist behaviors that establish the boundaries of a therapeutic relationship during a massage session.
- Review the term dual relationship.
- List one type of dual relationship that is prohibited in the massage profession.
- Identify ways to obtain external guidance on issues related to therapeutic relationships (e.g., supervisors, mentors, peer groups, etc.).

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss boundary types and boundary forms.
- Discuss the types of boundary violations that might occur if a therapist's boundaries are too permeable.
- Discuss methods to desexualize massage sessions.
- Discuss the types of boundary violations that might occur if the therapist is not respectful of these boundary forms: physical, mental, emotional, sexual.
- Discuss methods for establishing boundaries in healthy therapeutic relationships.
- Discuss methods for redirecting clients who are crossing a therapist's boundary.
- Discuss methods for establishing boundaries when a dual relationship exists (e.g., family member, colleague, or friend).
- Outline the steps one would take to end a therapeutic relationship if a dual relationship forms.
- Analyze five massage session scenarios in which a therapist violates a client's boundaries, and correctly label each scenario with the boundary form (physical, emotional, spiritual, mental, and sexual) violated by the therapist.

**Conditions:** Having participated in a practice session, the learner will be able to:

- Demonstrate effective language and behaviors to establish boundaries at the beginning of a massage session.
- Demonstrate effective language and behaviors to redirect or manage a client attempting to violate the therapist's boundaries in these situations (other situations may be substituted or added at the discretion of the instructor):
  - A client keeps reaching out during the massage session to touch the therapist on the arm, leg, or hand.
  - A client tells a therapist a story and becomes emotional, raising the voice and swearing excessively.
  - A client shares political views in opposition to the therapist's views.
  - A client shares her religious views in opposition to the therapist's views.
  - A client states to a therapist, "I
    don't know what I would do
    without you. You are the only good
    thing in my world. I would be
    devastated without you!"
- Show a pre-developed role-playing scene in which the "client" attempts to violate the "therapist's" boundaries and the "therapist" demonstrates effective methods to maintain boundaries given the situation.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having participated in a classroom activity, the learner will be able to:</li> <li>Work with a peer to write a role play in which "the client" crosses "the therapist's" boundaries and "the therapist" redirects the client effectively using appropriate language and behaviors.</li> <li>Critique a peer on choices for establishing and maintaining the boundaries of a therapeutic relationship during a role-playing classroom activity in which "clients" attempt to violate "therapist" boundaries.</li> </ul>	Conditions: Having practiced verbal and behavioral skills in ongoing massage sessions, the learner will be able to:  Demonstrate effective language and behaviors to redirect clients who attempt to cross therapist boundaries, when presented with on-the-spot scenarios by instructors.

# **Sub-Topic: Managing Emotions in a Therapeutic Relationship**

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term emotion.
- Explain in one's own words the meaning of emotional release.
- Match these emotional intelligence skills to their written descriptions: emotional intelligence, perception of emotion in self and others, use of emotion to facilitate thinking, understanding emotions in self and others, management of emotions in self.
- Explain in one's own words what it means to manage one's own emotions.
- List two reasons emotional release happens during a massage session (e.g., experience of a "fullness of life," embodiment, remembering repressed memories, feelings freed by released physical tension, etc.).
- List six emotional behaviors a client might demonstrate during an emotional release (e.g., anger, anxiety, fear, euphoria and laughing, sadness, tearfulness, irritation, etc.).
- Match these emotional release principles to their written descriptions (other principles can be substituted here if the school uses a different model): acknowledgement and normalcy, presence, responsiveness, and contact, connect with breath, give the client time, allow sharing or allow privacy, ground the client and honor the event, proceed or refer.
- Outline the steps one would follow when managing a client's emotional release process (as determined by the procedure at each school).

**Conditions:** Having viewed an instructor demonstration of managing a client's emotional release process, the learner will be able to:

 Imitate the language and behaviors an instructor used to manage a client's emotional release process.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss methods for building greater emotional intelligence and management of one's own emotions during massage sessions.</li> <li>Compare and contrast the behaviors of a therapist with high emotional intelligence managing a client's emotional release process with the behaviors of a therapist with lower emotional intelligence managing a client's emotional release process.</li> <li>Discuss emotional release principles and their practical application in massage session.</li> <li>Discuss school-selected guidelines for managing a client's emotional release process.</li> <li>Compare and contrast effective therapist's behaviors for managing a client's emotional release process with ineffective behaviors.</li> </ul>	Conditions: Having participated in a practice session, the learner will be able to:  • Role play a pre-developed scene in which "the client" experiences an emotional release and "the therapist" manages the client's emotional release process effectively and professionally.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having participated in a classroom activity, the learner will be able to:</li> <li>Work with a peer to write and role play a scene in which "the client" experiences an emotional release and "the therapist" manages the emotional release process professionally and effectively.</li> <li>Critique peers on their choices of language and behaviors used to manage a "client's" emotional release process.</li> </ul>	Conditions: Having participated in ongoing practice classes, the learner will be able to:  Consistently use appropriate and effective language and behaviors to manage a client's emotional release process, if emotional release occurs during a session.

# Sub-Topic: Managing Intimacy, Touch, and Sexual Arousal Responses

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *intimacy* as it is used in a massage practice.
- Define the term sexual arousal response as it relates to the professional practice of massage.
- List two ways massage promotes healthy, nonsexual intimacy.
- Review ways therapists can desexualize massage in a professional practice.
- Recall two physiological reasons that sexual arousal responses can occur when a client is not seeking sexual gratification from the massage session.
- Outline the steps one would follow when managing a client experiencing a sexual arousal response.
- List one reason some clients seek sexual gratification from massage sessions.
- Explain one method for discouraging people seeking sexual gratification from coming to a massage practice.
- Outline the steps one would follow when managing a client seeking sexual gratification from the massage session.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the language and behaviors an instructor used to manage a client experiencing an unwanted sexual arousal response during a massage session.
- Imitate the language and behaviors an instructor used to manage a client seeking sexual gratification during a massage session.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Compare and contrast the behaviors and motivations of a client seeking massage for sexual gratification with those of a client experiencing an unwanted sexual arousal response during a massage session.</li> <li>Discuss the behaviors and language of a therapist responding to a client seeking massage for sexual gratification.</li> <li>Discuss the behaviors and language of a therapist responding to a client experiencing an unwanted sexual arousal response.</li> <li>Discuss the steps one would follow when managing a client experiencing a sexual arousal response.</li> <li>Discuss the steps one would follow when managing a client seeking sexual gratification from the session.</li> <li>Discuss methods one can use to screen clients or discourage clients seeking sexual gratification from approaching a massage practice.</li> </ul>	<ul> <li>Conditions: Having participated in a practice session, the learner will be able to:</li> <li>Practice appropriate and effective language and behaviors to manage a client experiencing an unwanted sexual arousal response during a massage session.</li> <li>Practice appropriate and effective language and behaviors to manage a client seeking sexual gratification during a massage session.</li> <li>Role play a pre-developed scene in which the "client" experiences an unwanted sexual arousal response and the "therapist" manages the situation professionally and effectively.</li> <li>Role play a pre-developed scene in which the "client" is seeking sexual gratification from the massage session and the "therapist" manages the situation professionally and effectively.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having participated in a classroom activity, the learner will be able to:</li> <li>Work with a peer to write a role play scene in which the "client" experiences an unwanted sexual arousal response and the "therapist" manages the situation professionally and effectively.</li> <li>Work with a peer to write a role play scene in which the "client" is seeking sexual gratification from the massage session and the "therapist" manages the situation professionally and effectively.</li> </ul>	<ul> <li>Conditions: Having practiced verbal and behavioral sills in ongoing massage sessions, the learner will be able to:         <ul> <li>Demonstrate effective language and behaviors to manage a client experiencing an unwanted sexual arousal response, when presented with on-the-spot scenarios by instructors.</li> <li>Demonstrate effective language and behaviors to manage a client seeking sexual gratification from the massage session, when presented with on-the-spot scenarios by instructors.</li> </ul> </li> </ul>

	Entry-Level Massage Education Blueprint  Anatomy, Physiology, and Pathology
Topic	Orientation to the Human Body
Sub-Topics	<ul> <li>Using Anatomic and Health Care Terminology</li> <li>Chemistry, Organization, and Organ Systems</li> <li>Structure and Function of Cells</li> <li>Structure and Function of Tissues and Membranes</li> <li>An Overview of Health and Disease</li> </ul>
Topic	The Integumentary System
Sub-Topics	<ul> <li>The Structure and Function of the Integumentary System</li> <li>Pathologies of the Integumentary System</li> </ul>
Topic	The Skeletal System
Sub-Topics	<ul> <li>The Skeleton and Bones</li> <li>Joints</li> <li>Pathologies of the Skeletal System</li> </ul>
Topic	The Fascial System
Sub-Topics	<ul> <li>The Structure and Function of the Fascial System</li> <li>Fascial Dysfunctions</li> </ul>
Topic	The Muscular System
Sub-Topics	<ul> <li>The Structure and Function of the Muscular System</li> <li>Muscle Contractions</li> <li>Pathologies of the Muscular System</li> </ul>
Topic	The Nervous System
Sub-Topics	<ul> <li>The Structure and Function of the Nervous System</li> <li>The Peripheral Nervous System</li> <li>The Central Nervous System</li> <li>The Anatomy of Pain</li> <li>Pathologies of the Nervous System</li> </ul>

Topic	The Cardiovascular System
Sub-Topics	<ul> <li>The Structure and Function of the Cardiovascular System</li> <li>Pathologies of the Cardiovascular System</li> </ul>
Topic	Other Body Systems
Sub-Topics	<ul> <li>The Lymphatic System</li> <li>The Immune System</li> <li>The Digestive System</li> <li>The Respiratory System</li> <li>The Endocrine System</li> <li>The Reproductive System</li> <li>The Urinary System</li> </ul>

# **Topic: Orientation to the Human Body**

# Learning Outcomes

**Conditions:** Having completed 13 hours of instruction on orientation to the human body, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to using health care terminology including the ability to break down unknown words into word elements, use a medical dictionary, positional and directional terms, body planes and movements, body regions, cavities, and abdominal quadrants, on a written examination.
- Demonstrate knowledge of the key terms and concepts related to basic anatomy and physiology, including the structural levels of the body and the structure and function of cells, tissues, and membranes, on one or more written examinations.
- Demonstrate knowledge of the key terms and concepts related to health, wellbeing, and disease, including aspects of well-being and predisposing causes of disease, on a written examination.

# **Key Terminology and Concepts**

- Abdominal
- Abdomino-pelvic cavity
- Abduction
- Acromial
- Active transport
- Adduction
- Anatomic position
- Anatomic terminology
- Anatomy
- Antebrachial
- Antecubital
- Anterior
- Atoms
- Axillary
- Brachial
- Calcaneal
- Cardiovascular system
- Carpal
- Cell
- Cellular level
- Central
- Centrosomes
- Cervical
- Chemical level
- Circumduction
- Compounds

- Medical dictionary
- Mitochondria
- Molecules
- Mucous membrane
- Muscle tissue
- Muscular system
- Nasal
- Negative feedback
- Nervous system
- Nervous tissue
- Nucleus
- Occipital
- Occupational well-being
- Olecranal
- Oral
- Orbital
- Organ level
- Organ system level
- Organic compound
- Organism level
- Osmosis
- Otic
- Palmar
- Passive transport
- Patellar
- Pathology

- Connective tissue
- Contralateral
- Coxal
- Cranial
- Cranial cavity
- Crural
- Cubital
- Cutaneous membrane
- Cytoplasm
- Cytoskeleton
- Deep
- Depression
- Diffusion
- Digestive system
- Digital
- Disease
- Distal
- Dorsal
- Dorsiflexion
- Downward rotation
- Elements
- Elevation
- Emotional well-being
- Endocrine system
- Endoplasmic reticulum
- Epithelial tissue
- Eversion
- Extension
- External
- Facilitated diffusion
- Fascial system
- Femoral
- Filtration
- Flexion
- Frontal
- Frontal plane
- Gluteal
- Golgi apparatus
- Health
- Health care terminology
- Homeostasis
- Idiopathic
- Inferior
- Inguinal
- Inorganic compound
- Integumentary system

- Pectoral
- Pedal
- Pelvic
- Peripheral
- Peroneal
- Physical well-being
- Plantar
- Plantar flexion
- Plasma membrane
- Popliteal
- Positive feedback
- Posterior
- Predisposing causes
- Prefix
- Pronation
- Prone position
- Protraction
- Proximal
- Pubic
- Reproductive system
- Respiratory system
- Retraction
- Ribosomes
- Right lower quadrant
- Right upper quadrant
- Root
- Rotation
- Sacral
- Sagittal plane
- Scapular
- Serous membrane
- Signs
- Skeletal system
- Social well-being
- Spinal
- Spinal cavity
- Spiritual well-being
- Sternal
- Suffix
- Superficial
- Superior
- Supination
- Supine position
- Sural
- Symptoms
- Synovial membrane

- Intellectual well-being
- Internal
- Inversion
- Ion
- Ipsilateral
- Lateral
- Lateral rotation
- Left lower quadrant
- Left or right lateral flexion
- Left upper quadrant
- Lumbar
- Lymphatic system
- Lysosomes
- Manual
- Medial
- Medial rotation

- Tarsal
- Temporal
- Thoracic
- Thoracic cavity
- Tissue level
- Transverse plane
- Umbilical
- Upward rotation
- Urinary system
- Ventral
- Vertebral
- Vesicles
- Well-being
- Wellness model
- Word element

# **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

# **Sub-Topics:**

- Using Anatomic and Health Care Terminology
- Chemistry, Organization, and Organ Systems
- Structure and Function of Cells
- Structure and Function of Tissues and Membranes
- An Overview of Health and Disease

# **Sub-Topic: Using Anatomic and Health Care Terminology**

evel 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *anatomic terminology*.
- Define the term *health care terminology*.
- List three benefits of using anatomic and health care terminology consistently in school and in the massage profession (e.g., ability to decode unknown words in textbooks, correctly describe the location and position of body structures, communicate confidently with other health care providers, supports critical thinking processes, improves grades, easier to pass national examinations, etc.).
- Recall the two primary origins of most health care words (Latin, Greek).
- Define these terms: word element, prefix, root, suffix, medical dictionary.
- Match 30 instructor-selected word elements to their written descriptions (e.g., 10 prefixes, 10 roots and 10 suffixes such as trans-, epi-, sub-, arthr(o), brachi(o), -algia, cyte, -itis, etc.).
- Describe three ways that word elements can be used to form words (a prefix is a word element used at the beginning of words to modify a root word, a root word provides the core meaning of the word and is modified with a prefix and/or suffix, a suffix is a word element used at the end of a word to modify the root word).
- Match these location, positional and directional terms to their written descriptions: anatomic position, supine position, prone position, anterior, posterior, proximal, distal, medial, lateral, contralateral, ipsilateral, superior, inferior, palmar, dorsal, ventral, plantar, internal, external, superficial, deep, peripheral, central.

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

- Match these body planes to their written descriptions: sagittal plane, frontal plane, transverse plane.
- Match these movements to their written descriptions: flexion, extension, abduction, adduction, rotation, medial rotation, lateral rotation, left or right lateral flexion, supination, pronation, elevation, depression, protraction, retraction, upward rotation, downward rotation, inversion, eversion, dorsiflexion, plantar flexion, circumduction.
- Label a diagram of the anterior, posterior, and lateral views of the body with these body regions: abdominal, acromial, antebrachial, antecubital, axillary, brachial, calcaneal, carpal, cervical, coxal, cranial, crural, cubital, digital, femoral, frontal, gluteal, inguinal, lumbar, manual, nasal, occipital, olecranal, oral, orbital, otic, palmar, patellar, pectoral, pedal, pelvic, peroneal, plantar, popliteal, pubic, sacral, scapular, spinal, sternal, sural, tarsal, temporal, thoracic, umbilical, vertebral.
- Label a diagram of the body with these body cavities: cranial cavity, spinal cavity, thoracic cavity, abdomino-pelvic cavity.
- Label a diagram with these abdominal quadrants: right upper quadrant, left upper quadrant, right lower quadrant, left lower quadrant.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss two ways anatomic and health care terminology is used in the health care professions (e.g., communications with medical professionals, more accurate descriptions of location and positional relationship of structures, etc.).</li> </ul>	
	<ul> <li>Break down 20 health care words into their word parts.</li> </ul>	
	<ul> <li>Use a medical dictionary to look up 10 unknown health care words.</li> </ul>	
	<ul> <li>Work with a peer to use anatomic and health care terms to describe positional relationships (e.g., your watch is proximal to your fingers and your nose is superior to your navel, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Sub-Topic: Chemistry, Organization, and Organ Systems**

Level 1

Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *anatomy*.
- Define the term *physiology*.
- Explain in one's own words the relationship of anatomy and physiology (e.g., the parts of the body form an organized unit and each of those parts has a job to do to make the body operate as a whole).
- Recognize the six levels of structural organization of the body (chemical level, cellular level, tissue level, organ level, organ system level, and organism level).
- Match these terms to their written descriptions: chemical level, cellular level, tissue level, organ level, organ system level, organism level.
- Match these basic chemistry terms with their written description: atoms, elements, molecules, ion, compounds, organic compound, inorganic compound.
- List twelve systems in the body (e.g., integumentary system, skeletal system, muscular system, fascial system, nervous system, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, reproductive system).
- Match each of the twelve organ systems to their written descriptions.
- List two primary organs in each organ system.
- List two functions of each of the twelve systems of the body.
- Define the term homeostasis.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Categorize a list of organs by placing them into a table under the proper body system heading (e.g., joints and bones in the skeletal system category; nerves, brain, and spinal cord in the nervous system category, etc.).</li> </ul>	
	<ul> <li>Discuss the basic functions of each body system.</li> </ul>	
	<ul> <li>Discuss homeostasis and the basic stimulus- feedback process used for homeostatic control (e.g., a receptor responds to stimulus and sends information along a nerve to the brain where a response is determined and signaled. The response or feedback either depresses the stimulus (negative feedback) or enhances it (positive feedback).</li> </ul>	
	<ul> <li>Compare and contrast negative feedback mechanisms with positive feedback mechanisms.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Sub-To	opic: Structure and Functions of (	Cells
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.
	• Define the term <i>cell</i> .	
	<ul> <li>List three structural components common to most cells (e.g. cytoplasm, nucleus, plasma membrane).</li> </ul>	
	<ul> <li>Match these terms to their written descriptions: nucleus, cytoplasm, plasma membrane.</li> </ul>	
	<ul> <li>Name six organelles of a generalized cell (e.g. mitochondria, endoplasmic reticulum, ribosomes, lysosomes, Golgi apparatus, centrosomes, cytoskeleton, vesicles).</li> </ul>	
	<ul> <li>Match the organelles to written descriptions of their functions: mitochondria, endoplasmic reticulum, Golgi apparatus, lysosomes, cytoskeleton, centrosome (e.g., mitochondria fit this description: "breaks down glucose to produce ATP to provide energy for cellular work").</li> </ul>	
	<ul> <li>Match these cell transport mechanisms to their written descriptions: passive transport, active transport, diffusion, osmosis, filtration, facilitated diffusion.</li> </ul>	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture, or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss common cellular processes (e.g., transporting nutrients and wastes across plasma membranes, breaking down glucose to produce energy for cellular work, building essential proteins for growth and repair, adapting to changes in the environment, reproduction, etc.).</li> </ul>	

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Subject- Anatomy, Physiology, and Pathology, Topic - Orientation to the Human Body

## **Sub-Topic: Structure and Function of Tissues and Membranes**

**Knowledge: Attain and Comprehend** Skills: Observe and Imitate Receive Conditions: Having participated in an interactive There are no relevant learning objectives for this Respond lecture or classroom activity, the learner will be sub-topic in level 1 of the psychomotor domain. able to: List the four types of body tissues (epithelial, muscle, nervous, connective). Describe two characteristics of each of these tissues: epithelial, muscle, nervous, connective (e.g., epithelial tissue is avascular and regenerates rapidly, connective tissue is the most abundant tissue in body, etc.). List two general functions of each of these tissues: epithelial, muscle, nervous, connective (e.g., epithelial is a tissue that lines, covers, and secretes; muscle contracts and generates heat, etc.). List two locations where each of these tissues are found: epithelial, muscle, nervous, connective (e.g., epithelial tissue might be found lining body cavities, skin, or covering organs, etc.). Name the three different types of muscle tissue (skeletal, cardiac, visceral/smooth). Name four different types of connective tissue (e.g., liquid, loose, fibrous, cartilage, bone). Name the two types of cells found in nervous tissue (neuroglia and neurons). Match these muscle tissue types to their written descriptions: skeletal, cardiac, visceral/smooth.

•	Match these connective tissue types to their
	written descriptions: liquid, loose, fibrous,
	cartilage, bone.

- List the four types of membranes (mucous, serous, synovial, cutaneous).
- List one location where each of these membranes is found: mucous, serous, synovial, cutaneous (e.g., mucous membranes are found lining cavities that are open to external environments such as the respiratory tract and urinary tract, etc.).
- List one function for each of these membranes: mucous, serous, synovial, cutaneous (e.g., synovial membranes produce synovial fluid, etc.).

#### Level 2 **Knowledge: Use and Connect Skills: Practice and Refine** Apply **Conditions:** Having participated in an interactive There are no relevant learning objectives for this lecture or classroom activity, the learner will be sub-topic in level 2 of the psychomotor domain. able to: Compare and contrast the contractions of skeletal, cardiac, and smooth muscle tissue. Discuss the structure, characteristics, function, and location of these connective tissue types: liquid, loose, fibrous, cartilage, bone. Discuss the structure, characteristics, function, and location of these muscle tissue types: skeletal, cardiac, smooth. Discuss the structure, characteristics, function, and location of nervous tissue. Discuss the structure, characteristics, function, and location of epithelial tissue. Level 3 **Knowledge: Choose and Plan** Skills: Naturalize and Adapt Problem There are no relevant learning objectives for this There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain. sub-topic in level 3 of the psychomotor domain. Solve

## Sub-Topic: An Overview of Health and Disease

Level 1

#### **Knowledge: Attain and Comprehend**

#### Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *health*.
- Define the term well-being.
- Match aspects of well-being to their written descriptions: physical well-being, intellectual well-being, emotional well-being, spiritual well-being, occupational well-being, social well-being.
- Define the term wellness model.
- Explain the purpose of a wellness model.
- List one benefit of using a wellness model to assess personal wellness.
- Recognize aspects of wellness models by viewing two different models.
- Review the term disease.
- Review the term pathology.
- Review these general disease types: autoimmune, cancerous, deficiency, genetic, infectious, metabolic.
- Review these types of infectious agents: bacteria, viruses, fungi, protozoa, parasitic animals, lice, mites.
- Explain in one's own words two ways infectious diseases are spread between people.
- Review hygiene practices and sanitation practices for health care providers.
- Review the principles of standard precautions.
- Describe in one's own words how signs and symptoms result from disease (e.g., they may result from the disease process itself or the immune system's attempt to control an infectious agent, etc.).
- Define the term *idiopathic*.

Level 2	<ul> <li>List two predisposing causes of disease (e.g., age, gender, heredity, living conditions and habits, emotional factors, stress, previous physical injury, chemical damage, preexisting illness, etc.).</li> </ul> Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss each aspect of well-being and examine how it supports good health.</li> </ul>	
	<ul> <li>Discuss two wellness models and explore the benefits and uses of each.</li> </ul>	
	• Discuss predisposing causes of disease.	
	<ul> <li>Discuss how stress is a causative or exacerbating factor in many diseases.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 2 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Topic: The Integumentary System**

# Learning Outcomes

**Conditions:** Having completed 5 hours of instruction on the integumentary system, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the structure, function, and pathologies of the integumentary system, on a written examination.
- Demonstrate the use of a clinical reasoning model to determine appropriate
  massage session action for an integumentary pathology (e.g., determine it is a
  contraindication and decline massage, determine it is a local contraindication,
  determine that another session adaptation is required, etc.), on a graded activity.

### **Key Terminology and Concepts**

- Abrasions
- Absorption
- Accessory organs
- Acne
- Acute
- Animal parasites
- Burns
- Chronic
- Clinical reasoning model
- Contact dermatitis
- Contagious skin disorder
- Contracture scars
- Cutaneous
- Decubitus ulcers
- Dermatitis
- Dermatome
- Dermis
- Eczema
- Epidermis
- Excretion
- Fissures
- Fungal infections
- General sense receptors
- Hair
- Herpes simplex
- Incisions
- Integumentary system
- Keloid scars
- Keratin
- Keratinocyte
- Lacerations
- Melanin
- Melanocyte

- Nails
- Neoplastic skin disorders
- Nociceptor
- Noncontagious inflammatory skin disorder
- Papules
- Pores
- Pressure receptor
- Protection
- Psoriasis
- Punctures
- Pustules
- Scar tissue
- Sebaceous glands
- Sebum
- Sensory receptors
- Skin
- Skin injuries
- Staphylococcal infections
- Streptococcal infections
- Sub-acute
- Subcutaneous layer
- Sudoriferous glands
- Superficial fascia
- Tactile stimulation
- Temperature receptor
- Temperature regulation
- Touch deprivation
- Touch receptor
- Ulcers
- Vesicles
- Vibration receptor
- Warts

Use of Terms
The terms used in this topic appear to be consistent and widely used.
Sub-Topics
<ul> <li>The Structure and Function of the Integumentary System</li> <li>Pathologies of the Integumentary System</li> </ul>

Subject – Anatomy, Physiology, and Pathology for Massage, Topic – The Integumentary System

## Sub-Topic: The Structure and Function of the Integumentary System

**Knowledge: Attain and Comprehend Skills: Observe and Imitate** Receive **Conditions:** Having participated in an interactive There are no relevant learning objectives for this Respond lecture or classroom activity, the learner will be sub-topic in level 1 of the psychomotor domain. able to: Define the term *integumentary system*. Match these terms to their written descriptions: skin, epidermis, dermis, subcutaneous layer (or hypodermis), melanocyte, melanin, keratin, keratinocyte, pores, sebum, superficial fascia, dermatome, tactile stimulation, touch deprivation. Match these accessory organs of the skin to their written descriptions: hair, nails, sudoriferous glands, sebaceous glands, sensory receptors. List the five functions of the integumentary system (protection, temperature regulation, excretion and absorption, general sensory organ, synthesis of vitamin D). Match these cutaneous sensory receptors to their written descriptions: touch receptors, temperature receptors, pressure receptors, nociceptors, vibration receptors.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Compare and contrast the epidermis to the dermis.</li> </ul>	
	<ul> <li>Discuss the functions of the integumentary system (e.g., superficial covering and protective layer, body's largest sensory organ, helps regulate body temperature, excretes metabolic byproducts and water, absorbs substances through the pores of the skin, synthesizes vitamin D, etc.).</li> </ul>	
	<ul> <li>Discuss the functions of the sebaceous glands (e.g., secrete an oily fluid that keeps the skin soft and pliable)</li> </ul>	
	<ul> <li>Discuss the functions of the sudoriferous glands (e.g., secrete sweat through the pores to support body temperature regulation, water balance, eliminate select metabolic byproducts, etc.).</li> </ul>	
	<ul> <li>Discuss the basic functions of the epidermis, dermis, and subcutaneous layer.</li> </ul>	
	<ul> <li>Categorize individual sensory receptors by their specific sensations in these categories: touch, pressure, vibration, light touch, temperature, and pain.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for the integumentary system (e.g., stimulates sebaceous glands, increases scar tissue mobility, increases local circulation to the skin, massage lubricants nourish and condition the skin, tactile stimulation provides positive mental and emotional benefits, etc.).</li> </ul>	
	• Discuss tactile stimulation as a necessary component of life and development.	
	<ul> <li>Discuss the connections between touch as it is used in massage/bodywork and the skin as a sensory organ.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Sub-Topic: Pathologies of the Integumentary System**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these terms to their written descriptions: contagious skin disorder, noncontagious inflammatory skin disorder, neoplastic skin disorders, skin injuries, clinical reasoning model (or critical thinking model).
- List six types of contagious skin disorders (e.g., animal parasites, fungal infections, herpes simplex, staphylococcal infections, streptococcal infections, warts, etc.).
- List four noncontagious inflammatory skin disorders (e.g., acne, dermatitis, eczema, and psoriasis, etc.).
- List two types of skin injuries (e.g., burns, decubitus ulcers, scar tissue like keloid scars, contracture scars, etc.).
- Name five types of skin lesions (e.g., lacerations, fissures, papules, vesicles, pustules, punctures, abrasions, ulcers, incisions, etc.).
- Match these conditions to their written signs and symptoms: dermatitis, eczema, contact dermatitis, psoriasis.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	Discuss the reasons why open, broken, or scabbed skin is a local contraindication.	
	<ul> <li>Compare and contrast massage for acute eczema and/or psoriasis with massage for sub-acute or chronic eczema and/or psoriasis (e.g., in acute cases skin is broken and inflamed so massage is contraindicated, while in sub-acute the skin is less sensitive and massage is not locally contraindicated if the skin is intact, etc.).</li> </ul>	
	<ul> <li>Discuss the use of a clinical reasoning model (or critical thinking model) to problem solve when working with pathologies.</li> </ul>	
	<ul> <li>Work with a peer to analyze mock health forms indicating a client has a skin condition and use a clinical reasoning model to determine appropriate action (e.g., massage is contraindicated, massage is safe with some modifications, the client should be referred, more information is needed, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Topic: The Skeletal System**

# Learning Outcomes

**Conditions:** Having completed 10 hours of instruction on the skeletal system, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the structure and function of the skeletal system, including bones, bone landmarks, and joints and pathologies of the skeletal system including fractures, dislocations, and subluxations, on one or more written examinations.
- Demonstrate the use of a clinical reasoning model to determine appropriate
  massage session actions for a skeletal system pathology (e.g., determine it is a
  contraindication and decline massage, determine it is a local contraindication,
  determine that another session adaptation is required, etc.), on a graded activity.

### **Key Terminology and Concepts**

- Acetabulum
- Acromioclavicular joint
- Acromion process
- Adductor tubercle
- Amphiarthroses
- Anterior arch
- Anterior inferior iliac spine
- Anterior superior iliac spine
- Appendicular skeleton
- Articular cartilage
- Articular facet for tibia
- Atlas
- Axial skeleton
- Axillary border
- Axis
- Ball and socket joint
- Bicipital groove
- Blood cell production
- Body
- Body of sternum
- Body of vertebrae
- Bone landmark
- Bursae
- Calcaneous
- Capitate
- Capitulum
- Carpals
- Cartilaginous joint
- Cervical vertebra
- Clavicle

- Lunate
- Mandible
- Manubrium
- Maxilla
- Meatus
- Medial border
- Medial epicondyle
- Medial malleolus
- Medial supracondylar ridge
- Medullary cavity
- Metacarpals
- Metacarpophalangeal joint
- Metaphysis
- Metatarsals
- Middle phalanx
- Mineral storage
- Nasal
- Nasal concha
- Navicular
- Neck
- Obturator foramen
- Occipital
- Odontoid process
- Olecranon fossa
- Osteoblasts
- Osteoclasts
- Osteocytes
- Osteogenic
- Palatine
- Parietal

- Clavicular notch
- Coccygeal vertebrae
- Coccyx
- Compact bone
- Compound fracture
- Compression fracture
- Condyle
- Coracoid process
- Coronoid fossa
- Costal cartilage
- Coxal bone
- Crest
- Cuboid
- Cuneiforms
- Deltoid tuberosity
- Dens
- Diaphysis
- Diarthroses
- Dislocation
- Distal phalanx
- Ellipsoid joint
- Epicondyle
- Epiphyseal plate
- Epiphysis
- Ethmoid
- Facet
- Facial bones
- False ribs
- Femur
- Fibrous joint
- Fibula
- Flat bone
- Floating ribs
- Foramen
- Fossa
- Fovea
- Fovea capitis
- Fracture
- Framework
- Frontal
- Fulcrums
- Glenohumeral joint
- Glenoid fossa
- Gliding joint
- Greater sciatic notch
- Greater tubercle

- Patella
- Pedicle
- Pelvic girdle
- Periosteum
- Phalanges
- Pisiform
- Pivot joint
- Posterior inferior iliac spine
- Posterior superior iliac spine
- Process
- Protection
- Proximal phalanx
- Pubic arch
- Pubis
- Radial fossa
- Radial tuberosity
- Radius
- Red bone marrow
- Reduction
- Rib facet
- Ribs
- Sacral canal
- Sacral foramen
- Sacral vertebrae
- Sacrum
- Saddle joint
- Scaphoid
- Scapula
- Shaft
- Short bone
- Sinus
- Skull
- Sphenoid
- Spinal cord
- Spinal nerves
- Spinous process
- Spongy bone
- Sternal angle
- Sternoclavicular joint
- Sternum
- Stress fracture
- Styloid process
- Subluxation
- Subscapular fossa
- Superior angle
- Superior articular process

- Hamate
- Head
- Hinge joint
- Humerus
- Hyaline cartilage
- Hyoid
- Ilium
- Incomplete fracture
- Inferior angle
- Inferior articulate process
- Infraglenoid tubercle
- Infraspinous fossa
- Intercondylar eminence
- Intercostal spaces
- Interosseous membrane
- Interphalangeal joint
- Intervertebral disc
- Irregular bone
- Ischial tuberosity
- Ischium
- Joint
- Joint capsule
- Lacrimal
- Lamina
- Lateral border
- Lateral epicondyle
- Lateral malleolus
- Lateral supracondylar ridge
- Lesser sciatic notch
- Lesser tubercle
- Levers
- Ligament
- Linea aspera
- Long bone
- Lumbar vertebrae

- Support
- Supraglenoid tubercle
- Supraspinous fossa
- Suprasternal notch
- Synarthroses
- Synovial fluid
- Synovial membrane
- Synovial joint
- Talus
- Tarsals
- Temporal
- Thoracic vertebrae
- Tibia
- Tibial plateau
- Transverse foramen
- Transverse process
- Trapezium
- Trapezoid
- Triquetrium
- Trochanter
- Trochlea
- True ribs
- Tubercle
- Tuberosity
- Ulna
- Ulnar notch
- Ulnar tubercle
- Vertebral arch
- Vertebral border
- Vertebral column
- Vertebral foramen
- Vomer
- Xiphoid process
- Zygomatic

#### **Use of Terms**

The terms used in this topic appear to be consistent and widely used.

#### **Sub-Topics**

- The Skeleton and Bones
- Joints
- Pathologies of the Skeletal System

## **Sub-Topic: The Skeleton and Bones**

evel 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Name the the two divisions of the skeleton (axial skeleton and appendicular skeleton).
- On a diagram of the skeleton, label these bones or parts of bones: skull, facial bones, hyoid bone, clavicle, scapula, sternum, ribs, vertebral column, sacrum, coccyx, humerus, ulna, radius, carpals, metacarpals, phalanges, pelvic bone, coxal bone, ilium, pubis, ischium, femur, patella, tibia, fibula, tarsals, metatarsals.
- List the functions of the skeletal system (e.g., framework and support, protection, levers and fulcrums, mineral storage, blood cell production).
- Match these cells found in bone tissue to their written descriptions: osteoblasts, osteocytes, osteoclasts, osteogenic cells.
- Describe one difference between compact bone and spongy bone (e.g., compact bone is dense and resistant to the stresses of body weight and movement, while spongy bone is lattice-like in appearance and its spaces are filled with red bone marrow, etc.).
- Match these bones to their classification by shape (long, short, flat, irregular): femur, tibia, fibula, humerus, ulna, radius, metatarsals, metacarpals, phalanges, carpals, tarsals, skull, pelvic girdle, sternum, ribs, scapula, vertebrae, patella (e.g., the femur is in the long bone classification, vertebrae in the irregular bone classification, etc.).
- Match these parts of a long bone to their written descriptions: diaphysis, medullary cavity, epiphysis, metaphysis, epiphyseal plate, articular cartilage (hyaline cartilage), periosteum.
- Define the term bone landmark.

- Match these bone landmark terms for projections to their definitions: tubercle, tuberosity, head, condyle, epicondyle, process, crest.
- Match these bone landmark terms for depressions to their definitions: fossa, fovea, facet.
- Match these bone landmark terms for holes to their definitions: *foramen, meatus, sinus.*
- Label two examples of a condyle, epicondyle, fossa, trochanter, and process on diagrams of the humerus, femur, and scapula.
- On diagrams of the head and face, label these bones: frontal, parietal, temporal, occipital, sphenoid, ethmoid, lacrimal, nasal, nasal concha, vomer, palatine, zygomatic, maxilla, mandible.
- On a diagram of the spinal column, label these bones: 7 cervical vertebrae, 12 thoracic vertebrae, 5 lumbar vertebrae, 5 sacral vertebrae, and 3 or 4 coccygeal vertebrae.
- On a diagram of a sacrum, label these structures: sacral canal, superior articular process, coccyx, sacral foramen.
- On a diagram of a typical lumbar vertebra showing both a superior view and lateral view, label these parts of the bone: body, superior articular processes, transverse process, spinous process, vertebral arch, lamina, pedicle, vertebral foramen, inferior articular processes.
- On a diagram of a typical thoracic vertebra label these parts of the bone: body, inferior articular process, superior articular processes, spinous process, transverse process, rib facet/articulation.
- On a diagram of a typical cervical vertebra, label these parts of the bone: body, transverse foramen, vertebral foramen, spinous process, superior articular process.
- On a diagram of the atlas and axis, label these structures: atlas, axis, articular process, transverse foramen, anterior arch, dens (odontoid process), body, transverse process, spinous process.

- On a diagram of articulated thoracic vertebrae, label these structures: spinous processes, transverse processes (articulates with rib), spinal cord, superior articular processes, intervertebral foramen, spinal nerves, intervertebral disc, body of vertebra, inferior articular processes.
- On a diagram of the thorax, label these bones or parts of bones: true ribs 1-7, false ribs 8-12, floating ribs 11-12, sternum, suprasternal notch, clavicular notch, manubrium, sternal angle, body of sternum, xiphoid process, intercostal spaces, costal cartilage.
- On a diagram of the pectoral girdle, label these bones or parts of bones: humerus, glenoid fossa, coracoid process, acromion process, glenohumeral joint, acromioclavicular joint, scapula, clavicle, sternoclavicular joint, clavicular notch, manubrium, sternum.
- On a diagram of the scapula, label these parts of the bone: infraspinous fossa, medial border (vertebral border), supraspinous fossa, superior angle, coracoid process, acromion process, spine, glenoid fossa, lateral border (axillary border), inferior angle, subscapular fossa, infraglenoid tubercle, supraglenoid tubercle.
- On a diagram of the humerus label these parts of the bone: condyle, capitulum, lateral epicondyle, radial fossa, lateral supracondylar ridge, lesser tubercle, bicipital or intertubercular groove, greater tubercle, head, neck, deltoid tuberosity, medial supracondylar ridge, coronoid fossa, trochlea, medial epicondyle, olecranon fossa.
- On a diagram of the radius and ulna, label these structures: radial styloid process, ulnar notch, interosseous membrane, radial tuberosity, head of the radius, radial notch, olecranon process, trochlear notch, coronoid process, ulnar tubercle, head of ulna, ulnar styloid process.

- On a diagram of the wrist and hand, label these structures: hamate, pisiform, triquetrum, trapezoid, trapezium, capitate, scaphoid, lunate, carpals, metacarpals, phalanges, metacarpophalangeal joint, proximal interphalangeal joint, distal interphalangeal joint, distal phalanx, middle phalanx, proximal phalanx.
- On diagrams of the pelvic girdle label these structures or parts of the bones: ischial tuberosity, lesser sciatic notch, acetabulum, greater sciatic notch, posterior inferior iliac spine, posterior superior iliac spine (PSIS), iliac crest, ilium, ischium, pubis, obturator foramen, anterior inferior iliac spine, anterior superior iliac spine (ASIS), iliac fossa, coccyx, sacrum, pubic arch.
- On diagrams of the femur, label these parts of the bone: patellar surface (groove), lateral condyle, lateral epicondyle, adductor tubercle, medial epicondyle, medial condyle, intercondylar fossa, linea aspera, shaft, lesser trochanter, neck, greater trochanter, head, fovea capitis.
- On diagrams of the tibia and fibula, label these structures: medial malleolus, interosseus membrane, tibial plateau, intercondylar eminence, fibula, tibia, lateral malleolus, tibial crest, head of the fibula, tuberosity of tibia, medial condyle, lateral condyle, articular facet for tibia.
- On a diagram of the ankle and foot, label these structures: tarsals, metatarsals, phalanges, calcaneous, talus, cuboid, navicular cuneiforms, base of the metatarsals, shaft of the metatarsals, head of the metatarsals, proximal phalanx, middle phalanx, distal phalanx.

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Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Compare and contrast the two divisions of the skeleton (axial skeleton and appendicular skeleton).</li> </ul>	
	<ul> <li>Discuss the functions of the skeletal system (framework and support, protection, levers and fulcrums, mineral storage, blood cell production).</li> </ul>	
	<ul> <li>Discuss the composition and function of bone tissue including cells, fibers, and ground substance.</li> </ul>	
	Contrast compact bone with spongy bone.	
	<ul> <li>Discuss the parts of a long bone and their functions (diaphysis, medullary cavity, epiphysis, metaphysis, epiphyseal plate, articular cartilage [hyaline cartilage], periosteum).</li> </ul>	
	<ul> <li>Discuss bone landmarks, their forms, and their functions.</li> </ul>	
	• Discuss the bones of the head and face.	
	<ul> <li>Compare and contrast the shape of cervical vertebrae, thoracic vertebrae, and lumbar vertebrae.</li> </ul>	
	• Discuss the unique structure and function of the atlas and axis.	
	<ul> <li>Discuss the bones of the rib cage, sternum, and pectoral girdle.</li> </ul>	
	<ul> <li>Discuss the bones of the upper limb, forearm, wrist, and hand.</li> </ul>	
	• Discuss the bones on of the pelvic girdle.	
	• Discuss the bones of the thigh, leg, ankle and foot.	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

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Level 1 Knowle

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *joint*.
- Name the three structural classifications of joints (fibrous, cartilaginous, synovial).
- Match these joint classifications to their written descriptions: fibrous, cartilaginous, synovial.
- Name three examples of fibrous joints (e.g., sutures that hold the cranial bones together, interosseous membrane between the tibia and fibula, gomphoses where the teeth fit into the jaw, etc.).
- Name three examples of cartilaginous joints (e.g., pubic symphysis, intervertebral joints, the costochrondral junctions of the ribcage, etc.).
- Name three examples of synovial joints (e.g., humeroulnar [elbow], tibiofemoral [knee], iliofemoral [hip], etc.).
- Name the three functional classifications of joints (synarthroses, amphiarthroses, diarthroses).
- Match these joint classifications to their written descriptions: synarthroses, amphiarthroses, diarthroses.
- Describe the connection between structural and functional classifications of joints (e.g., there is a direct correlation between structural and functional classifications; fibrous joints are immovable, cartilaginous joints are slightly movable, and synovial joints are freely movable, etc.).
- List the common structural features of synovial joints (e.g. joint capsule, joint space, articular/hyaline cartilage, synovial membrane, ligaments).

- Match these structural features of synovial joints to their written descriptions: articular cartilage, joint capsule, synovial membrane, synovial fluid, ligaments, bursae.
- On a diagram of a synovial joint, label these structures: Joint capsule, synovial membrane, ligaments, articulating bone, synovial cavity, articular cartilage.
- Describe how synovial joints are classified (e.g., according to the shape of their bone ends, how they articulate, and the movements they allow).
- List the six types of synovial joints (ball and socket, hinge, pivot, ellipsoid [or condyloid], saddle, gliding).
- List the movements allowed by ball and socket joints (flexion, extension, abduction, adduction, horizontal abduction, horizontal adduction, rotation, circumduction).
- List the movements allowed by hinge joints (flexion, extension).
- List the movements allowed by pivot joints (rotation around a single axis).
- List the movements allowed by ellipsoid (condyloid) joints (flexion, extension, adduction, abduction).
- List the movements allowed by saddle joints (flexion, extension, abduction, adduction).
- List the movements allowed by gliding joints (shift, slide).
- On diagrams showing all of the synovial joints, label each joint with one of these types: ball and socket, hinge, ellipsoid (condyloid), pivot, saddle, gliding.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Compare and contrast joints based on their structural and functional classification (e.g., fibrous synarthrotic joints, cartilaginous amphiarthrotic joints, and synovial diarthrotic joints).</li> </ul>	
	• Discuss examples of fibrous, cartilaginous, and synovial joints.	
	<ul> <li>Discuss the common structural features of synovial joints (e.g., joint capsule, joint space, articular/hyaline cartilage, synovial membrane, ligaments).</li> </ul>	
	<ul> <li>Compare and contrast ball and socket joints with pivot joints.</li> </ul>	
	<ul> <li>Compare and contrast hinge joints with ellipsoid (condyloid) joints.</li> </ul>	
	• Compare and contrast saddle joints with gliding joints.	
	<ul> <li>Discuss ball and socket joints including joint structure, function, available movements, and examples.</li> </ul>	
	<ul> <li>Discuss hinge joints including joint structure, function, available movements, and examples.</li> </ul>	
	<ul> <li>Discuss pivot joints including joint structure, function, available movements, and examples.</li> </ul>	
	<ul> <li>Discuss ellipsoid (condyloid) joints including joint structure, function, available movements, and examples.</li> </ul>	
	<ul> <li>Discuss saddle joints including joint structure, function, available movements, and examples.</li> </ul>	
	<ul> <li>Discuss gliding joints including joint structure, function, available movements, and examples.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## Sub-Topic: Pathologies of the Skeletal System

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

Receive Respond Note: Please see in-depth learning objectives related to arthritis, bursitis, osteoporosis, and sprains in Adapting Sessions for Clients with Common Pathologies.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these terms to their written descriptions: compound fracture, compression fracture, dislocation, fracture, incomplete fracture, reduction, stress fracture, subluxation.
- List two possible causes and predisposing factors for dislocations (e.g., trauma, congenital weakness)
- List two signs and symptoms of a dislocation (e.g. complete loss of function, loss of contour in the joint).
- List two complications of dislocations (e.g., fibrosis and excessive scar tissue, nerve damage, ligaments supporting the joint damaged, muscular imbalances, etc.).
- List two cautions or contraindications for massage for a client with a history of dislocations (e.g., avoid position of vulnerability like full flexion and/or abduction in shoulder, no traction releases in that joint, etc.).
- List two or three soft-tissue structures that are highly susceptible to damage with dislocation or subluxation (e.g., labrum, joint capsule, ligaments).
- Match these types of fractures to their written descriptions: simple, incomplete, compound, stress, and compression.
- List two cautions or contraindications for working with fractures (e.g., acute fracture locally contraindicates massage, etc.).

- List two benefits or effects of massage for clients recovering from a fracture (e.g., treatment for compensating structures, manual lymphatic drainage to reduce edema in casted extremities, etc.).
- List the two of the most common subluxations (e.g., vertebral facets, rib facets, fingers, patellar, etc.).
- List one cause of a subluxation (e.g., muscular imbalances, traumatic events like a car accident).
- List two benefits of massage for a client with a subluxation (e.g., massage corrects muscular imbalances which may allow the bones to naturally fall back into their correct places, etc.).
- Describe appropriate massage treatment if a client has a suspected subluxation (e.g., work on reducing muscular imbalances and refer to a chiropractor, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss the causes, signs, and symptoms of dislocation.</li> </ul>	
	• Compare and contrast a joint dislocation with a joint subluxation.	
	<ul> <li>Discuss the cautions, contraindications, and session adaptations for working with client who has a history of dislocation (e.g., do not apply passive abduction and external rotation movements; the potential for re- dislocating lax joint is very high, etc.).</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for clients with a chronic dislocations (e.g., helpful for managing scar tissue accumulation, help alleviate corresponding reflexive muscle spasm around the joint, etc.).</li> </ul>	
	<ul> <li>Discuss the cautions, contraindications, and session adaptations for working with a client recovering from a fracture.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage when working with a client recovering from a fracture.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Topic: The Fascial System**

# Learning Outcomes

**Conditions:** Having completed 6 hours of instruction on the fascial system, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the structure and function of the fascial system, on a written examination.
- Demonstrate knowledge of the key terms and concepts related to myofascial dysfunction on a written examination.

### **Key Terminology and Concepts**

- Adhesiveness
- Adipose
- Blood
- Bone
- Cartilage
- Cellular exchange
- Chemoreceptors
- Collagen fibers
- Connective tissue
- Deep fascia
- Elastin fibers
- Endomysium
- Epimysium
- Fascia
- Fascial bands
- Fascial planes
- Fascial shortening
- Fascicles
- Fibroblasts
- Gel
- Glycoaminoglycans (GAGs)
- Ground substance
- Hydrogen bonds
- Immune defense
- Joint capsules

- Ligaments
- Mast cells
- Mechanoreceptors
- Myofascia
- Myofascial chains
- Myofascial dysfunction
- Myofibers
- Nociceptors
- Perimysium
- Periosteum
- Piezoelectricity
- Proprioceptors
- Protection
- Reticular fibers
- Shock absorption
- Sol
- Structural integrity
- Superficial fascia
- Tendons
- Tensegrity
- Tensile force
- Thixotropy
- Viscoelasticity

#### **Use of Terms**

The use of terms appears to be consistent and widely used.

### **Sub-Topics**

- The Structure and Function of the Fascial System
- Fascial Dysfunctions

## Sub-Topic: The Structure and Function of the Fascial System

level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *fascia*.
- Define the term myofascia
- Explain in one's own words the relationship of fascia and muscle (e.g., muscle and fascia are interwoven together and are closely related, massage of muscle is also massaging fascia, etc.).
- Outline the individual structures that make up muscle and the fascia that wraps each section (e.g., myofibers are wrapped by the endomysium, bundles of myofibers called fascicles are wrapped by the perimysium, groups of fascicles called muscles are wrapped by the epimysium, fascia merge at either end of a muscle to tendons to attach muscle to bone, etc.).
- Define the term connective tissue.
- Match these types of connective tissue to their written descriptions: fascia, bone, cartilage, ligaments, tendons, joint capsules, the periosteum of bones, blood, adipose tissue.
- Match these components of connective tissue to their written descriptions: connective tissue cells, fibroblasts, mast cells, ground substance, collagen fibers, elastin fibers, reticular fibers.
- Define the term *thixotropy*.
- Explain in one's own words the term gel as it is used to describe properties of connective tissue
- Explain in one's words the term sol as it is used to describe properties of connective tissue.
- List two ways to promote a fluid sol state in fascia (e.g., regular exercise, stretching, proper hydration, good nutrition, etc.).

- Define the term *viscoelasticity*.
- List two characteristics of myofascia that make it viscoelastic (e.g., connective tissue is "viscous" and will become deformed when an outside force manipulates it and remain deformed for a period of time after manipulation, whereas muscle tissue is elastic and deforms when manipulated by an outside force but then snaps back into shape, etc.).
- Define the term *piezoelectricity*.
- List three activities that cause piezoelectricity (e.g., walking, running, dancing, weightbearing activity, etc.).
- Define the term adhesiveness.
- List two reasons collagen fibers start to pack together and form hydrogen bonds leading to thickening and greater adhesiveness in soft tissue (e.g., age, injury, postural habits, habitual movement patterns, lack of movement, repetitive soft-tissue stress, etc.).
- List one unique characteristic of fascia that makes it different from other connective tissue (e.g., higher level of ground substance that allows it to move between a gel and sol state more easily, fascia wraps the whole body transferring tension patterns over longer distances that other soft tissue, etc.).
- Match these functions of fascia to their written descriptions: structural integrity, protection, shock absorption, immune defense, cellular exchange.
- Define the term tensegrity.
- Define the term *tensile force*.
- Explain in one's own words how tensegrity is affected if one set of tensile forces is excessively strong and one set is excessively weak (e.g., a structure experiences greater stress and is weaker).
- Describe the location of superficial fascia.
- Describe the location of deep fascia.
- Match these terms to their written descriptions: fascial planes, fascial bands, myofascial chains.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	• Discuss the interconnected relationship of fascia and muscle.	
	• Discuss the types and components of connective tissue.	
	<ul> <li>Discuss the concepts of thixotropy and its implications for massage and bodywork.</li> </ul>	
	<ul> <li>Discuss the concept of viscoelasticity and its implications for massage and bodywork.</li> </ul>	
	<ul> <li>Discuss adhesiveness, its causes, and its implications for massage and bodywork.</li> </ul>	
	<ul> <li>Compare and contrast characteristics of fascia with other connective tissue.</li> </ul>	
	<ul> <li>Discuss the functions of fascia including structural integrity, protection, shock absorption, immune defense, and cellular exchange.</li> </ul>	
	<ul> <li>Discuss the concept of tensegrity and the importance of balanced tensile forces to maintain proper postural alignment and myofascial health.</li> </ul>	
	<ul> <li>Discuss the locations of fascia and concepts of fascial planes, bands, and myofascial chains and their implications for massage and bodywork.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Sub-Topic: Fascial Dysfunctions**

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#### **Knowledge: Attain and Comprehend**

#### Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term myofascial dysfunction.
- List two causes of myofascial dysfunction (e.g., postural habits, diet, repetitive mechanical stress, injury, chronic stress, sedentary lifestyle, etc.).
- Explain in one's own words how collagen is formed.
- Match these connective tissue components to written descriptions of dysfunction: cells, collagen fibers, ground substance (e.g., ground substance might be matched to a descriptions that notes that a decrease in glycoaminoglycans [GAGs] that bind water decreases the amount of lubrication provided by this component of connective tissue, etc.).
- Match these properties of connective tissue to written descriptions of dysfunction: thixotropy, viscoelasticity, piezoelectricity, adhesiveness (e.g., piezoelectricity might be matched to a description that notes that adhesions create a resistance to the normal flow of electrical potentials in tissue and interfere with the normal repair and rejuvenation processes influenced by this property of connective tissue, etc.).
- List four sensory receptors present in soft tissue (e.g., mechanoreceptors, proprioceptors, chemoreceptors, nociceptors, etc.).
- Describe one way myofascial health is promoted (e.g., "melt" and "stir" ground substance with actions like physical activity and stretching or massage therapy, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Compare and contrast healthy myofascia with unhealthy myofascia.</li> </ul>	
	<ul> <li>Discuss the causes of myofascial dysfunction.</li> </ul>	
	<ul> <li>Discuss the process of healthy collagen formation.</li> </ul>	
	<ul> <li>Discuss connective tissue components, their normal function, and dysfunction.</li> </ul>	
	<ul> <li>Discuss properties of connective tissue and health function versus dysfunction.</li> </ul>	
	<ul> <li>Discuss pain and fascia including soft- tissue sensory receptors and fascial shortening.</li> </ul>	
	<ul> <li>Discuss methods to improve myofascial health and implications for massage and bodywork.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Topic: The Muscular System**

# Learning Outcomes

**Conditions:** Having completed 13 hours of instruction on the muscular system, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the structure, function, and pathologies of the muscular system, on a written examination.
- Demonstrate the use of a clinical reasoning model to determine appropriate
  massage session action for a muscular system pathology (e.g., determine it is a
  contraindication and decline massage, determine it is a local contraindication,
  determine that another session adaptation is required, etc.), on a graded activity.

### **Key Terminology and Concepts**

- Actin
- Adductor brevis
- Adductor longus
- Adductor magus
- Aerobic cellular metabolism
- Agonist
- All-or-none response
- Anaerobic cellular metabolism
- Antagonist
- Anterior scalene
- Aponeurosis
- ATP (adenosine triphosphate)
- Biceps brachii
- Biceps femoris
- Bipennate muscle
- Brachialis
- Brachioradialis
- Buccinators
- Circular muscle
- Concentric contraction
- Contractile
- Coracobrachialis
- Cramp
- Deltoid
- Diaphragm
- Eccentric contraction
- Elastic
- Endomysium
- Epimysium
- Excitable

- Muscle fiber
- Muscle recruitment
- Muscle spindle
- Muscle tone
- Muscular system
- Musculotendinous junction
- Myofascial pain syndrome
- Myofibril
- Myofilament
- Myosin
- Neuromuscular junction
- Neurotransmitter
- Occipitalis
- Orbicularis oculi
- Orbicularis oris
- Origin
- Oxygen debt
- Palmaris longus
- Parallel muscle
- Pectineus
- Pectoralis major
- Pectoralis minor
- Pennate muscle
- Perimysium
- Peroneus brevis
- Peroneus longus
- Piriformis
- Platysma
- Posterior scalene
- Prime mover

- Extensible
- Extensor carpi radialis brevis
- Extensor carpi ulnaris
- Extensor digitorum
- Extensor digitorum longus
- Extensor hallucis longus
- Extensor carpi radialis longus
- External intercostals
- External obliques
- Fascia
- Fascicle
- Flexor carpi ulnaris
- Flexor carpi radialis
- Flexor digitorum longus
- Flexor digitorum profundus
- Flexor digitorum superficialis
- Flexor hallucis longus
- Frontalis
- Fusiform muscle
- Gastrocnemius
- Gluteus maximus
- Gluteus medius
- Gluteus minimus
- Golgi tendon organ
- Gracilis
- Graded response
- Iliacus
- Iliocostalis
- Infraspinatus
- Insertion
- Internal intercostals
- Internal obliques
- Interspinales
- Intertransversarii
- Inverse stretch reflex
- Isometric contraction
- Isotonic contraction
- Lactic acid
- Lateral pterygoid
- Latissimus dorsi
- Levator scapula
- Longissimus
- Masseter

- Pronator teres
- Psoas major
- Psoas minor
- Quadratus lumborum
- Reciprocal inhibition
- Rectus abdominis
- Rectus femoris
- Retinaculum
- Rhomboids
- Rotatores
- Sarcomere
- Sarcoplasm
- Sarcoplasmic reticulum
- Sartorius
- Semimembranosus
- Semispinalis
- Semitendinosus
- Serratus anterior
- Sliding filament mechanism
- Soleus
- Spasm
- Spinalis
- Splenius capitis
- Splenius cervicis
- Stabilizer
- Sternocleidomastoid
- Stretch reflex
- Subclavius
- Suboccipitals
- Subscapularis
- Supinator
- Supraspinatus
- Synergist
- Temporalis
- Tendon
- Tenoperiosteal junction
- Tensor fasciae latae
- Teres major
- Teres minor
- Threshold stimulus
- Tibialis anterior
- Tibialis posterior
- Tonic contraction

- Mechanoreceptors
- Medial pterygoid
- Middle scalene
- Motor end plate
- Motor neuron
- Motor unit
- Motor unit recruitment
- Multifidi
- Multipennate muscle
- Muscle belly
- Muscle fatigue

- Torticollis
- Transverse abdominis
- Trapezius
- Trianglular muscle
- Triceps brachii
- Unipennate muscle
- Vastus intermedius
- Vastus lateralis
- Vastus medialis

# **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

# **Sub-Topics**

- The Structure and Function of the Muscular System
- Muscle Contractions
- Pathologies of the Muscular System

# **Sub-Topic: The Structure and Function of the Muscular System**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

## Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *muscular system*.
- List the three types of muscle found in the muscular system (skeletal, cardiac, and smooth).
- Match these terms related to the structure of a skeletal muscle to their written descriptions: epimysium, perimysium, fascicles, endomysium, muscle belly, musculotendinous junction, tendon, tenoperiosteal junction.
- On a diagram of a skeletal muscle, label these structures: epimysium, perimysium, fascicles, endomysium, muscle belly, musculotendinous junction, tendon, tenoperiosteal junction.
- Match these terms related to muscle fibers to their written descriptions: *myofibrils, myofilaments, myosin, actin, sarcomeres.*
- On a diagram of a skeletal muscle label these structures: muscle fascicle, muscle fiber, nucleus of a muscle fiber, myofibril bundles, single myofibril, sarcomere unit, myosin, actin.
- Match these connective tissue components of the muscular system to their written descriptions: fascia, tendon, aponeurosis, retinaculum.
- Match these muscle terms to their definition: actin, myosin.
- List the functions of the muscular system
   (e.g. generate force for movement, produce heat, maintain posture, stabilization of joints, etc.).
- Describe in one's own words each of these muscle characteristics: excitable, contractile, extensible, elastic.

- Match these terms related to muscle fiber arrangements to their written descriptions: parallel, fusiform, circular, triangular, pennate, unipennate, bipennate, multipennate.
- Identify a muscle in the body that represents each of these fiber arrangements: fusiform (gastrocnemius), circular (orbicularis oris), triangular (pectoralis major), unipennate (extensor digitorum), bipennate (rectus femoris), multipennate (deltoid).
- Describe in one's own words factors that influence muscle names (e.g., the size, shape, function, fiber direction, general location, origin, insertion or number of origins can influence a muscle's name).
- On diagrams of the head and face, label these muscles: occipitalis, suboccipitals, frontalis, temporalis, masseter, medial pterygoid, lateral pterygoid, buccinators, orbicularis oris, orbicularis oculi.
- On diagrams of the neck, label these muscles: platysma, sternocleidomastoid, anterior scalene, middle scalene, posterior scalene, splenius capitis, splenius cervicis, levator scapula.
- On diagrams of the chest, label these muscles: pectoralis major, pectoralis minor, subclavius, serratus anterior, internal intercostals, external intercostals, diaphragm.
- On diagrams of the abdominal area, label these muscles: rectus abdominis, external obliques, internal obliques, transverse abdominis, psoas major, psoas minor.
- On a diagram showing the paraspinal muscles, label these muscles: iliocostalis, longissimus, spinalis, semispinalis, multifidi, rotatores, interspinales, intertransversarii.
- On diagrams of the back, label these muscles: trapezius, latissimus dorsi, teres major, rhomboids, quadratus lumborum, supraspinatus, infraspinatus, teres minor, subscapularis.

- On diagrams of the brachium, label these muscles: deltoid, biceps brachii, coracobrachialis, brachialis, triceps brachii, supinator.
- On diagrams of the forearm, label these muscles: brachioradialis, extensor carpi radialis longus, extensor carpi radialis brevis, extensor digitorum, extensor carpi ulnaris, pronator teres, flexor carpi radialis, palmaris longus, flexor carp ulnaris, flexor digitorum superficialis, flexor digitorum profundus.
- On diagrams of the pelvic girdle, label these muscles: gluteus maximus, gluteus medius, gluteus minimus, piriformis, tensor fasciae latae, iliacus.
- On diagrams of the thigh, label these muscles: rectus femoris, vastus medialis, vastus intermedius, vastus lateralis, sartorius, pectineus, adductor brevis, adductor longus, adductor magus, gracilis, biceps femoris, semimembranosus, semitendinosus.
- On diagrams of the leg, label these muscles: tibialis anterior, extensor hallucis longus, extensor digitorum longus, peroneus longus, peroneus brevis, gastrocnemius, soleus, tibialis posterior, flexor hallucis longus, flexor digitorum longus.
- Match these muscle roles to their written descriptions: agonist (prime mover), antagonist, synergist, stabilizer (fixator).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	Discuss the structure of a skeletal muscle including the muscle fibers, sarcomeres, epimysium, perimysium, fascicles, endomysium, muscle belly, musculotendinous junction, tendon, tenoperiosteal junction.	
	Discuss connective tissue components of the muscular system (fascia, tendon, aponeurosis).	
	<ul> <li>Discuss the functions of the muscular system (e.g. generate force for movement, produce heat, maintain posture, stabilization of joints, etc.).</li> </ul>	
	<ul> <li>Differentiate among muscle characteristics (excitable, contractile, extensible, elastic).</li> </ul>	
	Compare and contrast muscles with parallel fiber arrangements to muscles with pennate fiber arrangements.	
	Discuss the factors that influence muscle names (e.g., the size, shape, function, fiber direction, general location, origin, insertion or number of origins can influence a muscle's name).	
	Discuss selected muscles of the face and head.	
	Discuss selected muscles of the neck.	
	Discuss selected muscles of the chest.	
	<ul> <li>Discuss selected muscles of the abdominal area.</li> </ul>	
	Discuss the paraspinal muscles.	
	Discuss selected muscles of the back.	
	• Discuss selected muscles of the arm.	
	Discuss selected muscles of the forearm.	
	Discuss selected muscles of the pelvic girdle.	
	Discuss selected muscles of the thigh.	
	Discuss selected muscles of the leg.	
	<ul> <li>Compare and contrast agonists, antagonist, synergist, and stabilizer muscles.</li> </ul>	

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Subject- Anatomy, Physiology, and Pathology, Topic – The Muscular System

# **Sub-Topic: Muscle Contractions Knowledge: Attain and Comprehend** Level 1 Skills: Observe and Imitate Receive **Conditions:** Having participated in an interactive There are no relevant learning objectives for this Respond lecture or classroom activity, the learner will be sub-topic in level 1 of the psychomotor domain. able to: Define the term *muscle contraction*. Define the term *sliding filament mechanism* (e.g., a model that explains events in a muscle contraction). Define the term *motor unit*. Match these terms related to motor units to their written descriptions: motor unit, motor neuron, neuromuscular junction, motor end plate, neurotransmitters, threshold stimulus, all-or-none response, graded response, motor unit recruitment. Define the term *muscle tone*. Outline the key physiologic events in a muscle contraction (e.g. threshold stimulus from motor neuron causes stored calcium in the sarcoplasmic reticulum to be released into the sarcomere, presence of calcium stimulates chemical bonds between myofilments; bonding between actin and myosin causes them to slide over each other to shorten the sarcomeres, etc.). Define the term *muscle fatigue*.

- List three factors that may cause muscle fatigue (e.g., lack of oxygen, decrease in the calcium supply needed for myofilament bonding, depletion of glycogen and other fuels needed for contraction, build-up of lactic acid, build-up of ADP, or insufficient release of neurotransmitters from the motor neurons).
- Match these terms related to muscle contractions to their written descriptions: tonic contraction, muscle tone, isometric contraction, isotonic contractions, concentric contraction, eccentric contraction.
- Describe in one's own words these muscle contractions: tonic, isometric, isotonic, concentric, eccentric.
- Match the types of muscle contraction to a description of their role in system functions (e.g. tonic contractions maintain posture and tone, isometric contractions create movement, eccentric contractions control movement, etc.).
- Define these terms: muscle spindle, Golgi tendon organ, mechanoreceptors.
- Match these muscle reflexes to their written description: reciprocal inhibition, stretch reflex, inverse stretch reflex, motor unit recruitment/graded response.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss the sliding filament mechanism to explain the events in a muscle contraction.</li> </ul>	
	<ul> <li>Compare and contrast anaerobic cellular metabolism with aerobic cellular metabolism.</li> </ul>	
	<ul> <li>Discuss factors that lead to muscle fatigue and oxygen debt.</li> </ul>	
	<ul> <li>Compare and contrast tonic, isometric, and isotonic contractions.</li> </ul>	
	<ul> <li>Differentiate between concentric and eccentric contractions.</li> </ul>	
	Discuss the relationship between concentric and eccentric contractions and the movement roles of agonist and antagonist	
	<ul> <li>Compare and contrast muscle tone and motor tone.</li> </ul>	
	<ul> <li>Discuss how massage therapists might utilize their understanding of reciprocal inhibition, stretch reflex, and reverse stretch reflex to reduce muscle tension and spasms, relieve muscle cramps, reduce tender points, and/or improve movement.</li> </ul>	
	<ul> <li>Discuss the interdependent function of the muscle spindles and Golgi tendon organs in monitoring and adjusting muscle tension.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Pathologies of the Muscular System**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

Note: Please see in-depth learning objectives related to fasciitis, fibromyalgia, headaches, strains, and tendinopathies in Adapting Sessions for Clients with Common Pathologies.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define these terms: *spasm, cramp*.
- List two possible causes of spasms or cramps (e.g., nutrition, ischemia, exercise-associated muscle cramping, "splinting" of an injury).
- List one sign or symptom of a cramp.
- List one sign or symptom of a spasm.
- List two cautions or contraindications for massage for a client with spasms (e.g., massage may be contraindicated if spasms are splinting an area of acute injury, etc.).
- List two benefits or effects of massage for clients with exercise-induced cramps (e.g., reciprocal inhibition techniques can reduce cramps, direct pressure can reduce cramps, etc.).
- Define the term *myofascial pain syndrome*.
- List two possible causes of myofascial pain syndrome (e.g., no clear causes in all cases, trauma or injury to muscles, development of trigger points, etc.).
- List two signs and symptoms of myofascial pain syndrome (e.g., predictable trigger point locations, predictable referred pain patterns, pain is usually regional, etc.).
- List two cautions or contraindications for massage for a client with myofascial pain syndrome (e.g., it is possible to overwork the client and cause increased pain, clients may be taking pain or muscle relaxant medications that require adaptations, etc.).

- List two benefits or effects of massage for clients with myofascial pain syndrome (e.g., massage can reduce trigger points, reduce pain, reduce stress, and reduce anxiety that often accompany the condition, etc.).
- Define the term torticollis.
- List two possible causes of torticollis (e.g., sleeping in a poor position, abnormal muscle contractions related to a central nervous system dysfunction, a muscle or bone condition present at birth, cervical misalignment, trigger points, related to other conditions, etc.).
- List two signs and symptoms of torticollis (e.g., the muscles of the neck are visibly contracted on one side causing the head to be stuck in flexion and rotation, etc.).
- List two cautions or contraindications for massage for a client with torticollis (e.g., understand the onset of the condition to determine if the client needs to see a physician; if the cause is trigger points or "slept funny," massage is usually indicated, etc.).
- List two benefits or effects of massage for clients with torticollis (e.g., reduce local trigger points, reduce unilateral spasms in neck muscles, reduce stiffness, improve range of motion, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss the causes, signs, and symptoms of spasms and cramps.</li> </ul>	
	• Compare and contrast a spasm and a cramp.	
	<ul> <li>Discuss cautions, contraindications, and session adaptations for working with client who has a spasm or cramp.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for a client with a spasm or cramp.</li> </ul>	
	<ul> <li>Discuss the causes, signs, and symptoms of myofascial pain syndrome.</li> </ul>	
	<ul> <li>Discuss the cautions, contraindications, and session adaptations for a client with myofascial pain syndrome.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for a client with myofascial pain syndrome.</li> </ul>	
	<ul> <li>Discuss the causes, signs, and symptoms of torticollis.</li> </ul>	
	<ul> <li>Discuss the cautions, contraindications, and session adaptations for a client with torticollis.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for a client with torticollis.</li> </ul>	
	<ul> <li>Use a clinical reasoning model to determine appropriate action for one pathology of the muscular system (e.g., massage is contraindicated, massage is safe with some modifications, the client should be referred, more information is needed, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: The Nervous System**

# Learning Outcomes

**Conditions:** Having completed 16 hours of instruction on the nervous system, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the structure and function of the nervous system, including the central nervous system, peripheral nervous system, autonomic nervous system, somatic nervous system, the anatomy of pain, and nervous system pathologies, on a written examination.
- Demonstrate the use of a clinical reasoning model to determine appropriate
  massage session actions for a nervous system pathology (e.g., determine it is a
  contraindication and decline massage, determine it is a local contraindication,
  determine that another session adaptation is required, etc.), on a graded activity.

# **Key Terminology and Concepts**

- Accessory nerve (XI)
- Action potential
- Afferent pathway
- Alpha-beta axons
- Amygdala
- Arachnoid mater
- Autonomic division
- Autonomic effector
- Axon
- Axon terminal
- Baroreceptor
- Basal ganglia
- Bell's palsy
- Brachial plexus
- Brain
- Brainstem
- Cell body
- Central nervous system (CNS)
- Cerebellum
- Cerebral cortex
- Cerebral hemisphere
- Cerebrospinal fluid
- Cerebrum
- Cervical plexus
- C-fiber axons
- Chemical stimuli
- Chemoreceptor
- Cingulate gyri
- Cognition
- Corpus callosum
- Cranial nerves

- Multiple sclerosis
- Myelin
- Myelinated fibers
- Nerve
- Nerve impulse
- Nerve plexus
- Nervous system
- Neuritis
- Neurofibrils
- Neurolemma
- Neuron
- Neuronal pathway
- Neurotransmitter
- Nociceptor
- Nodes of Ranvier
- Occipital lobe
- Pain perception
- Parasympathetic division
- Paresthesia
- Parietal lobe
- Peripheral nervous system (PNS)
- Photoreceptor
- Pia mater
- Pituitary gland
- Pons
- Proprioceptors
- Radial nerve
- Reflex arc
- Reticular formation
- Sacral plexus
- Schwann cell

- Dendrite
- Dermatome
- Diencephalon
- Dura mater
- Effector
- Efferent
- Facial nerve (VII)
- Frontal lobe
- Hippocampus
- Hypothalamus
- Impulse conduction
- Innervate
- Integrative function
- Interneuron
- Limbic system
- Lumbar plexus
- Mammillary bodies
- Mechanical stimuli
- Mechanoreceptors
- Median nerve
- Medulla oblongata
- Meninges
- Midbrain
- Mixed nerve
- Motor nerve
- Motor neuron

- Sciatic nerve
- Sensory nerve
- Sensory neuron
- Sensory receptor
- Somatic effector
- Somatic nervous system
- Special sensory receptor
- Spinal cord
- Spinal nerves
- Stimulus
- Sympathetic
- Sympathetic division
- Synapse
- Synaptic cleft
- Temporal lobe
- Thalamus
- Thermal stimuli
- Thermoreceptor
- Trigeminal nerve (V)
- Trigeminal neuralgia
- Ulnar nerve
- Vagus nerve (X)
- Vesicle (axon terminal)
- Visceral effector

#### **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

### **Sub-Topics**

- The Structure and Function of the Nervous System
- The Peripheral Nervous System
- The Central Nervous System
- The Anatomy of Pain
- Pathologies of the Nervous System

# **Sub-Topic: The Structure and Function of the Nervous System**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Describe simply in one's own words the sensory function of the nervous system (e.g., the nervous system can detect a broad spectrum of stimuli and transport information to the brain, etc.).
- Describe simply in one's own words the motor function of the nervous system (e.g., commands from the brain via the nerves tells muscles, glands, and organs what to do, etc.).
- Name the two divisions of the nervous system (central and peripheral).
- List the structures of the central nervous system (brain and spinal cord).
- List the general functions of the central nervous system (e.g., receives and interprets sensory information and directs motor responses, etc.).
- List the structures of the peripheral nervous system (12 pair cranial nerves, 31 pair spinal nerves).
- List the general functions of the peripheral nervous system (relays sensory and motor information to and from the central nervous system).
- Define the term neuron.
- Match these parts of a neuron to their written descriptions: axon, dendrite, cell body, myelin, axon terminal, vesicle.
- On a diagram of a neuron, label these structures: axon, dendrite, cell body, myelin, Schwann cell, neurofibrils, neurolemma, axon terminal, vesicle.
- Name the three types of neurons classified by function (sensory neurons, motor neurons, interneurons or associative neurons).

- Define these terms: *nerve*, *synapse*, *synaptic cleft*, *neurotransmitter*.
- Describe simply, in one's words, the function of nerves (e.g., nerves carry information between sensory receptors, the central nervous system, and effectors[e.g. muscles, organs, and glands]).
- Define the term *nerve impulse* (also called *action potential*).
- Outline simply the events related to nerve impulse conduction (e.g., an impulse is created by changes in the environment that stimulate dendrites; this stimulates a series of electrical events that travel along a neuron's plasma membrane to the axon; the impulse causes the release of neurotransmitters at the axon terminal that build a chemical bridge between one neuron and another neuron or an effector cell; impulses travel on specific pathways from one region of the nervous system to another, etc.).
- Define these terms: neuronal pathway, mixed nerve, motor nerve, and sensory nerve.
- Describe the function of afferent pathways (e.g., to transmit sensory information to the spinal cord and brain).
- Describe the function of efferent pathways (e.g., to carry motor impulses away from the brain).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss the general functions of the nervous system including sensory function, motor function and integrative function.</li> </ul>	
	<ul> <li>Discuss the two divisions of the nervous system, their structures, and their general functions.</li> </ul>	
	• Discuss the structure and functions of nerves.	
	<ul> <li>Compare and contrast motor, sensory, and mixed nerves.</li> </ul>	
	<ul> <li>Discuss nerve impulses (action potentials) and nerve impulse conduction.</li> </ul>	
	<ul> <li>Compare and contrast afferent pathways with efferent pathways.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: The Peripheral Nervous System**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *peripheral nervous system*.
- Review the structures of the peripheral nervous system (cranial nerves and spinal nerves).
- Review the general function of the peripheral nervous system (relays sensory and motor information to and from the central nervous system).
- Identify the origination of cranial nerves (from the brain).
- Describe how cranial nerves are named and numbered (named based on their function and numbered with Roman numerals according to the descending order of their position along the vertical axis of the brain stem, etc.).
- Match these cranial nerves to written descriptions of their functions: trigeminal (V), facial (VII), vagus (X), accessory (XI),
- Identify the origination of spinal nerves (from the spinal cord).
- Describe how spinal nerves are named and numbered (e.g., named and numbered according to their location along the spinal column).
- Match these spinal nerves or nerve plexuses to their written descriptions: cervical plexus, brachial plexus, lumbar plexus, sacral plexus, sciatic nerve, radial nerve, ulnar nerve, and median nerve.
- Define the term dermatomes.
- Define these terms: general sensory receptor, special sensory receptor.

- Match these sensory receptors to written descriptions of their functions: photoreceptors, chemoreceptors, thermoreceptors, nociceptors, mechanoreceptors, proprioceptors.
- Match these mechanoreceptors to written descriptions of their functions: tactile receptors, baroreceptors, mechanoreceptors for hearing, mechanoreceptors for equilibrium.
- Describe simply in one's own words the function of each of these proprioceptors: joint receptors, muscle spindles, Golgi tendon organs.
- Name the two divisions of the peripheral nervous system (somatic, autonomic).
- Define these terms: somatic nervous system, and somatic effector.
- List two functions of the somatic nervous system (e.g., sensory neurons carry information from sense receptors; motor neurons signal skeletal muscle contraction to produce movement and maintain balance, etc.).
- Define these terms: autonomic nervous system, autonomic effector.
- List two functions of the autonomic nervous system (e.g., sensory neurons from internal organs and fascia carry information; motor neurons stimulate smooth muscle, cardiac muscle and glandular effectors, etc.).
- Name the two divisions of the autonomic nervous system (sympathetic and parasympathetic).
- Describe simply in one's own words the function of the sympathetic division of the autonomic nervous system (e.g., initiate an emergency response that signals the body's fight-or-flight response).
- Describe simply in one's own words the function of the parasympathetic division of the autonomic nervous system (e.g., maintain homeostatic processes, etc.).

 Read descriptions of visceral effectors influenced by sympathetic or parasympathetic innervation (e.g., sharpens close and centered vision, opens the nasal septum) and label each description as sympathetic or parasympathetic (e.g., maintains or returns resting respiratory rate, constricts bronchioles labeled parasympathetic, while increases heart rate are labeled sympathetic, etc.).

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss cranial nerves, where they originate, how they are named and numbered, and their functions.
- Discuss why it is important for massage therapists to know the general location and innervation of cranial nerves V, VII, X, and XI (e.g., each is somewhat accessible during massage of head, neck, and face; irritations of these nerves is common with whiplash, temporomandibular joint disorder, tension headaches, etc).
- Discuss spinal nerves, where they originate, how they are named and numbered, and their functions.
- Review nerve plexuses and the body areas they innervate (e.g. cervical plexus innervates the head and neck, brachial plexus the upper extremity, thoracolumbar plexus the hips and thighs, sacral the leg and feet).
- Differentiate between general sensory receptors and special sensory receptors.
- Discuss the functions of these sensory receptors: photoreceptors, chemoreceptors, thermoreceptors, nociceptors, mechanoreceptors, proprioceptors.
- Compare and contrast these mechanoreceptors: tactile receptors, baroreceptors, mechanoreceptors for hearing, mechanoreceptors for equilibrium.
- Discuss proprioceptors and proprioception.

- Compare and contrast these proprioceptors: joint receptors, muscle spindles, Golgi tendon organs.
- Compare and contrast the terms voluntary and autonomic as related to the peripheral nervous system.
- Discuss the somatic nervous system and its structure and function.
- Discuss the autonomic nervous system and its structure and function.
- Compare and contrast the physiological effects of the sympathetic nervous system with the parasympathetic nervous system (e.g., sympathetic causes dilated pupils, increased heart rate, dilation of bronchi of the lungs, increased respiration, etc. while parasympathetic causes constricted pupils, decreased heart rate, constriction of bronchi, relaxed deep breathing, etc.).

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: The Central Nervous System**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term central nervous system.
- Review the structures of the central nervous system (brain and spinal cord).
- Review the general function of the central nervous system (e.g., receives, interprets, and sends a response to incoming sensory information).
- Define the term *meninges*.
- Match these connective tissue membranes of the brain and spinal cord to written descriptions of their functions: dura mater, arachnoid mater, pia mater.
- Define the term cerebrospinal fluid.
- Describe simply in one's own words the function of cerebrospinal fluid (e.g., shock absorption, nutrition, barrier to bloodborne pathogens, etc.).
- Define the term *spinal cord*.
- Define the term *brain*.
- Match these structures related to the brain to their written descriptions: brainstem, diencephalon, cerebrum, cerebellum, limbic system.
- Match these structures related to the brain stem to their written descriptions: medulla oblongata, pons, midbrain, reticular formation.
- Match these structures related to the diencephalon to their written descriptions: thalamus, hypothalamus.
- Match these structures related to the cerebrum to their written descriptions: cerebral cortex, basal ganglia, left hemisphere, right hemisphere, corpus callosum, frontal lobe, parietal lobe, temporal lobe, occipital lobe.

•	Match these structures of the limbic system
	to their written descriptions: cingulate gyri,
	hippocampus, amygdala, mammillary bodies.

 Match these regions of the brain with description of their key processes and functions: cerebrum, cerebellum, brainstem, diencephalon (e.g. cerebrum matches with cognition, consciousness and motor control, etc.).

#### Level 2 Knowledge: Use and Connect Skills: Practice and Refine

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the central nervous system and its basic structure and function.
- Discuss the general structure and function of meninges.
- Compare and contrast dura mater, arachnoid mater, and pia mater.
- Discuss the functions of cerebrospinal fluid.
- Discuss the brainstem, medulla oblongata, pons, midbrain, reticular formation.
- Discuss the diencephalon, related structures (thalamus, hypothalamus, pituitary gland), and its role in human health and survival.
- Discuss the structures of the cerebrum and their functions (e.g., cerebral cortex, gyri, fissures, basal ganglia, left hemisphere, right hemisphere, corpus callosum, frontal lobe, parietal lobe, temporal lobe, occipital lobe, etc.).
- Discuss the structures and function of the limbic system.
- Discuss these regions of the brain and their key processes and functions: cerebrum, cerebellum, brain stem, diencephalon (e.g. cerebrum controls cognition, consciousness, and motor control, etc.).

There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.

## Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

### Problem Solve

There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.

Sub-Topic: The Anatomy of Pain		
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive	<b>Conditions:</b> Having participated in an interactive	There are no relevant learning objectives for this

# Respond

lecture or classroom activity, the learner will be able to:

- Name the type of sensory receptor that transmits pain information (e.g., nociceptors).
- List the three types of stimuli that activate nociceptors (e.g., mechanical stimuli like bending, twisting, compression; thermal stimuli like hot or cold; chemical stimuli like prostaglandin and bradykinin).
- Name the two types of axons that convey pain stimuli to the brain (e.g., alpha-beta axons and C-fiber axons).
- Describe simply in one's own words the type of pain conveyed by alpha-beta axons (e.g., myelinated axons that convey information rapidly from precise locations are responsible for conveying immediate, sharp, intense pain like that of a stubbed toe, etc.).
- Describe simply in one's own words the type of pain conveyed by C-fiber axons (e.g., unmylinated axons that convey less defined information more slowly are responsible for secondary, diffuse, or throbbing pain).
- Review the role of myelin for wrapping
- Review the role of nodes of Ranvier as the "excitable" areas of the axon.
- Review the role of the cerebral cortex related to pain stimuli (e.g., in the cerebral cortex all sensory stimuli including pain are examined and compared with memories, past experiences, expectations, and emotional states to modify the pain experience; during this process pain is modified based on things like cultural beliefs, attitudes, expectations, viewpoints, etc.).

sub-topic in level 1 of the psychomotor domain.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	• Discuss the factors that influence pain perception.	
	<ul> <li>Discuss classifications of pain by time, location, tissue type, and how the pain was generated.</li> </ul>	
	<ul> <li>Discuss the structure and function of pain receptors.</li> </ul>	
	<ul> <li>Discuss each type of stimuli that activates nociceptors (mechanical, thermal, or chemical).</li> </ul>	
	<ul> <li>Discuss how pain information is conveyed to the brain on alpha-beta axons and C-fiber axons.</li> </ul>	
	<ul> <li>Discuss myelin, nodes of Ranvier, nerve impulse conduction, and the relationship of damaged nerves to pain (e.g., if myelin is disturbed when nerves are injured, large areas of excitable axons may be uncovered; nerve impulses can be spontaneously produces at these injury sites, resulting in numerous pain signals being conducted to the brain and intensifying the experience of pain, etc.).</li> </ul>	
	<ul> <li>Discuss the cerebral cortex in relationship to pain stimuli (e.g., In the cerebral cortex all sensory stimuli including pain are examined and compared with memories, past experiences, expectations, and emotional states to modify the pain experience; during this process pain is modified based on things like cultural beliefs, attitudes, expectations, viewpoints, etc.).</li> </ul>	
	Compare and contrast pain stimulus and pain	

perception.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	Conditions: Having reviewed a research article that concludes massage reduces pain sensations, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.
	Speculate about the mechanisms behind pain reduction and report on findings to peers and instructors.	

# **Sub-Topic: Pathologies of the Nervous System**

Level 1

**Knowledge: Attain and Comprehend** 

Skills: Observe and Imitate

# Receive Respond

Note: Please see in-depth learning objectives related to nerve compression syndromes and headaches in Adapting Sessions for Clients with Common Pathologies.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these terms to their written descriptions: neuritis, Bell's palsy (e.g., a flaccid paralysis of one side of the face caused by inflammation or damage to cranial nerve VII, the facial nerve).
- List two possible causes of Bell's palsy (e.g., neuritis caused by mechanical factors, reactivation of herpes simplex virus, Lyme disease, tumors, bone spurs, middle ear infections, upper cervical subluxation, temporomandibular joint disorder, etc.).
- List two signs and symptoms of Bell's palsy (e.g., flaccid paralysis on one side of the face which includes drooping and distortion of the face, etc.).
- List two cautions or contraindications for massage for a client with Bell's palsy (e.g., rule out underlying conditions that contraindicate massage like a tumor or Lyme disease, avoid deep or overly vigorous manipulation of the affected tissue, etc.).
- List two benefits or effects of massage for clients with Bell's palsy (e.g., helps maintain local circulation to the area, helps to maintain tissue flexibility, etc.).
- Define the term multiple sclerosis (e.g., a degenerative condition in which myelin is destroyed and replaced by scar tissue).
- State the type of disorder multiple sclerosis is (e.g., believed to be an auto-immune disorder).

- List two signs and symptoms of multiple sclerosis (e.g., weakness, paresthesia, loss of sensation, extreme fatigue, difficulty walking and loss of coordination, digestive disturbances, etc.).
- List two cautions or contraindications for massage for a client with multiple sclerosis (e.g., massage is contraindicated during active inflammatory cycles but can be used during periods of remission).
- List two benefits or effects of massage for clients with multiple sclerosis (e.g., reduces muscle stiffness, relieves symptoms of depression, supports stress reduction, etc.).
- Define the term trigeminal neuralgia (e.g., a condition involving sharp pain along one or more branches of the trigeminal nerve (cranial nerve V).
- List possible causes of trigeminal neuralgia (e.g., the trigeminal nerve becomes irritated; sometimes the cause of the irritation is identified, but tumors, bone spurs, infections, complications from dental surgery, or multiple sclerosis can cause irritation).
- List two signs and symptoms of trigeminal neuralgia (e.g., sharp and severe pain in the lower face and jaw; pain comes in brief episodes, usually without identifiable triggers, a muscular tic may be present).
- List two cautions or contraindications for massage for a client with trigeminal neuralgia (e.g., massage is often contraindicated because light touch can trigger an episode; clients with trigeminal neuralgia will not want to be face-down in a face cradle, and positioning for comfort will be necessary).
- List two benefits or effects of massage for clients with trigeminal neuralgia (e.g., trigeminal neuralgia is a site contraindication but a client positioned comfortably can benefit from the stress reduction effects of massage, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	Conditions: Having participated in a classroom discussion, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	• Discuss the causes, signs, and symptoms of Bell's palsy.	
	<ul> <li>Discuss the cautions, contraindications, and session adaptations for working with client a client who has Bell's palsy.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for clients with Bell's palsy.</li> </ul>	
	• Discuss the causes, signs, and symptoms of multiple sclerosis.	
	<ul> <li>Discuss the cautions, contraindications, and session adaptations for working with a client living with multiple sclerosis.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for clients living with multiple sclerosis.</li> </ul>	
	<ul> <li>Discuss the causes, signs, and symptoms of trigeminal neuralgia.</li> </ul>	
	<ul> <li>Discuss the cautions, contraindications, and session adaptations for working with a client with trigeminal neuralgia.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for a client with trigeminal neuralgia.</li> </ul>	
	<ul> <li>Discuss the use of clinical reasoning models (or critical thinking models) to problem solve when working with pathologies.</li> </ul>	
	<ul> <li>Work with a peer to analyze three mock health forms indicating clients have three unknown conditions related to the nervous system, and use a clinical reasoning model to determine appropriate action (e.g., massage is contraindicated, massage is safe with some modifications, the client should be referred, more information is needed, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: The Cardiovascular System**

# Learning Outcomes

**Conditions:** Having completed 4 hours of instruction on the cardiovascular system, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the structure, function, and pathologies of the cardiovascular system, on a written examination.
- Demonstrate the use of a clinical reasoning model to determine appropriate
  massage session actions for a cardiovascular pathology (e.g., determine it is a
  contraindication and decline massage, determine it is a local contraindication,
  determine that another session adaptation is required, etc.), on a graded activity.

# **Key Terminology and Concepts**

- Aorta
- Arteriole
- Artery
- Blood
- Blood pressure
- Capillary
- Cardiovascular system
- Circulation
- Deep vein thrombosis
- Edema
- Endocardium
- Erythrocytes
- Formed elements
- Heart
- Heart attack
- Heart valves
- Hypertension
- Inferior vena cava
- Left atrium
- Left ventricle
- Leukocytes
- Lumen

- Myocardial infarction
- Myocardium
- Pericardium
- Pitting edema
- Plasma
- Pulmonary artery
- Pulmonary circulation
- Pulmonary vein
- Pulse
- Right atrium
- Right ventricle
- Stroke
- Superior vena cava
- Systemic circulation
- Thrombocytes
- Thrombophlebitis
- Varicose veins
- Vasoconstriction
- Vasodilation
- Vein
- Venule

# **Use of Terms**

The terms in this topic appear to be consistent and widely used.

### **Sub-Topics**

- The Structure and Function of the Cardiovascular System
- Pathologies of the Cardiovascular System

# Sub-Topic: The Structure and Function of the Cardiovascular System

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term cardiovascular system.
- Describe simply in one's own words the basic structure of the cardiovascular system (e.g., composed of the heart and blood vessels).
- Describe simply in one's own words the basic function of the cardiovascular system (e.g., transport blood to supply body tissues with oxygen, water, and nutrients, and remove wastes).
- Describe simply in one's own words the functions of the blood (e.g., the primary transportation medium for nutrients, wastes, and chemicals like hormones that are needed to support the body's metabolic processes, etc.).
- Match these terms to their written descriptions: right atrium, left atrium, right ventricle, left ventricle, myocardium, endocardium, pericardium, coronary circulation, systemic circulation, pulmonary circulation, artery, arteriole, capillary, vein, venule, pulse, superior vena cava, inferior vena cava, aorta, pulmonary artery, pulmonary vein, plasma, formed elements, erythrocytes, leukocytes, thrombocytes.
- Match these structures to a written description of their functions: heart, heart valves, arteries, veins, capillaries, lumen, aorta, inferior vena cava, superior vena cava.
- List three factors that influence arterial blood flow.
- List three factors that influence venous blood flow.
- List three factors that influence blood pressure (e.g., blood volume, strength of heart contractions, heart rate, blood viscosity, resistance to blood flow, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss the functions of the cardiovascular system (e.g., transportation system for nutrients, waste, hormones, and other substances for cellular activity; helps to regulate temperature, fluid volumes, and pH, immune response, etc.).</li> </ul>	
	<ul> <li>Compare and contrast the basic structures and functions of arteries, veins, and capillaries.</li> </ul>	
	<ul> <li>Differentiate between pulmonary circulation with systemic circulation.</li> </ul>	
	<ul> <li>Discuss the effects of vasodilation and vasoconstriction on local and systemic blood flow.</li> </ul>	
	<ul> <li>Discuss the relationship of the cardiovascular system to the stages of healing that occur after soft-tissue injury.</li> </ul>	
	<ul> <li>Discuss massage myths, unanswered questions, or unproven benefits and effects of massage as a method to improve circulation.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Pathologies of the Cardiovascular System**

Level 1

**Knowledge: Attain and Comprehend** 

Skills: Observe and Imitate

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review the basic structure of the cardiovascular system (composed of the heart and blood vessels).
- Review the basic functions of the cardiovascular system (e.g., transport blood to supply body tissues with oxygen, water, and nutrients; remove wastes, etc.).
- Review the functions of the blood (e.g., the primary transportation medium for nutrients, wastes, and chemicals like hormones that are needed to support the body's metabolic processes).
- Review factors that influence blood pressure (e.g., blood volume, strength of heart contractions, heart rate, blood viscosity, resistance to blood flow, etc.).
- Define these terms: *edema*, *pitting edema*.
- List five possible causes of edema (e.g., chemical imbalance, inflammation, poor circulation, weakened heart, dysfunctional liver, serious kidney problems, obstruction to venous or lymphatic return like a blood clot, an accumulation of salts or proteins in the interstitial fluid, etc.).
- Define the term *hypertension*.
- Outline blood pressure guidelines for optimal, pre-hypertension, hypertension stage 1, and hypertension stage 2 (e.g., optimal is <120/<80, etc.).</li>
- List two signs associated with hypertension that warrant referral to a physician (e.g., shortness of breath after mild exercise, headaches, dizziness, edema in ankles, excessive sweating, etc.).
- Define the term *myocardial infarction* (heart attack).

- List three signs and symptoms that someone may be having a heart attack (e.g., chest pain or heaviness, spreading pain, lightheadedness, nausea, sweating, shortness of breath, anxiety, weakness, stomach and abdominal pain, etc.).
- Outline response steps for a suspected heart attack (e.g., call 911 immediately, keep the person calm, and seated or lying down, have a client not allergic to aspirin chew and swallow a baby aspirin; if the person stops breathing, perform CPR immediately until emergency services arrive, etc.).
- Define the term stroke.
- List five signs and symptoms of someone having a stroke (e.g., sudden onset of unilateral weakness, numbness, or paralysis on the face, arm, leg, or any combination of the three, sudden confusion, trouble speaking or understanding, sudden trouble seeing in one or both eyes, sudden trouble walking, dizziness, loss of balance or coordination, sudden severe headache with no known cause etc.).
- Outline response steps for a suspected stroke (e.g., call 911 immediately, have the person sit or lie down, do not give aspirin; if the person stops breathing perform CPR immediately until emergency services arrive, etc.).
- Define the term varicose veins.
- Describe in one's own words the location and appearance of varicose veins (e.g., varicose veins look like lumpy bluish wandering lines on the surface of the skin on the legs, etc.).
- Define these terms: thrombophlebitis, deep vein thrombosis.
- List three factors that might lead to the development of thrombophlebitis or deep vein thrombosis (e.g., physical trauma, varicose veins, local infection, physical restrictions, immobility, pregnancy and childbirth, certain types of cancer, surgery, hormone supplements, others, etc.).

 List three signs or symptoms associated with thrombophlebitis (e.g., pain, heat, redness, itching, a hard cord where the vein is affected, edema with discoloration distal to the affected area, etc.).

## Level 2 **Knowledge: Use and Connect Skills: Practice and Refine** Apply **Conditions:** Having participated in an interactive There are no relevant learning objectives for this lecture or classroom activity, the learner will be sub-topic in level 2 of the psychomotor domain. able to: Compare and contrast when massage is indicated, contraindicated, or requires adaptations for these conditions: hypertension, varicose veins, history of heart attack, and history of stroke. Work with peers to brainstorm four followup questions to ask during a client interview that will help plan massage adaptations or determine if massage is contraindicated if these conditions are listed on a health intake form: hypertension, varicose veins, history of heart attack, history of stroke. Work with peers to determine three massage adaptations that might increase the safety of massage applied for these conditions: hypertension, varicose veins, history of heart attack, history of stroke. Compare and contrast thrombophlebitis to deep vein thrombosis. Discuss the risks of massage application for clients with thrombophlebitis and deep vein thrombosis. Work with peers to brainstorm two follow-up questions to ask during a client interview that will help determine if massage is contraindicated or to plan adaptations for a client with thrombophlebitis. Work with peers to determine massage adaptations for thrombophlebitis that would reduce the risks for the client. Level 3 **Knowledge: Choose and Plan Skills: Naturalize and Adapt** Problem There are no relevant learning objectives for this There are no relevant learning objectives for this Solve sub-topic in level 3 of the cognitive domain. sub-topic in level 3 of the psychomotor domain.

# **Topic: Other Body Systems**

# Learning Outcomes

**Conditions:** Having completed 13 hours of instruction on the lymphatic, immune, digestive, respiratory, endocrine, reproductive, and urinary systems, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the structure, function, and pathologies of the lymphatic, immune, digestive, respiratory, endocrine, reproductive, and urinary systems, on written examinations.
- Demonstrate the use of a clinical reasoning model to determine appropriate
  massage session action for selected pathologies of the lymphatic, immune,
  digestive, respiratory, endocrine, reproductive, and urinary systems (e.g.,
  determine it is a contraindication and decline massage, determine it is a local
  contraindication, determine that another session adaptation is required, etc.), on
  graded activities.

## **Key Terminology and Concepts**

- Abortion
- Absorption
- Accessory digestive organs
- Acute bronchitis
- Adrenal glands
- Allergic reaction
- Allergy
- Alveoli
- Anabolism
- Anaphylaxis
- Angioedema
- Antibodies
- Antigen
- Aorta
- Appendix
- Asthma
- Autoimmune diseases
- Axillary nodes
- B-cells
- Bladder
- Blood
- Bronchial tree
- Capillaries
- Cardiovascular system
- Catabolism
- Catchments
- Cervical cancer
- Cervical nodes
- Chemical digestion
- Chronic bronchitis

- Lymph capillaries
- Lymph nodes
- Lymphatic system
- Lymphatic terminus
- Lymphatic vessels
- Lymphedema
- Lymphocyte
- Macrophage
- Mastication
- Mechanical digestion
- Memory cells
- Metabolic rate
- Metabolic syndrome
- Metabolism
- Monocytes
- Motility
- Mouth
- Nasal cavity
- Nephrons
- Neurohormone
- Neuropeptide
- Neurotransmitters
- Non-specific immunity
- Norepinephrine
- Nose
- Ovaries
- Oxytocin
- Pancreas
- Parathyroid glands
- Pelvic inflammatory disease

- Circulation
- Cisterna chyli
- Clitoris
- Common cold
- Constipation
- Cortisol
- Cystic fibrosis
- Diabetes mellitus
- Diaphragm
- Digestion
- Digestive system
- Dopamine
- Dysmenorrhea
- Edema
- Elimination
- Emphysema
- Endocrine system
- Endometriosis
- Endorphins
- Enteric nervous system
- Epinephrine
- Esophagus
- Fallopian tubes
- Fibroid tumors
- Gallbladder
- Gastroesophageal reflux disease
- Gastrointestinal tract
- Growth hormone
- Heartburn
- Hepatitis
- Hormones
- Hyperthyroidism
- Hypoglycemia
- Hypothalamus
- Hypothyroidism
- Immune system
- Ingestion
- Inguinal nodes
- Intralymphatic valve
- Jaundice
- Kidney stones
- Kidneys
- Large intestine
- Larynx
- Liver
- Lung cancer
- Lungs
- Lymph

- Penis
- Peristalsis
- Peyer's patches
- Phagocyte
- Pharynx
- Pineal gland
- Pituitary gland
- Pneumonia
- Premenstrual syndrome
- Primary lymph vessel
- Prostate cancer
- Prostatitis
- Reproductive system
- Respiratory system
- Right lymphatic duct
- Rugae
- Salivary glands
- Scrotum
- Segmentation
- Serotonin
- Sexually transmitted disease
- Simple edema
- Sinusitis
- Small intestine
- Specific immunity
- Spleen
- Stomach
- Submandibular nodes
- Substance P
- T-cells
- Teeth
- Testes
- Thoracic duct
- Thymus
- Thyroid gland
- Tongue
- Tonsils
- Trachea
- Tuberculosis
- Ureters
- Urethra
- Urinary system
- Urinary tract infection (UTI)
- Uterus
- Vagina
- Ventilation
- Vulva

# Use of Terms

The terms in this topic appear to be consistent and widely used.

# **Sub-Topics**

- The Lymphatic System
- The Immune System
- The Digestive System
- The Respiratory Systems
- The Endocrine System
- The Reproductive System
- The Urinary System

# **Sub-Topic: The Lymphatic System**

evel 1

**Knowledge: Attain and Comprehend** 

Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *lymphatic system*.
- Match these organs to written descriptions of their functions: lymphatic vessels, lymph capillaries, intralymphatic valves, lymphatic terminus, spleen, thymus, tonsils, Peyer's patches, appendix.
- Describe simply in one's own words the basic structure of the lymphatic system (e.g., composed of lymphatic vessels and lymphoid tissue and organs scattered throughout the body, etc.).
- Describe simply in one's own words the fluid return function of the lymphatic system (e.g., the lymphatic vessels pick up interstitial fluid [now lymph], cleanse and enrich it, then transport it back into the blood).
- Label these areas or organs on a diagram of the lymphatic system: right lymphatic duct, thoracic duct, Cisterna chyli, submandibular nodes, cervical nodes, inguinal nodes, axillary nodes, lymphatic terminus points.
- Define the term *lymphedema*.
- List one possible cause of primary lymphedema (e.g., congenital or genetic defect in lymphatic development, etc.).
- List one possible cause of secondary lymphedema (e.g., damaged nodes or vessels due to surgery, radiation, chemotherapy, infection, etc.).

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss basic lymph node structure and function.
- Discuss the relationship between lymphatic vessels and blood vessels (e.g., the capillaries in both systems are similar in structure with vessel walls that are only one epithelial cell thick; lymph capillaries are entwined with cardiovascular capillaries, primary lymph vessels and veins both have 1-way valves, the right lymphatic and thoracic lymph ducts are located close to the superior vena cava and abdominal aorta, and return lymph to the bloodstream at the subclavian veins, etc.).
- Compare and contrast the movement of lymph through the lymphatic system with the movement of blood in the cardiovascular system.
- Discuss the term catchments as it is used in manual lymphatic massage methods (e.g., manual lymphatic therapists use the term catchments instead of lymph node bed because they catch and slow lymph flow to filter and carry out immune processes; therefore, clearing the catchments can improve lymph flow and reduce edema; specific catchments drain fluid from specific tissue regions, etc.).
- Review three causes of edema (e.g., in general chemical imbalance, inflammation, or poor circulation; more specifically, weakened heart, dysfunctional liver, serious kidney problems, obstruction to venous or lymphatic return like a blood clot, an accumulation of salts or proteins in the interstitial fluid, etc.).
- Compare and contrast simple edema in cardiovascular system to lymphedema (e.g., lymphedema is the result of dysfunctions in the lymphatic system; simple edema is accumulation of fluid in the interstitium related to a variety of problems like obesity, hypertension, etc.).

	• Compare and contrast when general massage is indicated for edema versus when it is contraindicated (e.g., lymphedema is contraindication, only special manual lymphatic techniques are safe; general massage can benefit simple edema and edema related to musculoskeletal injuries.	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

### **Sub-Topic: The Immune System**

evel 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Describe simply in one's own words the basic structure of the immune system (e.g., the immune system includes structural components of the cardiovascular, lymphatic, and endocrine system including tonsils, lymph nodes, thymus gland, spleen, Peyer's patches, and appendix, etc.).
- Describe simply in one's own words the basic functions of the immune system (e.g., protect and defend the body from foreign substances via general and specific immune responses, etc.).
- List four nonspecific immune defenses (e.g. chemical barriers, mechanical barriers, inflammation, fever, etc.).
- List two defining characteristics of the specific immune response (e.g. antigenspecific, body-wide response, develops memory).
- Match these immune system cells and chemicals to their written descriptions: monocytes, macrophages, T-cells, B-cells, memory cells, antigen, and antibodies.
- Define these terms: allergy, allergic reaction, anaphylaxis, angioedema.
- List two signs of possible acute allergic reaction (e.g., swelling around the face and throat, hives, rashes, etc.).
- List common massage items that might cause allergic reactions in clients (e.g., massage lubricants, essential oils, candles, laundry detergent used to wash linens, synthetic aromas used to fragrance the treatment room, herbal applications, etc.).

- List four types of oil that might be used as a massage lubricant that could cause a hypersensitivity reaction (e.g., usually massage oils that break down into arachidonic acid on the skin such as safflower, soy, almond, sunflower, and corn oils, etc.).
- Outline the steps one would take to respond to hypersensitivity reactions of the skin during a massage (e.g., wash the area with soap and cool water to remove the lubricant, etc.).
- Define the term *autoimmune disease*.
- List three autoimmune diseases (e.g., rheumatoid arthritis, systemic lupus, type 1 diabetes, myasthenia gravis, etc.).

### Level 2 Knowledge: Use and Connect

### Apply

able to:

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be

- Discuss the relationship between the lymphatic system and immune system.
- Compare and contrast the body's nonspecific immune responses with the specific immune responses.
- Categorize immune system cells as one of two types (e.g., neutrophils, monocytes, and macrophages would be categorized as phagocytes, and T-cells and B-cells would be categorized as lymphocytes).
- Discuss immune system mistakes that result in allergic reactions (e.g., when the body launches an attack against nondangerous antigens like cat dander, oak pollen, or peanuts).
- Discuss immune system mistakes that result in autoimmune disorders (e.g., when the body fails to distinguish self from non-self, etc.).
- Compare and contrast allergic reactions categorized as anaphylaxis with allergic reactions categorized as angioedema.

### **Skills: Practice and Refine**

•	Discuss methods to deal with mild allergic
	reactions in a massage clinic (e.g., remove
	the substance from the skin if it is topical and
	apply a cold pack, etc.).

 Discuss methods to prevent mild allergic reactions in a massage clinic (e.g., use unscented, sensitive skin laundry detergents, don't burn fragranced candles, check ingredients on massage lubricant labels with clients, etc.).

Level 3	knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem	There are no relevant learning objectives for this	There are no relevant learning objectives for this
Solve	sub-topic in level 3 of the cognitive domain.	sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: The Digestive System**

Level 1

**Knowledge: Attain and Comprehend** 

Skills: Observe and Imitate

### Receive Respond

Note: Hepatitis A, B, and C are also discussed in the sub-topic Standard Precautions in the Massage Professional Practices subject.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these terms to their written descriptions: gastrointestinal tract, ingestion, digestion, absorption, metabolism, elimination, chemical digestion, mechanical digestion, peristalsis, segmentation, mastication, rugae, enteric nervous system, anabolism, catabolism, metabolic rate.
- Match these organs to written descriptions of their functions: mouth, pharynx, esophagus, stomach, small intestine, large intestine, teeth, tongue, salivary glands, liver, gallbladder, pancreas.
- Describe simply in one's own words the basic structure of the digestive system (e.g., composed of the gastrointestinal tract and several accessory digestive organs including the salivary glands, liver, gallbladder, and pancreas, etc.).
- Describe simply in one's own words the basic functions of the digestive system (e.g., to digest food to provide nutrients for cellular metabolism, eliminate solid wastes from the body, assist in regulating body temperature by generating heat as a by-product of digestion and metabolism, etc.).
- Define the term constipation.
- List two possible causes of constipation (e.g., not enough fluid or fiber-rich foods in diet, muscles that move bowels aren't properly coordinated, lack of physical activity, irritable bowel syndrome, etc.).
- Define these terms: heartburn, gastroesophageal reflux disease (GERD).

- List two massage session adaptations appropriate for clients who experience frequent heartburn or GERD (e.g., use a semireclined position, no direct pressure over the abdominal area, etc.).
- Define these terms: hepatitis, jaundice.
- Match the three primary types of hepatitis to their written descriptions (A, B, C).
- List three symptoms associated with hepatitis A, B, or C (e.g., fatigue, abdominal pain, nausea, diarrhea, and jaundice).
- List two ways a person might become infected with hepatitis A.
- List two ways a person might become infected with hepatitis B.
- List two ways a person might become infected with hepatitis C.

Level 2 Knowledge: Use and Connect Skills: Practice and Refine

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss these processes of the gastrointestinal tract: ingestion, digestion (chemical and mechanical), motility, absorption, metabolism, and elimination.
- Compare and contrast the metabolic processes of anabolism and catabolism.
- Compare and contrast segmentation and peristalsis.
- Discuss the benefits and effects of massage for digestion (e.g., massage generally improves digestion and relieves constipation by decreasing stress and sympathetic tone, etc.).
- Contrast the massage myth that offering clients water after a session "flushes out toxins" from body tissue with the real benefits of water consumption after a session (e.g., rehydration of tissue, especially fascia, support of nutrient absorption, facilitation of waste products, etc.).

•	Discuss the benefits and effects of massage	
	for chronic constipation (e.g., abdominal	
	massage may help relieve constipation by	
	decreasing stress and sympathetic tone to	
	enhance motility, etc.).	

- Discuss the cautions and contraindications of abdominal massage for constipation (e.g., constipation may be caused by a serious metabolic condition or mechanical blockage and irritable bowel syndrome; Crohn disease and ulcers my indicate general massage but contraindicate abdominal massage, etc.).
- Compare and contrast hepatitis A, B, and C.
- Discuss massage benefits and effects for people living with hepatitis.
- Discuss the massage considerations and possible session adaptations for a client with hepatitis.
- Discuss signs and symptoms that indicate massage is contraindicated for a client with hepatitis.
- Review guidelines for standard precautions.
- Discuss standard precautions in relationship to working with clients who are living with hepatitis infections.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

### Sub-Topic: The Respiratory System Level 1 **Knowledge: Attain and Comprehend Skills: Observe and Imitate** Receive Conditions: Having participated in an interactive There are no relevant learning objectives for this Respond lecture or classroom activity, the learner will be sub-topic in level 1 of the psychomotor domain. able to: Define the term respiratory system. Match these organs of the respiratory system to their written descriptions: nose, nasal cavity, pharynx, larynx, trachea, lungs, bronchial tree, alveoli. Define simply in one's own words the function of the respiratory system. Explain simply in one's own words the process of blood oxygenation through the lungs. List three muscles closely related to the respiratory system and ventilation (e.g., diaphragm, internal and external intercostals, scalenes, external and internal oblique abdominals, sternocleidomastoid, rectus abdominus, pectoralis major and minor, serratus anterior). Match these pathologies of the respiratory system to their written descriptions: acute bronchitis, common cold, pneumonia, sinusitis, tuberculosis, asthma, chronic bronchitis, emphysema, cystic fibrosis, lung cancer. List two conditions that are categorized as

chronic obstructive pulmonary diseases (e.g.,

asthma, emphysema, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss the basic structure and function of the respiratory system.</li> </ul>	
	<ul> <li>Discuss the impact of head-forward posture with rounded shoulders on ventilation and oxygen levels (e.g., the scalenes and pectoralis minor can shift roles, other muscles that aid ventilation become fatigued leading to decreased oxygen levels, etc.).</li> </ul>	
	<ul> <li>Discuss the massage considerations and possible session adaptations for a client with a chronic obstructive pulmonary disease (e.g., client may need to be in a seated, semi- reclining, or side-lying position to ensure ease of breathing, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Sub-To	opic: The Endocrine System	
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	Note: Diabetes is covered in depth in the Topic, Adapting Sessions for Clients with Common Pathologies.	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.
	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	
	• Define the term <i>endocrine system</i> .	
	<ul> <li>Match these organs of the endocrine system to their written descriptions: hypothalamus, pituitary gland, pineal gland, thyroid gland, parathyroid glands, thymus, pancreas, adrenal glands, ovaries, testes.</li> </ul>	
	<ul> <li>Define simply in one's own words the function of the endocrine system.</li> </ul>	
	• Match these terms related to chemical messengers to their written descriptions: hormones, neurotransmitters, neuropeptide, neurohormone, cortisol, dopamine, endorphins, epinephrine, growth hormone, norepinephrine, oxytocin, serotonin, substance P.	
	<ul> <li>Match these pathologies related to the endocrine system to their written descriptions: diabetes mellitus, hyperthyroidism, hypoglycemia, hypothyroidism, metabolic syndrome.</li> </ul>	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	• Discuss the basic structure and function of the endocrine system.	
	<ul> <li>Discuss the basic roles that hormones play in the endocrine system (e.g., they act on target cells to initiate and regulate multiple physiologic responses, etc.).</li> </ul>	
	<ul> <li>Discuss the relationship of the endocrine system and nervous system for regulating body function.</li> </ul>	

	<ul> <li>Review one instructor-selected research study that suggests that chemicals related to the endocrine system are influenced by massage/bodywork.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Sub-To	ppic: The Reproductive System	
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.
	• Define the term <i>reproductive system</i> .	
	<ul> <li>Match these organs of the reproductive system to their written descriptions: testes, penis, scrotum, ovaries, fallopian tubes, uterus, vagina, vulva, clitoris.</li> </ul>	
	<ul> <li>Define simply in one's own words the function of the reproductive system.</li> </ul>	
	<ul> <li>Match these pathologies of the reproductive system to their written conditions: cervical cancer, dysmenorrhea, abortion (spontaneous and elective), endometriosis, fibroid tumors, prostate cancer, prostatitis, pelvic inflammatory disease, premenstrual syndrome, sexually transmitted diseases.</li> </ul>	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss the basic structure and function of the reproductive system.</li> </ul>	
	<ul> <li>Discuss the benefits and effects of massage for pregnancy, labor and delivery, and child development (e.g., studies show that massage decreases many of the symptoms associated with the discomforts of pregnancy, decreases labor pain, encourages weight gain in preterm infants, etc.).</li> </ul>	
	<ul> <li>Discuss the massage considerations and possible session adaptations for a client recovering from spontaneous or elective abortion.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Sub-To	Sub-Topic: The Urinary System		
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate	
Receive Respond	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.	
	• Define the term <i>urinary system</i> .		
	<ul> <li>Match these structures of the urinary system to their written descriptions: kidneys, nephrons, ureters, bladder, urethra.</li> </ul>		
	<ul> <li>Define simply, in one's own words, the function of the urinary system.</li> </ul>		
	<ul> <li>Match these pathologies of the urinary system to their written descriptions: kidney stones, urinary tract infection (UTI).</li> </ul>		
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine	
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.	
	• Discuss the basic structure and function of the urinary system.		
	<ul> <li>Discuss these urinary system pathologies: kidney stones, urinary tract infection (e.g., do they contraindicate massage or require caution and session adaptations).</li> </ul>		
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt	
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.	

# **Entry-Level Massage Education Blueprint Assessment and Documentation Topic Client Assessment Sub-Topics** Overview of Assessment in Massage and Bodywork Health Forms and Client Interviews • General Observation and Client Level of Health • Palpation Assessment Posture Assessment Range of Motion Assessment Pain Assessment **Functional Limitations Assessment** Topic **Documentation and Client Files Sub-Topics** Key Principles of Documentation and Keeping Good Client Files **SOAP Charting and Other Documentation Formats**

# **Topic: Client Assessment**

# Learning Outcomes

**Conditions:** Having completed 43.5 hours of instruction on client assessment, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to health forms, client interviews, general observation, palpation assessment, posture assessment, range of motion assessment, pain assessment, and functional limitations assessment, on written examinations.
- Correctly administer a health form and conduct a client interview to rule out contraindications and plan a safe massage session, on a graded activity or practical evaluation.
- Conduct a competent palpation assessment and make four defensible observations about the quality of skin, fascia, muscles, tendons, and joint movements to inform session planning, on a graded activity or practical evaluation.
- Correctly perform a posture assessment and make two defensible observations about muscular imbalance to inform session planning, on a graded activity or practical evaluation.
- Correctly perform active and passive range of motion assessments on two joints and make two defensible observations about movement quality to inform session planning, on a graded activity or practical evaluation.
- Correctly administer a pain assessment asking effective follow-up questions to inform session planning, on a graded activity.
- Correctly administer a functional limitations assessment and set two defensible short-term and two defensible long-term functional goals with a client, on a graded activity.

### **Key Terminology and Concepts**

- Active range of motion
- Activities of daily living
- Aggravating activities
- Anterior pelvic tilt
- Anterior view
- Assessment
- Asymmetry
- Attitude
- Body language
- Breathing patterns
- Cervical curve
- Client intake
- Client interview
- Condition management

- Optimal health
- Pain
- Pain assessment
- Pain questionnaire
- Palliative care
- Palpation
- Palpation assessment
- Passive range of motion
- Physician's release
- Poor health
- Posterior pelvic tilt
- Posterior view
- Post-session interview
- Postural dysfunction

- Dying process
- End feel
- Energy level
- Fitness
- Follow-up questions
- Freedom of movement
- Functional goals
- Functional limitations
- Functional limitations assessment
- General observation
- Good health
- Head tilted laterally
- Head-forward position
- Health form
- Health maintenance
- Hyperkyphosis
- Hyperlordosis
- Ideal posture
- Lateral pelvic tilt
- Lateral view
- Lumbar curve
- Mental stimulation
- Nutrition
- Objective data

- Posture
- Posture assessment
- Qualitative measurement
- Quantitative measurement
- Range of motion
- Range of motion assessment
- Referral
- Relationships
- Relieving activities
- Resisted range of motion
- Scoliosis
- Session adaptations
- Session planning
- SMART goals
- Spinal curves
- Stress management
- Subjective data
- Symmetry
- Terminal illness
- Therapeutic change
- Thoracic curve
- Visual analog measures
- Vitality
- Wellness

# **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

### **Sub-Topics**

- Overview of Assessment in Massage and Bodywork
- Health Forms and Client Interviews
- General Observation and Client Level of Health
- Palpation Assessment
- Posture Assessment
- Range of Motion Assessment
- Pain Assessment
- Functional Limitations Assessment

# **Sub-Topic:**

# Overview of Assessment in Massage Therapy and Bodywork

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term assessment.
- Match common assessment methods to their written descriptions: health form, client interview, palpation assessment, posture assessment, range of motion assessment, pain assessment.
- Give one example of subjective data a therapist might gather for a session.
- Give one example of objective data a therapist might gather for a session.
- Give one example of a quantitative measurement.
- Give one example of a qualitative measurement.
- List three types of assessment methods used by massage therapists before all sessions (e.g., health form, client interview, general assessment through observation of the client, etc.).
- State three reasons assessment methods are used before massage sessions (e.g., determine if massage is contraindicated, determine if the client should be referred, determine if session adaptations are necessary, determine if massage can address the client's needs/symptoms/expectations, plan the best possible massage session for the client, determine if current massage treatment is effective, determine if treatment goals should be adjusted, etc.).
- Describe three principles of assessment (e.g., assess bilaterally and "normal" first, assess pre- and post-session, always document findings, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss briefly each of these assessment methods: health form, client interview, posture assessment, range of motion assessment, functional limitations assessment, pain assessment.</li> </ul>	
	<ul> <li>Outline the events of a massage session to identify where assessment is used during sessions.</li> </ul>	
	<ul> <li>Compare and contrast subjective data with objective data.</li> </ul>	
	• Compare and contrast quantitative measurement with qualitative measurement.	
	Discuss the purpose of massage assessment.	
	<ul> <li>Discuss the benefits of collecting and documenting quantitative and qualitative data in each massage session (e.g., regular assessment measurements show progress or that a treatment plan needs adjustment).</li> </ul>	
	<ul> <li>Work with a peer to brainstorm at least ten questions assessment data can answer about a client (e.g., what are the client's symptoms, what tissues are involved in the client's problem, what level of pain is the client experiencing, what activities increase the client's pain level, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Health Forms and Client Interviews**

Level 1 Knowledge: Attain and Comprehend

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *health form*.
- Describe the purpose of a health form.
- Review the components of a health form (e.g., parts and sections).
- List three pieces of information a therapist can learn from a health form (e.g., health history, prior treatments and attempts at resolving problem or conditions, medications used, etc.).
- List three situations that require a client to update a health form (e.g., recent accident, new medication or changes in treatment for a pre-existing condition, new diagnosis from a physician, annually, etc.).
- Define the term *client interview*.
- Describe the purpose of a pre-session client interview.
- Outline the school-selected steps in a client interview process (e.g., establish rapport with the client, communicate clinic policies, clarify written information on the health form, determine client session goals and expectations, identify body regions where the client wishes to receive massage, identify body regions where the client does not wish to receive massage, determine the types of techniques and depth the client would like, determine the client's preferences for music or lubricants, etc.).
- Describe the purpose of a post-session client interview.
- List three pieces of information a therapist can learn from a pre-session client interview (e.g., the client's expectations for the session, the quality of the client's experience of pain, functional limitations, etc.).
- Define the term session adaptations.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate instructor language and behaviors during a pre-session client interview to:
  - Establish rapport and put the client at ease.
  - Ask follow-up questions to clarify information on a health form (e.g., "Can you describe exactly where you feel the pain?").
  - Determine the client's expectations and goals for the session.
  - Identify body regions where the client experiences symptoms (e.g., pain or muscle tension).
  - Determine the body regions where the client wants massage and the body regions where the client does not want massage.
  - Agree on a plan with the client.
  - Determine the types of techniques and the level of pressure and depth the client enjoys.
- Imitate instructor language and behaviors during a post-session interview to:
  - Gather information about how the client feels at the conclusion of the session.
  - Offer basic recommendations for self-care activities that might support the client's wellness goals.
  - Gather information that might support planning for future sessions.

- List three session adaptations a therapist might use to make a massage session more comfortable or safer for a client (e.g., changes in positioning, shorten the session, choice of application methods, etc.).
- List three pieces of information a therapist can learn from a post-session client interview (e.g., how has the pain changed, what did the client feel was most beneficial from the session, etc.).

### Level 2 Knowledge: Use and Connect

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Analyze each section of a health form and discuss how to use it to ensure client health and safety.
- Discuss the types of general observation data therapists gather during a client intake process (e.g., condition of the skin, movement quality, facial expression, breathing, mental clarity, emotional state, stress levels, etc.).
- Compare and contrast subjective data obtained from the client with objective data obtained through assessment procedures.
- Review methods for ruling out contraindications, obtaining a physician's release if one is required, and planning session adaptations based on information included on a health form.
- Review two mock health forms and use them to answer these questions: What is the client's past health history? What are the client's current symptoms? What activities cause symptoms to increase? What activities cause symptoms to decrease? What region of the body is affected?
- Brainstorm four follow-up questions to ask two different clients, after reviewing mock health forms.
- Discuss each step in the school-selected client interview process.
- Compare and contrast an intake interview with a post-session interview.

### **Skills: Practice and Refine**

**Conditions:** Having participated in a practice session, the learner will be able to:

- Demonstrate effective language and behaviors during a pre-session client interview to:
  - Establish rapport and put the client at ease.
  - Ask follow up questions to clarify information on a health form (e.g., "Can you describe exactly where you feel the pain?").
  - Determine the client's expectations and goals for the session.
  - Identify body regions where the client experiences symptoms (e.g., pain or muscle tension).
  - Determine the body regions where the client wants massage and the body regions where the client does not want massage.
  - Agree on a plan with the client.
  - Determine the types of techniques and the level of pressure and depth the client enjoys.

- Demonstrate effective language and behaviors during a post-session interview to:
  - Gather information about how the client feels at the conclusion of the session.
  - Offer basic recommendations for self-care activities that might support the client's wellness goals.
  - Gather information that might support planning for future sessions.

### Level 3 **Knowledge: Choose and Plan** Skills: Naturalize and Adapt Problem Conditions: Having administered three health Conditions: Having practiced in ongoing hands-Solve forms and conducted three client interviews, the on classes, the learner will be able to: learner will be able to: Conduct useful client interviews to gather relevant data to ensure it is safe for clients Rule out contraindications, determine to receive massage and to choose other session adaptations, choose appropriate relevant assessment methods necessary for methods, and plan a 1-hour session for three obtaining a full health picture of clients. clients.

# **Sub-Topic: General Observation and Client Level of Health**

Level 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *general observation*.
- Define the term session planning.
- List two reasons session planning is conducted for every massage or bodywork session.
- List three types of general observation information that might be useful for session planning (e.g., general freedom of movement or lack of freedom of movement, symmetry or asymmetry, breathing patterns, general skin condition and complexion color, level of sympathetic dominance, what body language and gestures tell you about client attitudes and energy levels, etc.).
- Match these levels of health to their written descriptions: optimal health, wellness, poor health, good health, terminal illness, the dying process, palliative care, condition management, therapeutic change, health maintenance.
- List three areas that influence a person's level of health (e.g., nutrition, fitness, stress management, mental stimulation, sense of spiritual connection, good relationships with others, etc.).
- Describe two pieces of information therapists learn from a general assessment of the client's overall vitality and level of health (e.g., indicators of the level of vigor or gentleness the client might need in the session, helps to determine general session goals, etc.).
- Match general session goals to client levels of health (e.g., optimal health would match to massage for maintenance, the dying process would match to palliative care, etc.).

- Identify two factors that would indicate that one does not have the skills and knowledge necessary to work with a particular client's condition (e.g., the client has a serious condition or multiple conditions that create a complex health picture, the client is fragile or in a severely weakened condition, etc.).
- Identify two factors that would indicate that a client should be referred to another health care provider for analysis and treatment before receiving massage (e.g., the client's symptoms are new, severe, and unexplained, the client does not have a diagnosis but experiences pronounced symptoms, etc.).
- Identify two factors that would indicate that a client should be referred to another health professional in addition to receiving massage (e.g., the client demonstrates pronounced emotion while talking about a condition and might benefit from a session with a mental health professional, or the client reports the same intensity pain at the same location each session and it does not seem to be improving and might benefit from an x-ray to rule how bone or joint trauma, etc.).

### Level 2 **Knowledge: Use and Connect**

### Apply

Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss general observation and ways it supports session planning.
- Discuss these factors related to people's sense of wellness: physical factors, intellectual factors, spiritual factors, environmental factors, emotional factors, social factors, occupational factors.
- Discuss ways that massage supports wellness in people's lives.
- Discuss these client conditions: optimal health, good health, fair health, poor health, very poor health, premature death, terminal illness.
- Discuss these factors in relationship to health and disease: mental attitudes, emotional state, coping resources, interpersonal relationships, stress levels, spiritual influences, cultural influences.

### **Skills: Practice and Refine**

- Discuss these general treatment goals of massage: palliative care, condition management, therapeutic change, health maintenance and wellness.
- Compare and contrast massage applied for palliative care with massage applied for condition management.
- Compare and contrast massage applied for therapeutic change with massage applied for health maintenance and wellness.
- Discuss situations where the client should be referred and massage therapy should be postponed.
- Analyze four client scenarios and determine for each if massage should be applied for palliative care, condition management, therapeutic change, or health maintenance and wellness.

# Problem Solve Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to: Develop a basic treatment plan for one of these general massage session goals: palliative care, condition management, therapeutic change, health maintenance and wellness. Knowledge: Choose and Plan Skills: Naturalize and Adapt There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Palpation Assessment**

## Level 1

### **Knowledge: Attain and Comprehend**

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term palpation assessment.
- Describe the purpose of palpation for assessment (e.g., sensing the quality of the tissue in order to treat it, detecting changes in tissue after massage to determine effectiveness of treatment, etc.).
- Outline four palpation objectives (e.g., detect irregularity in tissue texture, detect irregularity in tissue tone, sense differences in tissue texture, recognize areas that are painful, etc.).

**Conditions:** Having viewed an instructor demonstration and used a textbook for guidance, the learner will be able to:

- Locate a specific structure through palpation.
- Distinguish among different types of tissue through palpation (e.g., muscle versus tendon or ligament).
- Differentiate between layers of tissue through palpation.
- Describe the quality of a structure (e.g., spongy, hard, flaccid, hypertonic, fibrotic, etc.).

### Level 2

### **Knowledge: Use and Connect**

### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Compare and contrast palpation for locating structures with palpation for assessment.
- Working with peers, write examples of findings for each palpation objective (e.g., detect irregularity in tissue tone, such as the right deltoid muscle feels firmer than the left deltoid muscle, etc.).
- Working with peers, develop a complete list of descriptive word pairs for describing the way tissue feels (e.g., warm/cold, spongy/firm, grainy/smooth, hard/firm, hard/soft, dry/swollen, etc.).

**Conditions:** Having participated in a practice session, the learner will be able to:

- Palpate and describe qualities of the skin, fascia, muscles, tendons, and basic joint movements.
- Compare tissues bilaterally and describe differences that are felt.

### Level 3

### **Knowledge: Choose and Plan**

### **Skills: Naturalize and Adapt**

### Problem Solve

**Conditions:** Having participated in a classroom activity, the learner will be able to:

- Plan a palpation session and explore the quality of the skin, fascia, muscles, tendons, and joint movements of a body.
- Document findings from a palpation session on a SOAP form in the appropriate places.

**Conditions:** Having participated in a practice session, the learner will be able to:

 Implement a plan for a palpation session and describe the quality of skin, fascia, muscles, tendons, and joint movements of the practice body.  Verbally report on findings and share with peers ideas for massage methods to address palpation findings.

Subject - Assessment and Documentation, Topic – Client Assessment

# **Sub-Topic: Posture Assessment**

evel '

Knowledge: Attain and Comprehend

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *posture*.
- Explain the position of the body in ideal posture.
- Describe the three normal spinal curves visible when viewing the body from the side (lumbar, thoracic, and cervical).
- Match the spinal curves to their written descriptions: lumbar curve, thoracic curve, cervical curve.
- Describe two benefits of good posture.
- List two ways massage supports good posture (e.g., lengthens muscles that are short, softens structures that are tight for better overall muscular balance and less stress on joints, etc.).
- Define the term postural dysfunction.
- Identify four body structures that might be under stress because of postural dysfunction.
- Match these postural dysfunctions to their written descriptions: anterior pelvic tilt, posterior pelvic tilt, lateral pelvic tilt, hyperlordosis, hyperkyphosis, scoliosis, headforward position, head tilted laterally.
- Explain the purpose of a posture assessment.
- Explain the difference between the terms symmetry and asymmetry as they are used in posture assessment.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the instructor's directions to clients to move into correct body positions for anterior, posterior, left lateral, and right lateral postural views.
- Imitate the instructor's approach to assessment of the anterior view of posture by systematically working up or down the body, viewing and palpating body landmarks, and documenting findings on a SOAP chart.
- Imitate the instructor's approach to assessment of the posterior view of posture by systematically working up or down the body, viewing and palpating body landmarks, and documenting findings on a SOAP chart.
- Imitate the instructor's approach to assessment of both lateral views of posture by systematically working up or down the body, viewing and palpating body landmarks, and documenting findings on a SOAP chart.

- List the four views used to evaluate posture (anterior, posterior, and both lateral views).
- Describe the client's body position in anterior, posterior, and lateral views (e.g., in the anterior view the client looks straight ahead and places the weight evenly between the feet, arms hang relaxed at the sides, etc.).
- Explain the use of bony landmarks as visual reference guides in posture assessment.
- List the body areas or bony landmarks used as reference guides in anterior, posterior, and both lateral views (e.g., in the anterior view use the feet, knees, anterior superior iliac spine, fingertips, sternum, clavicles, and position of the ears, mandible, etc. to determine symmetry).
- Identify two muscles that are likely to be shortened in clients with these observable findings: anterior pelvic tilt, posterior pelvic tilt, lateral pelvic tilt, shoulder elevation, shoulder rotation (medial), shoulder protraction, head-forward position, and head tilted laterally.
- Match symbols used in documentation of posture to their written descriptions.

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the characteristics of ideal posture.
- Discuss ways in which selected body structures might be under stress because of postural dysfunction.
- Discuss factors that can influence posture and might lead to postural dysfunction (e.g., heredity, disease, habits, environment, injury, lifestyle, compensation patterns, mental and emotional states, etc.).
- Discuss factors that may play a role in hyperlordosis, hyperkyphosis, and headforward positions (e.g., hyperlordosis prolonged slouching, wearing high heels, weak abdominal muscles, etc.; hyperkyphosis – hunching, osteoporosis, ankylosing spondylitis, etc.).
- Discuss muscles that are under stress with these postural dysfunctions: hyperlordosis, hyperkyphosis, scoliosis, head-forward position, lateral head tilt.
- Discuss symbols and documentation methods specific to posture assessment.
- Discuss the possible muscular compensation made for postural deviations as determined through observation of asymmetries of key landmarks for an anterior and posterior view (e.g., a foot on one side pointed more laterally indicating tightness or shortness of the external rotators of that hip, etc.).
- Discuss the possible muscular compensation made for postural deviations as determined through observation of deviations from ideal posture from a lateral view (e.g., increased anterior pelvic tilt indicating tightness or shortness or lumber extensors and hip flexors, etc.).
- Outline a method to approach posture assessment (e.g., start with an anterior view and begin assessment at the feet working up the body, or begin assessment with a posterior view and start with the head working down the body).

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Practice performing a complete posture assessment following a systematic method of observation and palpation on classmates.
- Modify techniques based on feedback from instructors and peers.

- Discuss the ways data gathered through posture assessment are used to inform a session plan.
- Discuss the impact of asymmetry on opposing muscle groups.
- Document the findings from posture assessments on SOAP charts.

### Level 3

### **Knowledge: Choose and Plan**

### Skills: Naturalize and Adapt

### Problem Solve

**Conditions:** Having completed a pre-session posture assessment, a 1-hour massage session, and a post-session posture assessment, the learner will be able to:

- Determine some of the structures that are under stress as the result of postural deviations observed in the posture assessment.
- Plan a 1-hour massage session to address postural assessment findings.
- Determine changes to posture resulting from the methods used in the massage session.
- Document all findings and changes correctly on a SOAP chart.
- Verbally report on posture assessment findings, effective massage methods, and changes in posture pre- and post-session posture.

**Conditions:** Having completed a pre-session posture assessment, a 1-hour massage session, and a post-session posture assessment, the learner will be able to:

- Correctly perform a pre-session posture assessment following a systematic and effective method of observation and palpation.
- Deliver a 1-hour massage session to address the findings from a pre-session posture assessment.
- Correctly perform a post-session posture assessment following a systematic and effective method of observation and palpation to identify notable changes.

# **Sub-Topic: Range of Motion Assessment**

Level 1 Knowledge: Attain and Comprehend

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term range of motion assessment.
- Review terms and concepts related to joint structure and function from other classes.
- List the purpose of each type of ROM assessment: active, passive, and resisted
   (e.g., AROM assesses contractile tissue and is generally used to determine the client's willingness and ability to move, while PROM primarily assesses non-contractile tissue
   [joint capsule and ligaments], and resisted ROM assess the functional capacity of muscles and tendons, etc.).
- Define or review the term end feel.
- List two reasons ROM is limited because of normal anatomical joint restrictions (e.g., bone meets bone in hard end feel).
- List three reasons ROM might feel limited due to abnormal or pathological restrictions (e.g., adhesions in related muscles, inflammation caused by injury, degeneration of the joint cartilage, inflammation of a bursa, etc.).
- List three conditions that require caution when performing ROM assessment (e.g., pins, plates, screws, or rods from surgical replacements or to stabilize the joint, chronic osteoarthritis, subacute or chronic sprain or strain, etc.).
- List three conditions that contraindicate ROM assessment (e.g., recent dislocation, gout, septic arthritis, acute osteoarthritis, etc.).
- List two pieces of information a therapist might obtain from ROM assessment to inform massage session planning.
- Identify where ROM assessment findings are documented on SOAP charts.

**Conditions:** Having viewed an instructor demonstration and used a textbook for guidance, the learner will be able to:

- Imitate the instructor's language and behavior to instruct and show a client five movements to perform actively for assessment.
- Imitate the instructor's methods and client communication for performing passive ROM on five joints.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss ROM methods, their uses, and their cautions and contraindications.</li> <li>Compare and contrast the types of tissue assessed with active, passive, and resisted ROM assessment methods.</li> <li>Discuss how findings from ROM assessment influence massage session planning choices.</li> <li>Discuss guidelines for applying active and passive ROM methods.</li> <li>Discuss charting methods for documentation of ROM assessment.</li> <li>Discuss the types of massage methods that might benefit a client based on ROM assessment findings.</li> </ul>	<ul> <li>Conditions: Having completed a practice session, the learner will be able to:         <ul> <li>Practice using effective language and behavior to instruct and show a client five different movements to perform actively for assessment.</li> <li>Practice performing passive ROM assessment on five joints.</li> </ul> </li> <li>Use effective language to communicate with clients about the comfort of ROM assessment.</li> <li>Revise techniques, body mechanics, and client communication based on instructor and peer feedback.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having completed a pre-session ROM assessment, a 45-minute massage session, and a post-session ROM assessment, the learner will be able to:</li> <li>Plan a 1-hour massage session to address ROM findings.</li> <li>Determine changes from massage methods based on differences in ROM assessment results pre- and post-session.</li> <li>Document all findings and changes correctly on SOAP charts.</li> <li>Verbally report on ROM findings, effective massage methods, and changes in joint movement pre- to post-session.</li> </ul>	Conditions: Having completed a pre-session ROM assessment, a 45-minute massage session, and a post-session ROM assessment, the learner will be able to:  Correctly perform a pre-session ROM assessment.  Deliver a 45-minute massage session to address findings from a pre-session ROM assessment.  Correctly perform a post-session ROM assessment on four peers.

# **Sub-Topic: Pain Assessment**

Level 1

**Knowledge: Attain and Comprehend** 

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *pain*.
- Review terms and concepts related to body structures and functions associated with pain sensations from anatomy, physiology, and pathology classes.
- Review theories and models of mechanisms related to pain (e.g., gate control theory and pain-spasm-pain cycle are unproven but useful models to explore).
- Review the effects of pain medications on sensation and the client's ability to give accurate feedback.
- List four words clients might use to describe pain (e.g., burning, shooting, numb, throbbing, etc.).
- Define the term pain assessment.
- Explain the purpose of a pain assessment (e.g., capture the client's experience of pain at a given point in time).
- Define the term *visual analog measure*.
- Review two different visual analog forms.
- Define the term pain questionnaire.
- Review one pain questionnaire form.
- List three benefits of conducting a pain assessment (e.g., to inform treatment planning choices, prove injury for insurance or workers comp, demonstrate progress when pain scores decrease, allow clients the opportunity to express pain, etc.).
- Describe in one's own words when to first administer pain assessments and how often to repeat them during regular massage treatment.
- Explain how pain assessment data is documented and kept in the client's file.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the instructor's directions to clients as part of the administration of a pain questionnaire or visual analog measure.
- Note the follow-up questions the instructor uses to find out more information about the client's experience of pain during the assessment process.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss emotional factors that influence perception of pain sensations.</li> <li>Discuss the benefits and uses of pain assessment methods.</li> <li>Discuss the differences between pain questionnaires and analog measures used to capture pain data.</li> <li>Working with peers, review three mock pain assessment questionnaires or analog measures and brainstorm six different follow-up questions to ask clients during a client interview to gather useful information about their experiences of pain (e.g., What activities of daily living make the pain worse? What do you do to combat the pain or attempt to reduce it? Where is the pain located? How large an area does the pain affect? etc.).</li> <li>Discuss massage methods that might be used to reduce sensations of pain and improve the client's quality of life.</li> </ul>	Conditions: Having completed a practice session, the learner will be able to:  Refine verbal skills and follow-up questions when performing a pain assessment.  Respond to feedback from peers and instructors to improve verbal skills and follow-up questions.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no appropriate learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having participated in a practice session, the learner will be able to:  Correctly perform a pain assessment when requested by an instructor.

## **Sub-Topic: Functional Limitations Assessment**

Level 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term activities of daily living.
- List three basic physical functions necessary in daily life (e.g., seeing, hearing, walking, standing, sitting, carrying, lifting, walking up or down stairs, etc.).
- List three activities of daily life relevant to most people (e.g., getting around at home, getting in and out of bed, bathing, dressing, eating, housecleaning, driving, etc.).
- List three activities that provide meaning for people's lives (e.g., walks with a spouse or friend, recreational activities like bike riding, going to movies, going out for meals, etc.).
- Define the term functional limitations.
- Explain the purpose of functional limitations assessment (e.g., identify activities of daily living impacted by injury or pathology, identify activities that aggravate or relieve the client's symptoms, identify regions that need further assessment, support functional goal setting processes, etc.).
- Define the term aggravating activities.
- Define the term relieving activities.
- Give two examples of activities that might aggravate a client's symptoms.
- Give two examples of activities that might relieve a client's symptoms.
- List two benefits of performing a functional limitation assessment (e.g., helps therapist focus on decreasing symptoms or addressing regions that have the most impact on activities of daily living important to the client, attainment of specific functional goals demonstrate progress, etc.).
- Define the term functional goal.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the instructor's language, questions, follow-up questions, and instructions to a client to:
  - Identify client functional limitations that impact activities of daily living (e.g., shoulder pain prevents the client from brushing own hair).
  - Identify activities of daily living that aggravate or relieve client symptoms.
  - Support client prioritizing of activities of daily living.
  - Encourage client input to set shortterm and long-term functional goals.

 List the factors to consider when writing SMART functional goals with clients (specific, measurable, attainable, relevant, timebound).

#### Level 2

#### **Knowledge: Use and Connect**

# Apply Conditions: Having participated

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the impact an injury or pathology can have on activities of daily living related to basic needs (e.g., a person can no longer independently brush hair, care for children, bathe, etc.).
- Discuss the impact an injury or pathology can have on activities of daily living related to recreation (e.g., a person may be unable to participate in activities related to physical fitness or activities that bring a sense of joy to life, such as working out, painting, playing an instrument, etc.).
- Discuss the impact an injury or pathology can have on social relationships (e.g., unable to have lunch with friends, unable to sit through a movie with a spouse, unable to participate in family events, etc.).
- Compare and contrast activities that increase or aggravate a client's symptoms with activities that decrease or relieve a client's symptoms.
- Discuss assessment methods that would provide additional information about a client's functional limitations in four different situations (e.g., additional information about a client who cannot brush own hair might be gained through a ROM assessment of the shoulder).
- Discuss the characteristics of SMART functional goals (specific, measurable, attainable, relevant, and time-bound).
- Compare and contrast a measurable functional goal with one that is not measurable (e.g., measurable: lift a 26-pound child in and out of a car seat six times a day with no increase in pain symptoms in 2 weeks, versus "provide care to a child," etc.).

#### **Skills: Practice and Refine**

**Conditions:** Having participated in a practice session, the learner will be able to:

- Demonstrate effective language, questions, follow-up questions, and instructions to the client to:
  - Identify client functional limitations that impact the client's activities of daily living.
  - Identify activities of daily living that aggravate or relieve the client symptoms.
  - Support client prioritizing of activities of daily living.
  - Encourage client input to set shortterm and long-term functional goals.

- Discuss effective questions and follow-up questions that help clients identify and prioritize activities of daily living that are important.
- Working with peers write five examples of short-term and long-term functional goals.
- Document goals in the correct section of a SOAP chart using proper symbols and abbreviations.
- Discuss massage techniques that might be used to meet specific short-term and longterm functional goals.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having participated in practice sessions, the learner will be able to:  • Administer a functional limitations assessment during a client interview and ask effective follow-up questions to set functional goals with client input that inform treatment planning choices, when requested by an instructor.

# **Topic: Documentation and Client Files**

# Learning Outcomes

**Conditions:** Having completed 6.5 hours of instruction on documentation and client files, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to key principles of documentation, maintenance of client files, and SOAP charting and other documentation formats as determined by the school, on a written examination.
- Demonstrate the knowledgeable use of SOAP charting by documenting five practice
  massage sessions on SOAP forms and correctly completing each section of the form
  using proper abbreviations and symbols, on a graded homework assignment or during
  practical evaluations in hands-on classes.
- If appropriate, demonstrate knowledgeable use of an alternative method of charting
  (as determined by the school) by documenting five practice massage sessions correctly
  on the appropriate form, as part of a graded homework assignment or during practical
  evaluations in hands-on classes.

#### **Key Terminology and Concepts**

- Abbreviations
- Activities of daily living
- Aggravating activities
- Assessment information
- Client file
- Confidentiality
- Disabled
- Documentation (charting)
- Documentation formats
- Duration
- Frequency
- Health Insurance Portability and Accountability Act (HIPAA)
- Intensity
- Location
- Mild
- Mild minus
- Mild plus
- Moderate
- Moderate minus
- Moderate plus
- Objective information

- Onset
- Palpable findings
- Planning information
- Qualifying data
- Quantifying data
- Relieving activities
- Response to treatment
- Self-care activities
- Severe
- Severe minus
- Severe plus
- SOAP form
- Subjective information
- Symptoms
- Techniques/modalities
- Test results
- Visual findings
- Wellness form
- Within normal limits

#### **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

#### **Sub-Topics**

- Key Principles of Documentation and Keeping Good Client Files
- SOAP Charting and Other Documentation Formats

Subject - Assessment and Documentation, Topic - Documentation and Client Files

# **Sub-Topic:**

# **Key Principles of Documentation and Keeping Good Client Files**

Receive Respond

Level 1

**Knowledge: Attain and Comprehend** 

Skills: Observe and Imitate

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term client file.
- List two items that are kept in a client file (e.g., past health forms, current health forms, SOAP forms, session record, etc.).
- Define the term *documentation* (also called *charting*).
- Define the term SOAP form (or chart).
- List five reasons to document sessions (e.g., promotes client safety, establishes therapeutic relationship and therapeutic boundaries, helps organize client assessment, provides a historical record, shows when progress is made or when treatment adjustments are needed, improves communication within healthcare team, is necessary for insurance reimbursement or legal issues related to an accident, protects the therapist for liability purposes, etc.).
- Explain one way that documentation promotes client safety (e.g., captures health history, client symptoms, and medication information, etc.).
- Describe one way documentation helps establish therapeutic boundaries (e.g., projects a professional image, helps ensure sessions stay client-centered, etc.).

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

- List three general guidelines for documentation of sessions (e.g., never use White-out, use standard medical abbreviations, avoid personal opinions or notes on a chart, measure every finding or symptom described by the client in a consistent manner, etc.).
- Match these rating terms to their written descriptions: within normal limits, mild minus, mild, mild plus, moderate minus, moderate, moderate plus, severe minus, severe, severe plus, disabled.
- Define the term *Health Insurance Portability* and *Accountability Act (HIPAA)*.
- Describe one method used to keep client files secure (e.g., don't leave files unattended in the office, keep them locked in a cabinet, etc.).

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss each section of a SOAP form.
- Discuss confidentiality related to documentation and client files (e.g., keep confidential written documents, anything discussed in the session, observations noted on forms, etc.).
- Outline basic procedures and practices regulated by HIPAA (e.g., inform clients of privacy rights, permission to share information must be granted in writing, procedures must ensure confidentiality, electronic files should be password protected, etc.).
- Discuss the purposes and benefits of good session documentation and record keeping.
- Discuss general guidelines for documenting sessions.
- Compare and contrast quantifying and qualifying data.

There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.

•	Discuss the scale used by health care
	professionals to quantify data (e.g., mild,
	moderate, and severe with plus or minus
	added when appropriate).

Discuss the language therapists use to qualify what they observe and palpate (e.g., "the joint feels moderately restricted when approaching the end of the joint's range of

	motion").	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Subject - Assessment and Documentation, Topic – Documentation and Client Files

# Sub-Topic: SOAP Charting and Other Documentation Formats

Skills: Observe and Imitate **Knowledge: Attain and Comprehend** Receive Conditions: Having participated in an interactive There are no relevant learning objectives for this lecture or classroom activity, the learner will be Respond sub-topic in level 1 of the psychomotor domain. able to: Explain one reason SOAP charting is used to document massage sessions (e.g., it is the standard format used by physicians, physical therapists, chiropractors, nurses, and other professional health care providers, it is the form therapists must use if they work on a health care team, etc.). Explain one reason SOAP charting might not be used in a spa or wellness setting and how a condensed format is used instead (e.g., may be too formal or time consuming, etc.). Review the scale commonly used to quantify data on a SOAP form (mild, moderate, and severe). Match these terms to their written descriptions: subjective information (S section of a SOAP form), objective information (O section of a SOAP form), assessment information (A section of a SOAP

form), plan (P section of a SOAP form).

- Match each of these terms to their written descriptions: symptoms, location, intensity, frequency, duration, onset, activities of daily living, aggravating activities, relieving activities, visual findings, palpable findings, test results, techniques/modalities, response to treatment, self-care activities.
- Give one example of a piece of data that belongs in each of these sections of a SOAP form: Focus for today, S section, O section, A section, P section.
- Match these words to their written abbreviations or symbols: abdominals, adhesions, anterior, before, bilateral, change, constant, contraindication, date of injury, decrease/down, deep tissue, elevation, full body, gluteal muscles, hamstrings, headache, history, hypertonicity, increase, inflammation, left, long, low back, massage, massage therapist, medications, mild/low, moderate, myofascial release, no change, not applicable, numbness or tingling, pain, palpation, posterior, prescription, right, rotation, severe, short, spasm, symptoms, tender point, treatment, trigger point, with, within normal limits, without (others if appropriate to the particular program).

#### Level 2 Knowledge: Use and Connect

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Examine three different documentation formats (e.g., a condensed SOAP form, a wellness form, a SOAP form, a seated massage form, etc.) and describe one advantage and one disadvantage of each.
- Discuss each section of a SOAP form.
- Discuss the correct format and phrasing of information documented in each section of a SOAP form.
- Compare and contrast aggravating activities with relieving activities.

#### **Skills: Practice and Refine**

There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.

- Place examples of written data into the correct places on a SOAP form (e.g., "Swedish massage 1 time a month for 2 months and then reevaluate" would go in the Plan section, while "60 minutes Swedish massage with focus on the neck, low back, and shoulders" would go in the Techniques/Modalities section, etc.).
- Translate descriptions of symptoms written in longhand into a SOAP form using correct abbreviations and symbols.
- Use human figure diagrams to chart these conditions: moderate + elevation of the right shoulder, mild headache pain, bilateral mild minus hypertonicity in the hamstrings and moderate minus hypertonicity in the trapezius muscles, trigger points in the right scalenes muscles, mild spasm in the right quad muscles, severe numbness in the left bicep, adhesions in the rhomboids (others as determined by the school).
- Compare and contrast a condensed documentation format (like a wellness form) with a SOAP form.

write well-written SOAP notes to document practice massage sessions on an ongoing

basis.

# Problem Solve Conditions: Having participated in a classroom activity, the learner will be able to: Correctly use abbreviations and symbols to Skills: Naturalize and Adapt There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

	Entry-Level Massage Education Blueprint  Massage and Bodywork Application
Topic	Foundation Principles and Skills
Sub-Topics	<ul> <li>Overview of Massage and Bodywork Forms and Styles</li> <li>Positioning Clients for Comfort and Safety</li> <li>Draping Methods</li> </ul>
Topic	Application Methods
Sub-Topics	<ul> <li>Core Concepts in Massage and Bodywork Application</li> <li>Forces and Soft-Tissue Deformation</li> <li>Gliding Methods</li> <li>Torsion Methods</li> <li>Shearing Methods</li> <li>Elongation Methods</li> <li>Oscillating Methods</li> <li>Percussive Methods</li> <li>Static Methods</li> <li>Joint Movement Methods</li> <li>Hot and Cold Methods</li> </ul>
Topic	The Massage or Bodywork Session
Sub-Topics	<ul> <li>Overview of the Events in a Massage or Bodywork Session</li> <li>Integrating Methods into a Form and Session Plan</li> <li>Customization of the Session to Meet Client Wants and Needs</li> <li>Suggesting Client Self-Care</li> </ul>
Topic	Sample Form: Western Integration of Application Methods
Sub-Topics	<ul> <li>Swedish Massage</li> <li>Myofascial Approaches</li> <li>Neuromuscular Approaches</li> </ul>
Topic	Sample Form: Eastern Integration of Application Methods
Sub-Topics	<ul> <li>Basic Concepts of Traditional Chinese/Japanese Medicine</li> <li>Shiatsu</li> <li>Tuina</li> <li>Thai Massage</li> </ul>

# **Topic: Foundation Principles and Skills**

# Learning Outcomes

**Conditions:** Having completed 13 hours of instruction in foundation principles and skills, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to an overview of massage/bodywork forms and styles, positioning, and draping, on a written examination.
- Correctly bolster clients safely and comfortably in the prone, supine, side-lying, and semi-reclined positions, on a practical evaluation.
- Correctly drape clients modestly and comfortably while exposing appropriate body areas for massage/bodywork, on a practical evaluation.
- Correctly assist a client on and off a massage table while keeping the client draped, on a practical evaluation.

#### **Key Terminology and Concepts**

- Anterior pelvic drape
- Body support system
- Bodywork
- Bolster
- Breast drape
- Draping
- Forms/styles
- Gluteal drape
- Massage
- Positioning
- Prone position
- Seated position
- Semi-reclining position
- Side-lying drape
- Side-lying position
- Supine position
- Table skills

#### **Use of Terms**

The terms in this topic appear to be consistent and widely accepted.

#### **Sub-Topics**

- Overview of Massage and Bodywork Forms and Styles
- Positioning Clients for Comfort and Safety
- Draping Methods

# **Sub-Topic: Overview of Massage and Bodywork Forms and Styles**

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

#### Receive Respond

Note: Schools can choose which massage or bodywork approaches and forms/styles they discuss. The idea is to provide learners with a broad understanding that there are many different forms and styles that are practiced in the profession.

Schools are encouraged to introduce the forms/styles they teach and to introduce the idea of life-long learning through continuing education.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review these terms: massage, bodywork.
- Match school-selected massage and bodywork approaches to their written descriptions: wellness/relaxation approaches, clinical approaches, Eastern approaches, structural integration approaches, neuromuscular approaches, myofascial approaches, energetic approaches, movement approaches, psychological mind-body approaches, others.
- Match these school-selected popular massage/bodywork forms to their written descriptions (other forms/styles can be included or substituted): craniosacral therapy, spa therapy, aromatherapy, reflexology, Swedish massage, hot stone massage, manual lymphatic drainage, Esalen Massage, seated massage, Touch for Health, others.
- Match these massage/bodywork forms or styles from specific countries or cultures to their written descriptions: Lomilomi, Russian massage, Ayurvedic massage, Thai massage, Tuina, others.
- Define the school-selected forms/styles of massage/bodywork.

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	Discuss the basic philosophy behind these massage/bodywork approaches: wellness/relaxation, clinical, structural-integrative, neuromuscular, myofascial, energetic, movement, psychology based, others as selected or substituted by the school.	
	Discuss the basic philosophy behind Eastern bodywork approaches.	
	<ul> <li>Discuss the philosophy behind the school- selected massage/bodywork forms.</li> </ul>	
	Discuss the types of massage/bodywork application methods used in school-selected forms: craniosacral therapy, spa therapy, aromatherapy, reflexology, Swedish massage, hot stone massage, manual lymphatic drainage, Esalen Massage, seated massage, Touch for Health, others.	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Positioning Clients for Comfort and Safety**

Level 1

**Knowledge: Attain and Comprehend** 

Skills: Observe and Imitate

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these terms to their written descriptions: positioning, supine position, prone position, side-lying position, semireclining position, seated position, table skills, bolster, body support systems.
- List one reason clients are usually bolstered for massage/bodywork sessions (e.g., it places a client's structures in a position to best receive massage/bodywork methods).
- List two instances when a client might need assistance getting on and off a massage table.
- Explain in one's own language one method for moving a client between a supine and prone position (turning over) during the massage/bodywork session.

**Conditions:** Having viewed an instructor demonstration of positioning and table skills, the learner will be able to:

- Imitate the methods the instructor used to:
  - Help a client onto a massage table.
  - Bolster a client in the supine position.
  - Bolster a client in the prone position.
  - Check the position of the face cradle and adjust it if necessary.
  - Turn a client between a supine and prone position.
  - Bolster a client in the side-lying position.
  - Bolster a client in a semi-reclining position.
  - Help a client off a massage table.

#### Level 2

#### **Knowledge: Use and Connect**

#### Skills: Practice and Refine

#### Apply

**Conditions:** Having participated in an interactive lecture, the learner will be able to:

 Compare the benefits and drawbacks of starting a session with the client in a prone position with the benefits and drawbacks of starting a session with the client in the supine position. **Conditions:** Having participated in a practice session, the learner will be able to:

- Practice methods to:
  - Help a client onto a massage table.
  - Bolster a client in the supine position.
  - Bolster a client in the prone position.
  - Check the position of the face cradle.
  - Turn a client between a supine and prone position.
  - Bolster a client in the side-lying position.
  - Bolster a client in a semi-reclining position.
  - Help a client off a massage table.
- Adjust positioning methods based on feedback from peers and instructors.
- Adjust one's body mechanics based on feedback from instructors.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<b>Conditions:</b> Having participated in practice sessions, the learner will be able to:
		<ul> <li>Adjust positioning methods for each client (e.g., clients who are frail, obese, injured, etc.):</li> </ul>
		Help a client onto a massage table.
		Bolster a client in the supine position.
		Bolster a client in the prone position.
		Check the position of the face cradle.
		<ul> <li>Turn a client between a supine and prone position.</li> </ul>
		Bolster a client in the side-lying position.
		<ul> <li>Bolster a client in a semi-reclining position.</li> </ul>
		Help a client off a massage table.
		Perform bolstering and positioning tasks with correct body mechanics.

Subject- Massage and Bodywork Application, Topic – Foundation Principles and Skills

	Subject Massage and Body Work A	Application, Topic Touridation Timelples and Skills		
Sub-To	Sub-Topic: Draping Methods			
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate		
Receive Respond	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	Conditions: Having viewed an instructor demonstration of draping methods, the learner will be able to:		
	<ul> <li>Match these terms to their written descriptions: draping, breast drape, anterior pelvic drape, gluteal drape, side-lying drape.</li> <li>List three benefits of draping clients.</li> </ul>	<ul> <li>Imitate the methods the instructor used to:</li> <li>Expose the client's arm for massage/bodywork in the supine, prone, and side-lying positions.</li> </ul>		
	<ul> <li>Explain in one's own words why draping is always used in professional massage/bodywork practices.</li> </ul>	<ul> <li>Expose the client's leg for massage/bodywork in the supine, prone, and side-lying positions.</li> </ul>		
	<ul> <li>Identify two ways draping helps establish the boundaries of a professional massage/bodywork practice.</li> </ul>	<ul> <li>Expose the client's back for massage/bodywork in the prone and side-lying positions.</li> </ul>		

- Expose the client's abdominal area using a breast drape.
- Expose both anterior legs using an anterior pelvic drape.
- Expose both posterior legs and the back using a gluteal drape.
- Keep the client draped modestly while turning the client between a supine and prone position.
- Keep the client draped modestly while assisting the client on and off the massage table.

#### Level 2 Knowledge: Use and Connect

#### ever 2 Knowledge: Ose and Connect

able to:

# Apply Conditions: Having participated in an interactive

• Share one's thoughts about feelings of vulnerability when acting as a draped client.

lecture or classroom activity, the learner will be

 Share one's views about what constitutes modest and secure draping practices.

#### Skills: Practice and Refine

**Conditions:** Having participated in a practice session, the learner will be able to:

- Practice methods to:
  - Expose the client's arm for massage/bodywork in the supine, prone, and side-lying positions.
  - Expose the client's leg for massage/bodywork in the supine, prone, and side-lying positions.
  - Expose the client's back for massage/bodywork in the prone and side-lying positions.
  - Expose the client's abdominal area using a breast drape.
  - Expose both anterior legs using an anterior pelvic drape.
  - Expose both posterior legs and the back using a gluteal drape.
  - Keep the client draped modestly while turning the client between a supine and prone position.
  - Keep the client draped modestly while assisting the client on and off the massage table.
- Adjust draping methods to increase client safety and comfort based on feedback from peers and instructors.
- Adjust one's body mechanics while draping based on feedback from instructors.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<b>Conditions:</b> Having participated in practice sessions, the learner will be able to:
		<ul> <li>Consistently demonstrate neat, efficient, and modest draping methods:</li> </ul>
		<ul> <li>Expose the client's arm for massage/bodywork in the supine, prone, and side-lying positions.</li> </ul>
		<ul> <li>Expose the client's leg for massage/bodywork in the supine, prone, and side-lying positions.</li> </ul>
		<ul> <li>Expose the client's back for massage/bodywork in the prone and side-lying positions.</li> </ul>
		<ul> <li>Expose the client's abdominal area using a breast drape.</li> </ul>
		<ul> <li>Expose both anterior legs using an anterior pelvic drape.</li> </ul>
		<ul> <li>Expose both posterior legs and the back using a gluteal drape</li> </ul>
		<ul> <li>Keep the client draped modestly while turning the client between a supine and prone position.</li> </ul>
		<ul> <li>Keep the client draped modestly while assisting the client on and off the massage table.</li> </ul>
		Improvise safe and comfortable draping to meet client needs (e.g., a larger client may need additional draping material, keep the client warm, etc.).

# **Topic: Application Methods**

# Learning Outcomes

**Conditions:** Having completed 82 hours of instruction in the application of massage and bodywork methods, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to core concept in massage and bodywork application, forces and soft-tissue deformation, gliding, torsion, shearing, elongation, oscillating, percussive, static, joint movements, and hot and cold methods, on written examinations.
- Demonstrate the correct application of gliding, torsion, shearing, elongation, oscillating, percussive, static, joint movement, and hot and cold methods, including variations in methods, the use of appropriate pace, depth, rhythm, therapeutic intent, proper body mechanics, correct client positioning methods, modest draping, and effective client communication, on practical evaluations.

#### **Key Terminology and Concepts**

- Anatomical tools
- "Deep tissue" work
- Active assisted joint movement
- Active resisted joint movement
- Active joint movement
- Adhesiveness
- Arm pulling
- Beating
- Bending
- Bending force\*
- Breath
- Center of gravity
- Circular friction
- Coarse vibration
- Cold
- Cold pack
- Combined forces
- Compression\*
- Compressive force\*
- Crossed-hand stretch
- Cross-fiber friction
- Cryotherapy
- Cupping
- Elongation methods\*
- Emotional release
- Emotional release protocol
- End feel
- Engaging the tissue
- External forces

- Linear friction
- Lubricant
- Muscle approximation
- Muscle separation
- Muscle spindles
- Neutral
- Oblique angles
- Oscillating methods\*
- Pacing and leading
- Paraffin dip
- Passive joint movement
- Passive stretching
- Percussive methods\*
- Piezoelectricity
- Pin and stretch techniques
- Pincement
- Pincer compression
- Primary forces
- Quality of touch
- Resistant tissue
- Rhythm
- Rhythmic compression
- Rocking
- Shear\*
- Shearing force\*
- Shearing methods\*
- Skin rolling
- Slapping
- Soft-tissue deformation\*

- Fascial bending
- Fascial cutting
- Fascial spreading
- Fascial torqueing
- Fine vibration
- Flow and continuity
- Footbath
- Force\*
- Fulling
- General work
- Gliding methods\*
- Golgi tendon organ release
- Golgi tendon organs
- Gravity\*
- Hacking
- Holding strokes
- Homeostasis
- Hot
- Hot pack
- Hydrocollator
- Hydrotherapy
- Ice immersion
- Ice massage
- Internal forces
- Joint movement methods
- Jostling
- Kneading
- Leg pulling

- Specific work
- Static compression
- Static methods\*
- Stroke length
- Superficial friction
- Swinging
- Tapping
- Tensile force\*
- Tension\*
- Therapeutic discomfort
- Therapeutic edge
- Therapist intention
- Thermotherapy
- Thixotropy
- Tissue load\*
- Torque\*
- Torsion force\*
- Traction
- Trigger points
- Torsion methods\*
- Variety
- Viscoelasticity
- Warm
- Warm pack
- Working in layers
- Wringing

### Use of Terms

\*These terms are not consistently used or consistently defined in the massage therapy profession at this time. Curriculum designers are encouraged to use the terminology specific with their school's philosophy or the definitions of similar terms used in their textbooks. For the purposes of this document, these terms are defined as:

**Bending force**: A force that deforms the tissue by compressing the inner surface of the tissue and elongating the outer surface of the tissue.

**Compression or compressive force**: A force that deforms the tissue by pushing the ends of a structure towards one another.

**Elongation methods**: Massage or bodywork methods that exert a tensile force on soft-tissue structures causing deformation of the tissue by pulling the ends of the structure apart.

**Force:** Something that internally or externally causes the movement of the body to change or soft-tissue structures to deform.

**Gliding methods:** Massage or bodywork methods where strokes are applied in a smooth continuous motion that does not lose contact with the client's skin.

**Gravity:** A force caused by the Earth's gravitational pull that compresses body structures downward.

**Oscillating methods:** Massage or bodywork methods that deforms soft tissue through the momentum created by a back and forth swinging, rocking, or vibrating motion.

**Percussive methods**: Massage or bodywork methods that use rapid, rhythmic blows to the body with the hands held in various formations to affect the nervous system while briefly deforming tissue with a bending force.

**Shear or shearing force:** A force that deforms the tissue by pulling perpendicular sections of a structure in opposite directions, or by shifting different structures against each other.

**Shearing methods:** Massage or bodywork methods that exert a shearing force on soft-tissue structures causing deformation of the tissue by pulling perpendicular sections of a structure in opposite directions, or by shifting different structures against one another.

**Soft-tissue deformation**: The change in the shape of soft tissue as a result of applied forces.

**Static methods**: Massage or bodywork methods that deform soft tissue in various ways using hand positions that are held for usually fixed lengths of time.

**Tension or tensile force**: A force that deforms the tissue by pulling the ends of the structure apart.

**Tissue load**: The amount of stress soft-tissue structures are under due to forces; too much load and the tissue might fail and be injured.

**Torsion force or torque**: A force that deforms the tissue by compressing and twisting one end of the structure in one direction while the other end is held motionless or is compressed and twisted in the opposite direction.

**Torsion methods**: Massage or bodywork methods that exert a torsion force or torque on soft-tissue structures causing deformation of the tissue by twisting it.

#### **Sub-Topics**

- Core Concepts in Massage and Bodywork Application
- Forces and Soft-Tissue Deformation
- Gliding Methods
- Torsion methods
- Shearing Method
- Elongation Methods
- Oscillating Methods
- Percussive Methods
- Static Methods
- Joint Movement Methods
- Hot and Cold Methods

# Sub-Topic: Core Concepts in Massage and Bodywork Application

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term quality of touch.
- List three factors that contribute to competent quality of touch (e.g., warm, soft, dry, open, and confident hands that sink into the tissue at just the right depth and maintain regular and continuous contact, etc.).
- Review the term therapist intention.
- List one characteristic of therapists who lack therapeutic intention (e.g., they may not hold a clear intent for the session to benefit the client and may chat about their personal lives instead of keeping the session focused on the client, they may not have ready all the supplies necessary for the session and have to hunt around for the lubricant, they may "check out" and think about their bills or a personal event and not remain present with the client, etc.).
- List two considerations related to the use of lubricant during a massage or bodywork session (e.g., lubricant should always be used in moderation; for deeper, slower work, or for work where fascia is the focus, little or no lubricant is used; clients should have a choice in the type of lubricant used; attention must be paid to skin sensitivities, etc.).
- Explain in one's own words the concept of pacing and leading (e.g., the idea that the therapist matches the client's personal pace while entering the session and then leads the client towards a more relaxing pace as the session progresses).
- List two considerations related to engaging the tissue during a massage or bodywork session (e.g., the idea that clear communication regarding the agreed upon session goals, the approaches that work best, and the agreed upon depth of pressure leads to a massage/bodywork session that is therapeutic and satisfying for the client).

There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

- Define the term therapeutic edge (e.g., the particular pace and depth of work for the specific client that allows for the greatest therapeutic change in the tissue, etc.).
- Explain in one's own words what the therapeutic edge feels like to a client (e.g., the place where the client feels the "good hurt" or therapeutic discomfort; a technique feels "close to the limit" but the client also feels that the tissue is changing in a positive way and the stroke feels appropriate and "good," etc.).
- List two considerations related to rhythm in massage and bodywork application (e.g., the idea that strokes should be applied in regular patterns at a regular pace or tempo to elicit the parasympathetic nervous system response; when strokes are delivered in uneven patterns or at an irregular pace, it is jarring for the nervous system and the client has more difficulty relaxing, etc.).
- List two considerations related to flow and continuity in a massage or bodywork session (e.g., the idea that methods flow from one technique to another and from one body area to another through smooth transitions; strokes should flow in one uninterrupted action so that the client experiences the constant and steady pressure of hands, etc.).
- List two considerations related to variety in massage and bodywork sessions (e.g., the idea that therapists want to use a variety of methods to work in layers and to engage the interest of the client, and that muscles in particular areas respond better to certain methods and techniques; variety of methods also reduces stress on the therapist's body that might be produced through overly repetitive motions, etc.).
- List two considerations related to *stroke length* in massage and bodywork sessions (e.g., in general wellness or relaxation sessions, long strokes are used that connect body areas together and completely cover appropriate areas; strokes should travel the length of muscles or muscle groups when possible as cutting a stroke short can leave a client feeling frustrated, etc.).

- List two considerations related to *general* verses *specific* work (e.g., the idea that broad and general application methods lead to more specific or focused methods and then back to broad, general methods as the session closes, and that there is a difference between what a client experiences with general work verses specific, focused work in just one area, etc.).
- List two considerations related to working in layers (e.g., therapists often work superficial, to deep, and back to superficial, avoiding changing the depth of work sporadically and jumping between layers of tissue, etc.).
- Explain in one's own words what it means to work at oblique angles (e.g., in some situations therapists drop straight down into the tissue, but most often work at oblique angles no greater than 45 degrees; this ensures that blood vessels, lymph vessels, and nerves won't be pinched, etc.).
- List two considerations to ensure that resistant tissue is not forced during a stroke (e.g., slow down and wait for the tissue to release, make sure that tissue is warmed up sufficiently, find the therapeutic edge and work in layers, etc.).
- Explain in one's own words how the use of breath during sessions benefits the client (e.g., it helps the client relax through potentially uncomfortable methods, it can support the release of tension, it can reduce sensations of pain, it can positively influence lymphatic movement, it can lead to greater relaxation, etc.).
- Explain in one's own words what a client might mean when requesting "deep tissue" massage.
- Review concepts related to client emotional release and emotional release protocol from other classes.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.
	<ul> <li>Compare and contrast a therapist with high quality of touch with a therapist with lower quality of touch (e.g., differences in attentiveness, palpation skills, confidence, continuous contact, etc.).</li> </ul>	
	• Discuss the concept of therapist intention.	
	<ul> <li>Discuss quality of touch and ways to improve quality of touch during practice sessions.</li> </ul>	
	<ul> <li>Discuss considerations related to the use of lubricant during sessions.</li> </ul>	
	<ul> <li>Compare the behaviors of a therapist with good pacing and leading skills with the behaviors of a therapist with poor pacing and leading skills.</li> </ul>	
	<ul> <li>Contrast a massage or bodywork session where the therapist does not properly engage the tissue with a massage or bodywork session that engages the tissue.</li> </ul>	
	<ul> <li>Analyze the experiences of a client who receives work on the therapeutic edge with a client who receives overly light work or overly deep work.</li> </ul>	
	<ul> <li>Discuss rhythm and its relationship to an enjoyable massage or bodywork session.</li> </ul>	
	<ul> <li>Contrast a massage or bodywork session with good flow and continuity with a session that lacks flow and continuity.</li> </ul>	
	<ul> <li>Discuss methods to improve stroke length during the application of massage and bodywork methods.</li> </ul>	
	<ul> <li>Discuss concepts of working general to specific to general.</li> </ul>	
	<ul> <li>Discuss the negative effects on the client when a therapist fails to demonstrate sensitivity to resistant tissue.</li> </ul>	
	<ul> <li>Discuss methods to encourage the client to breath effectively during the application of massage and bodywork methods.</li> </ul>	

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Subject- Massage and Bodywork Application, Topic –Application Methods

# **Sub-Topic: Forces and Soft-Tissue Deformation**

Receive **Conditions:** Ha

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Respond

**Conditions:** Having participated in a lecture or classroom activity, the learner will be able to:

- Review anatomy and physiology concepts of the skeletal, muscular, fascial, and nervous systems in relationship to massage and bodywork application.
- Review the key benefits and effects of massage and bodywork application for softtissue structures.
- Review these proprioceptors in relationship to massage and bodywork application: Golgi tendon organs, muscle spindles.
- Define the term soft-tissue deformation (e.g., the change in the shape of soft-tissue as a result of applied forces).
- Define the term forces (e.g., something that internally or externally causes the movement of the body to change or soft-tissue structures to deform).
- Define the term tissue load (e.g., the amount of stress soft-tissue structures are under due to forces; too much load and the tissue might fail and be injured).
- Describe simply in one's own words the way external forces create loads on soft tissue (e.g., forces create external loads by pushing or pulling on the body in a variety of ways).

**Conditions:** Having discussed the forces that deform soft tissue and worked with a peer group to explore soft-tissue deformation, the learner will be able to:

- Try to find two ways to deform tissue using a compressive force on three different body areas.
- Try to find two ways to deform tissue using a tensile force on three different body areas.
- Try to find two ways to deform tissue using a shearing force on three different body areas.
- Try to find two ways to deform tissue using a torsion force on three different body areas.
- Try to find two ways to deform tissue using a bending force on three different body areas.
- Ask the client for regular feedback to determine if methods are applied at a comfortable depth for the client.
- Pay attention to felt sensations when acting as a client and report on sensations to classmates.

- Describe simply in one's own words the way internal forces create loads on soft tissue
   (e.g., misaligned joints or poor body mechanics cause soft-tissue to shorten, tighten, lengthen and/or weaken which may load surrounding tissue; for example, a tight muscle or tendon could compress a nerve running close by and cause pain or dysfunction, etc.).
- Review the properties and characteristics of soft tissue that allow it to benefit from deformation (e.g., thixotropy, viscoelasticity, piezoelectricity, adhesiveness, etc.).
- List the three primary forces (e.g., compression, tension, and shear, etc.).
- Define the term combined forces (e.g., two forces acting at the same time on a softtissue structure, etc.).
- List two combined forces (e.g., torsion and bending, etc.).
- Match these forces to their written descriptions: gravity, compression, tension, shear, torsion, bending.
- Define the term gravity (e.g., a force caused by the Earth's gravitational pull that compresses structures downward).
- Define the term *center of gravity* (e.g., the imaginary point around which body weight is evenly distributed).
- List one way that gravity's downward pull influences the body (e.g., postural muscles must sustain a semicontracted state for long periods of time to hold the body upright against the forces of gravity; when posture is distorted, the body cannot move or stand efficiently against Earth's gravitational pull and postural muscle become hypertonic by bracing misaligned joints and myofascia becomes thicker and shortened, etc.).
- Define the term compression or compressive force (e.g., a force that deforms the tissue by pushing the ends of a structure towards one another).

- Describe one way a therapist's hands might apply a compressive force to a muscle (e.g., the therapist might grasp a muscle by its origin with one hand and by its insertion with the other hand and push the origin and insertion points towards each other, etc.).
- List two ways that the application of methods that deform soft tissue with compressive force benefit the body (e.g., pushing the origin and insertion points of muscles together may unload the muscle spindles decreasing hypertonicity or muscle spasm, etc.).
- Define the term *tension* or *tensile force* (e.g., a force that deforms the tissue by pulling the ends of the structure apart).
- Describe one way a therapist's hands might apply a tensile force to a muscle (e.g., the therapist might place crossed hands with the fingers pointing away from each other on a body area, engage the tissue by dropping slightly downward, and then move the hands apart, stretching the tissue between the hands, or by using minimal or no lubricant and working away from either an origin or insertion point and "dragging the tissue" away from the fixed point, etc.).
- List two ways the application of methods that deform soft tissue with tensile force benefits the body (e.g., elongate shortened tissue, break the hydrogen bonds that hold adhered tissue together to improve range of motion, etc.).
- Define the term shear or shearing force (e.g., a force that deforms the tissue by pulling perpendicular sections of a structure in opposite directions, or by shifting different structures against each other, etc.).
- Describe one way a therapist's hands might apply a shearing force to a muscle (e.g., the therapist might drop fingers into a muscle and use small, deep, back-and-forth actions to move tissue fibers against each other, etc.).

- List two ways that the application of methods that deform soft tissue with shearing force benefits the body (e.g., break the hydrogen bonds that cause tissues to stick together to reduce adhesions, reorganize collagen fibers during scar tissue formation, ensure that two closely situated structures slide over one another instead of sticking together, etc.).
- Define the term torsion force or torque (e.g., a force that deforms the tissue by compressing and twisting one end of the structure in one direction while the other end is held motionless or compressed and twisted in the opposite direction, etc.).
- Describe one way a therapist's hands might apply a torsion force to a muscle (e.g. the therapist might lift the muscle away from underlying structures with the hands and knead it by rolling the tissue through the fingers while twisting it one way and then the next, etc.).
- List two ways the application of methods that deform soft tissue with torsion force benefits the body (e.g., breaks the adhesive bonds between individual tissue fibers to make a muscle more pliable, "mixes" ground substance to increase its sol state, etc.).
- Define the term bending force (e.g., a force that deforms the tissue by compressing the inner surface of the tissue and elongating the outer surface of the tissue, etc.).
- Describe one way a therapist's hands might apply a bending force to a muscle (e.g., the therapist might place both hands across the fibers on a muscle's belly and lift the muscle slightly to press the thumbs horizontally into the lateral aspect of the muscle's belly while the origin and insertion points are pulled sideways and downward, etc.).
- List two ways the application of methods that deform soft tissue with bending force benefits the body (e.g., adhesive bonds between tissue fibers are broken making the tissue more pliable, shortened tissue is elongated, etc.).

Explain the difference between a force applied externally that benefits soft tissue and a force applied externally that causes injury to soft tissue (e.g., a force applied with the right amount of intensity deforms the tissue in a positive way as with a massage method that elongates a shortened muscle encouraging it to return to a normal resting length; a force applied with too little intensity might not produce enough tissue deformation to cause a positive change but still feels enjoyable; a force applied with too much intensity might produce so much tissue deformation that injury results such as when a muscle is overstretched and muscle fibers are torn, etc.).

#### Level 2 **Knowledge: Use and Connect Psychomotor: Practice and Refine** Apply Conditions: Have participated in a class activity, There are no relevant learning objectives for this the learner will be able to: sub-topic in level 2 of the psychomotor domain. Discuss the properties and characteristics of soft tissue that allow it to benefit from deformation. Discuss the ways that gravity impacts the body. Compare and contrast a compressive force with a tensile force and a shear force. Compare and contrast a torsion force with a bending force. Discuss the effects of forces on soft-tissue structures. Discuss felt sensations when acting as a client during a massage and bodywork application exploration. Level 3 **Knowledge: Choose and Plan Skills: Naturalize and Adapt** Problem There are no relevant learning objectives for this There are no relevant learning objectives for this Solve sub-topic in level 3 of the cognitive domain. sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Gliding Methods**

evel 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *gliding* (e.g., a stroke applied in a smooth continuous motion that does not lose contact with the client's skin).
- List the depths at which gliding strokes might be applied (e.g., light, moderate, deep, etc.).
- Describe the way that soft tissue is deformed by gliding strokes (e.g., light strokes don't apply enough force to deform tissue significantly, but moderate strokes apply a tensile force and deeper strokes apply a tensile and shear force, etc.).
- Name the types of "anatomical tools" that can be used to apply gliding methods (e.g., full palm, forearm, fists, etc.).
- List two uses or goals for methods that glide over the skin (e.g., apply lubricant, warm tissue, introduce client to touch, etc.).
- List two benefits or physiological effects of strokes that glide over the skin (e.g., they feel pleasurable, they stimulate the parasympathetic nervous system response, etc.).
- Identify two conditions or contraindications with strokes that glide over the skin.
- List two guidelines for the proper application of strokes that glide over the skin (e.g., lubricant is used to provide slip, the stroke should cover the length of the body area, the stroke should cover the entire width of the body area, the stroke should stay in continuous contact with the client, etc.).
- Name three examples of gliding strokes in different massage and bodywork forms or systems (e.g., instructor-selected forms or systems that might include Swedish massage use a gliding stroke named effleurage, lomilomi uses a gliding stroke named a "power stroke," Ayurveda calls gliding strokes sweeps or flowing strokes, etc.).

**Conditions:** Having viewed an instructor demonstration of gliding strokes, the learner will be able to:

- Imitate the amount of lubricant the instructor used to apply gliding strokes.
- Imitate gliding strokes applied at three speeds (slow, moderate, and fast) on three or more body areas.
- Imitate gliding strokes applied at three depths (light, moderate, and deep) on three or more body areas.
- Try gliding strokes with two different "anatomical tools" (e.g., palms, forearms, fingertips, knuckles, etc.).
- Try gliding stroke variations (e.g., "shingling" use of fingertips on the face, etc.) on two or more body areas.
- Try gliding strokes on each area of the body where massage/bodywork is appropriate.
- Pay attention to palpatory sensations that signal that soft tissue is changing as a result of gliding strokes.
- Pay attention to felt sensations when acting as the client and receiving gliding strokes.
- Reproduce the language the instructor used to communicate with the client about depth, pace, and comfort of gliding strokes.
- Correct one's body mechanics in response to instructor feedback during the application of gliding strokes.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss the ways tissue is deformed by gliding strokes at light, moderate, and deep depths.</li> <li>Discuss the uses, benefits and effects, cautions, and contraindications for gliding strokes.</li> <li>Discuss guidelines for the correct application of gliding strokes.</li> <li>Discuss felt sensations when acting as a client and receiving gliding strokes.</li> <li>Discuss felt sensations when acting as the therapist and applying gliding strokes.</li> </ul>	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:</li> <li>Demonstrate the correct use of lubricant in the application of gliding strokes.</li> <li>Demonstrate the correct application of gliding strokes on all appropriate body areas.</li> <li>Perform gliding strokes at a slow, moderate, and brisk pace.</li> <li>Perform gliding strokes at a light, moderate, and deep depth.</li> <li>Perform gliding strokes using two different "anatomical tools."</li> <li>Use appropriate and effective language to communicate with the client about depth, pace, and comfort of strokes.</li> <li>Verbally share with peers and instructors the palpatory sensations that signal that soft tissue is changing because of gliding strokes during their application.</li> <li>Verbally share with peers and instructors the felt sensations when acting as the client and receiving gliding strokes.</li> <li>Correct one's body mechanics based on instructor feedback.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having completed practice sessions, the learner will be able to:  Correctly perform gliding strokes on all appropriate body areas, using stroke variations, a variety of "anatomical tools," smooth transitions, different pacing, different depth, different stroke direction, and with attention to safe and comfortable client positioning, modest draping, client communication, and effective body mechanics.

## **Sub-Topic: Torsion Methods**

evel 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review the term torsion force or torque (e.g., a force that deforms the tissue by compressing and twisting one end of the structure in one direction while the other end is held motionless or compressed and twisted in the opposite direction, etc.).
- Review one way a therapist's hands might apply a torsion force to a muscle (e.g. the therapist might lift the muscle away from underlying structures with the hands and knead it by rolling the tissue through the fingers while twisting it one way and then the next, etc.).
- Match instructor-selected torsion methods to their written descriptions (e.g., kneading, skin rolling, fulling, wringing, and fascial torqueing, etc.).
- List two benefits or physiological effects of instructor-selected torsion methods (e.g., kneading makes soft tissue more pliable, breaks up adhered fibers, etc.).
- Identify two conditions that require caution or contraindicate the use of torsion methods.
- List two guidelines for the proper application of each instructor-selected torsion method (e.g., kneading guidelines might include an even rhythm, good lift in tissue, application over body hair with more lubricant, etc.).
- List three examples of torsion methods in different massage and bodywork forms or systems (e.g., instructor-selected - but might include petrissage in Swedish, fascial torqueing in myofascial release, skin rolling used as part of the protocol in some neuromuscular approaches, Cuo technique in Tuina, squeezing method in Ayurveda, etc.).

**Conditions:** Having viewed an instructor demonstration of twisting methods, the learner will be able to:

- Imitate the proper application of instructorselected torsion methods (e.g., kneading, skin rolling, fulling, wringing, fascial torqueing).
- Try each instructor-selected torsion method on one to four body areas as appropriate.
- Pay attention to palpatory sensations that signal that soft tissue is changing as a result of twisting methods.
- Try transitioning into and out of torsion methods using gliding strokes.
- Modify one's skills based on peer and instructor feedback.
- Correct one's body mechanics based on instructor feedback.
- Pay attention to felt sensations when acting as the client and receiving torsion methods.
- Reproduce the language the instructor used to communicate with the client about depth, pace, and comfort of torsion methods.
- Correct one's body mechanics in response to instructor feedback during the application of torsion methods.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Review how adhesions form.</li> <li>Review factors that contribute to adhesion formation (e.g., repetitive stress, incorrect posture, injury, etc.).</li> <li>Discuss the ways tissue is deformed by torsion forces.</li> <li>Discuss the uses, benefits and effects, cautions, and contraindications for torsion methods.</li> <li>Discuss guidelines for the correct application of instructor-selected torsion methods.</li> <li>Discuss felt sensations when acting as a client and receiving torsion methods.</li> <li>Discuss felt sensations when acting as the therapist and applying torsion methods.</li> <li>Compare and contrast the physiological effects of gliding methods with the physiological effects of torsion methods.</li> </ul>	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:         <ul> <li>Demonstrate the correct application of instructor-selected torsion methods on one to four body areas as appropriate (e.g., kneading, skin rolling, fulling, wringing, fascial torqueing).</li> <li>Perform torsion methods at the correct depth based on the body area (e.g., light with the fingertips on the face, deeper with full palms and fingers on fleshy areas like the thighs, etc.).</li> <li>Use effective language to determine if torsion methods are applied at a comfortable depth for the client.</li> <li>Use smooth transitions between gliding strokes and torsion methods.</li> <li>Correct one's body mechanics during the application of torsion methods based on instructor feedback.</li> </ul> </li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:         <ul> <li>Integrate torsion methods with gliding strokes in a flowing manner.</li> </ul> </li> <li>Correctly perform instructor-selected torsion methods on all appropriate body areas, using effective pacing and depth and with attention to safe and comfortable client positioning, modest draping, client communication, and effective body mechanics.</li> </ul>

# **Sub-Topic: Shearing Methods**

Level 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review relevant terms and concepts of the fascial and muscular systems.
- Review the term shear or shearing force (e.g., a force that deforms the tissue by pulling perpendicular sections of a structure in opposite directions, or by shifting different structures against each other, etc.).
- Review one way a therapist's hands might apply a shearing force to a muscle (e.g., the therapist might drop the fingers into a muscle and use small, deep, back-and-forth actions to move tissue fibers against each other, etc.).
- Match instructor-selected shearing methods to their written descriptions (e.g., superficial friction, linear friction, circular friction, crossfiber friction, muscle separation, fascial cutting, Cyriax cross-fiber friction, etc.).
- List two benefits or physiological effects of shearing methods.
- List two cautions or contraindications for shearing methods.
- List two general guidelines for deep work using broad, slow, shearing methods (e.g., be present and communicate about comfort often, use little or no lubricant to allow for greater control of the stroke, for broad shearing strokes slow down and don't force resistant tissue, methods should work on the therapeutic edge or "good hurt" and not feel overly painful, work in layers, work at oblique angles, work origins and insertions as well as muscle bellies, place muscles in a lengthened position when possible, work the entire length of muscles, use breath, use passive and active movement at the end of sessions, etc.).

**Conditions:** Having viewed an instructor demonstration of shearing methods, the learner will be able to:

- Imitate the proper application of instructorselected shearing methods (e.g., superficial friction, linear friction, circular friction, cross-fiber friction, muscle separation, fascial cutting).
- Try each instructor-selected shearing method on every area of the body where it is appropriate.
- Try deep, slow, broad shearing methods on two areas of the body.
- Try instructor-selected shearing methods using two different "anatomical tools" (e.g., knuckles, reinforced fingers, reinforced thumb, elbow, etc.).
- Pay attention to palpatory sensations that signal that soft tissue is changing as a result of shearing methods.
- Try transitioning into and out of shearing methods using gliding strokes.
- Pay attention to felt sensations when acting as the client and receiving shearing methods.
- Reproduce the language the instructor used to communicate with the client about depth, pace, and comfort of shearing methods.
- Correct one's body mechanics in response to instructor feedback during the application of shearing methods.

- List two guidelines for the proper application instructor-selected shearing methods (e.g., for superficial friction strokes: apply the stroke with palms in a light, quick, back-andforth motion with little or no lubricant, etc.; for linear friction strokes: work in layers until depth is achieved, work slowly, use moderate or little lubricant, palpate and apply the stroke to separate muscle fibers or muscle edges, etc.).
- List three examples of shearing methods in different massage and bodywork forms or systems (e.g., instructor-selected but might include muscle stripping in "deep tissue massage," fascial cutting in myofascial release, superficial friction in Swedish, etc.)

#### Level 2

#### **Knowledge: Use and Connect**

#### Apply

Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the ways tissue is deformed by shearing forces.
- Discuss the uses, benefits and effects, cautions, and contraindications for shearing methods.
- Discuss the general guidelines for deep work using broad, slow, shearing methods.
- Discuss guidelines for the correct application of instructor-selected shearing methods.
- Discuss felt sensations when acting as a client and receiving shearing methods.
- Discuss felt sensations when acting as the therapist and applying shearing methods.
- Compare and contrast the physiological effects of gliding methods with the physiological effects of torsion methods and the physiological effects of shearing methods.
- Compare and contrast the physiological effects of brisk, superficial friction strokes with the physiological effects of slow, deep linear friction strokes.

#### **Skills: Practice and Refine**

Conditions: Having completed practice sessions, the learner will be able to:

- Demonstrate the correct application of each instructor-selected shearing method on two appropriate body areas.
- Demonstrate deep, slow, broad shearing methods on two areas of the body.
- Demonstrate the use of three different "anatomical tools" in the application of shearing methods.
- Use effective language to determine if shearing methods are applied at a comfortable depth for the client.
- Correct one's body mechanics during the application of shearing methods based on instructor feedback.

Level 3	Knowledge: Choose and Plan	Skills Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:         <ul> <li>Integrate shearing methods with gliding strokes and twisting methods.</li> </ul> </li> <li>Correctly perform shearing methods on all appropriate body areas, using stroke variations, a variety of "tools," smooth transitions, appropriate depth, and appropriate stroke direction and with attention to safe and comfortable client positioning, modest draping, client communication, and effective body mechanics.</li> </ul>

# **Sub-Topic: Elongation Methods**

Level 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review the term tension or tensile force (e.g., a force that deforms the tissue by pulling the ends of the structure apart, etc.).
- Review one way a therapist's hands might apply a tensile force to a muscle (e.g., the therapist might place crossed hands with the fingers pointing away from each other on a body area, engage the tissue by dropping slightly downward, and then move the hands apart, stretching the tissue between the hands, or by using minimal or no lubricant and working away from either an origin or insertion point and "dragging the tissue" away from the fixed point, etc.).
- List two guidelines for the application of elongation methods when the focus is myofascial work (e.g., very little or no lubricant is used to increase the "drag" on tissue, take out the slack in tissue and hold the stretch, work fascia in all directions stretching it first one way and then another, work slowly, use passive and active joint movement methods at the end of sessions, etc.).
- Match instructor-selected elongation methods to their written descriptions (e.g., crossed hands stretch, fascial spreading, pin and stretch, arm pulling, leg pulling, traction).
- List one example of an application method where multiple mechanical stresses are combined (e.g., pin and stretch, etc.).
- List two benefits or physiological effects of elongation methods.
- List two cautions or contraindications for elongation methods.

**Conditions:** Having viewed an instructor demonstration of elongation methods, the learner will be able to:

- Imitate the proper application of instructorselected elongation methods (e.g., crossed hands stretch, fascial spreading, pin and stretch, arm pulling, leg pulling, traction).
- Try each instructor-selected elongation method on one to four appropriate areas of the body.
- Pay attention to palpatory sensations that signal that soft tissue is changing as a result of elongation methods.
- Try transitioning into and out of elongation methods using gliding strokes.
- Pay attention to felt sensations when acting as the client and receiving elongation methods.
- Reproduce the language the instructor used to communicate with the client about depth, pace, and comfort of elongation methods.
- Correct one's body mechanics in response to instructor feedback during the application of elongation methods.

- List two guidelines for the proper application of instructor-selected elongation methods (e.g., for crossed hands stretch, the forearms are crossed and the hands placed with fingers pointing in opposite directions; engage the tissue and take the slack out of the fascia and hold the stretch until the tissue softens, etc.).
- List three examples of elongation methods in different massage and bodywork forms or systems (e.g., instructor-selected but might include crossed-hands stretch and fascial spreading from myofascial release; Bashen Technique is a tension method from Tuina; heel pulling is a tension method used in Shiatsu, etc.)

#### Level 2

## **Knowledge: Use and Connect**

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the ways tissue is deformed by tensile forces.
- Discuss the uses, benefits and effects, cautions, and contraindications for elongation methods.
- Discuss guidelines for the application of elongation methods when the focus is myofascial work.
- Discuss guidelines for the correct application of these elongation methods: crossed- hands stretch, fascial spreading, pin and stretch, arm pulling, leg pulling, traction.
- If pin and stretch is an instructor-selected method, discuss the idea that pin and stretch applications combine compressive, tensile, and shearing forces during application (e.g., compressive force is exerted when the muscle is shortened, shearing force is exerted when linear friction is applied during the stretching phase, and tensile force is applied when the muscle fibers are pulled through a fixed "pin," etc.).
- Discuss when gliding strokes become elongation methods (e.g., when little or no lubricant is used, the pace is slowed, and the tissue "drag" becomes significant, etc.).

#### **Skills: Practice and Refine**

**Conditions:** Having completed practice sessions, the learner will be able to:

- Demonstrate the correct application of each instructor-selected elongation method on two different areas of the body.
- Use effective language to determine if elongation methods are applied at a comfortable depth and pace for the client.
- Correct one's body mechanics during the application of elongation methods based on instructor feedback.

- Discuss the idea that joint movement methods often exert a tensile force on tissue.
- Discuss felt sensations when acting as a client and receiving elongation methods.
- Discuss felt sensations when acting as the therapist and applying elongation methods.
- Compare and contrast the physiological effects of gliding, elongation methods, shearing methods, and twisting methods.

Level 3	Knowledge: Choose and Plan	Skills Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:</li> <li>Integrate elongation methods with all previously learned methods.</li> <li>Correctly perform elongation methods on all appropriate body areas, using smooth transitions, appropriate depth, and appropriate pace and with attention to safe and comfortable client positioning, modest draping, client communication, and effective body mechanics.</li> </ul>

# **Sub-Topic: Oscillating Methods**

evel 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

# Receive Respond

**Conditions:** Having participated in a lecture or classroom activity, the learner will be able to:

- Define the term oscillating method (e.g., any method that deforms soft tissue through the momentum created by a back-and-forth swinging, rocking, or vibrating motions, etc.).
- Match instructor-selected oscillating methods to their written descriptions (e.g., fine vibration, rough vibration, shaking, jostling, rocking, rhythmic compression, etc.).
- List three benefits or physiological effects of oscillating methods (e.g., depending on location, depth, pace, and duration oscillating methods can stimulate the nervous system, numb a local area, loosen muscles, stimulate peristalsis, etc.).
- Identify two conditions that require caution or that contraindicate the use of oscillating methods.
- List two guidelines for the proper application
  of instructor-selected oscillating methods
  (e.g., for jostling the arm, the guidelines
  might be to grasp the client's hand and use
  the other hand to support the elbow as the
  arm is lifted; swing the arm back and forth,
  keeping a bend in the client's elbow, etc.).
- List three examples of oscillating methods in different massage and bodywork forms or systems (e.g., instructor –selected but examples might include vibration in Swedish massage, jostling in sports massage, etc.).

**Conditions:** Having viewed an instructor demonstration of oscillating methods, the learner will be able to:

- Imitate instructor-selected oscillating methods on two or more body areas or joints as appropriate.
- Try transitioning into and out of oscillating methods using gliding strokes.
- Pay attention to felt sensations when acting as the client and receiving oscillating methods.
- Reproduce the language the instructor used to communicate with the client about depth, pace, and comfort of oscillating methods.
- Correct one's body mechanics in response to instructor feedback during the application of oscillating methods.

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the way that oscillating methods use momentum to deform tissue.
- Discuss the uses, benefits and effects, cautions, and contraindications for oscillating methods.
- Discuss the influence of location, depth, pace, and duration on the benefits and effects of oscillating methods (e.g., initially a vibration stroke is stimulating but as the stroke progresses it becomes sedating, and sustained vibration can numb an area, etc.).
- Discuss the idea that some oscillating methods apply a bending force to soft tissue in the area where the rocking, shaking, or vibrating movements are initiated (e.g., rhythmic compressions use the momentum of oscillation to soothe the body and relax muscles, but the areas directly under the therapist's hands are also exposed to bending forces which cause elongation and increased tissue pliability, etc.).
- If appropriate based on the methods selected by the instructor, compare and contrast the physiological effects of fine vibration with the effects of coarse vibration like rocking or jostling.
- Discuss guidelines for the correct application of instructor-selected oscillating methods.
- Discuss felt sensations when acting as a client and receiving oscillating methods.
- Discuss felt sensations when acting as the therapist and applying oscillating methods.

**Conditions:** Having completed practice sessions, the learner will be able to:

- Demonstrate the correct application of each instructor-selected oscillating method on two body areas or joints as appropriate.
- Use appropriate and effective language to communicate with the client about depth, pace, and comfort of oscillating methods.
- Correct one's body mechanics based on instructor feedback while applying oscillating methods.

	Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
-	roblem olve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:         <ul> <li>Integrate oscillating methods with all previously learned methods.</li> </ul> </li> <li>Correctly perform oscillating methods on all appropriate body areas, using smooth transitions, different pacing, and different duration and with attention to safe and comfortable client positioning, modest draping, client communication, and effective body mechanics.</li> </ul>

# **Sub-Topic: Percussive Methods**

Level 1

**Knowledge: Attain and Comprehend** 

## **Skills: Observe and Imitate**

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term percussive methods (e.g., methods that use rapid, rhythmic blows to the body with the hands held in various formations, etc.).
- List two benefits or physiological effects of percussive methods (e.g., stimulate the body, warm muscles, loosen mucus for easier expulsion, etc.).
- Identify two conditions that require caution contraindicate the use of percussive methods.
- List three guidelines for the proper application of percussive methods (e.g., can be applied over dry or lubricated skin, rhythm is important, strokes should be regular, strokes should move up and down and across body areas fluidly, avoid overtreating one area, keep wrists and fingers loose, etc.).
- List three different "anatomical tools" a therapist might use to apply percussive methods (e.g., fists, fingers, palms, cupped palms, etc.).
- Match these percussive methods to their written descriptions: hacking, cupping, beating, slapping, pincement, tapping.
- List two examples of percussive methods used in different massage and bodywork forms or systems (e.g., tapotement in Swedish massage, tapping in Ayurveda, regularly used in pre-event sports massage, etc.).

**Conditions:** Having viewed an instructor demonstration of percussive methods, the learner will be able to:

- Imitate percussive methods on appropriate areas of the body.
- Imitate light percussive methods applied with the fingertips to the face.
- Try percussive methods with various "anatomical tools."
- Try percussive methods at three depths (e.g., light, moderate, and deep).
- Pay attention to palpatory sensations that signal that soft tissue is changing as a result of percussive methods.
- Reproduce the language the instructor used to communicate with the client about depth, pace, and comfort of percussive methods.
- Correct one's body mechanics in response to instructor feedback during the application of percussive methods.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss the uses, benefits and effects, cautions, stroke adaptations, and contraindications for percussive methods.</li> <li>Compare and contrast the physiological effects of short applications of percussive methods with the effects of longer applications of percussive methods.</li> <li>Discuss guidelines for the correct application of percussive methods.</li> <li>Discuss felt sensations when acting as a client and receiving percussive methods.</li> <li>Discuss felt sensations when acting as the therapist and applying percussive methods.</li> </ul>	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:</li> <li>Demonstrate the correct application of percussive methods on all appropriate body areas.</li> <li>Demonstrate percussive methods using four different " anatomical tools."</li> <li>Use appropriate and effective language to communicate with the client about depth, pace, and comfort of percussive methods.</li> <li>Correct one's body mechanics based on instructor feedback.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:         <ul> <li>Integrate percussive methods with gliding strokes, torsion methods, tension methods, shearing methods, and oscillating methods.</li> </ul> </li> <li>Correctly perform percussive methods on all appropriate body areas, using a variety of "tools," smooth transitions, different pacing, and different depth and with attention to safe and comfortable client positioning, modest draping, client communication, and effective body mechanics.</li> </ul>

# **Sub-Topic: Static Methods**

\_evel 1

**Knowledge: Attain and Comprehend** 

## **Skills: Observe and Imitate**

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review the mechanisms related to the tendon reflex, stretch reflex, and reciprocal inhibition.
- Review the physical characteristics and autonomic phenomena associated with trigger points (e.g., they feel like nodules, they are hypersensitive, they cause hyperirritability in local tissue, they are found in taut bands of muscle, they cause symptoms locally and in regions distant to the point, etc.).
- Review the symptoms of trigger points (e.g., local pain, referred pain, paresthesia, muscle tension, reduced range of motion, general motor function disturbances, sleep disturbances, etc.).
- Define the term static methods (e.g., methods that deform soft tissue in various ways using hand positions that are held for usually fixed lengths of time, etc.).
- Match instructor-selected static methods to their written descriptions (e.g., holding strokes, muscle approximation, fascial bending, Golgi tendon organ release, pincer compression, static compression, etc.).
- If an instructor-selected method, explain in one's own words the type of force used in muscle approximation (e.g., muscle approximation uses a compressive force that deforms the tissue by pushing the ends of a muscle towards one another in order to unload muscle spindles and Golgi tendon organs and reset muscle resting tone, etc.).
- If an instructor-selected method, explain in one's own words the type of force applied in fascial bending (e.g., fascial bending uses a bending force that deforms the tissue by compressing the inner surface of the tissue and elongating the outer surface of the tissue, etc.).

**Conditions:** Having viewed an instructor demonstration of static methods, the learner will be able to:

- Imitate instructor-selected static methods on three appropriate areas of the body.
- Imitate static compression with three different "anatomical tools."
- Pay attention to palpatory sensations that signal that soft tissue is changing as a result of static methods.
- Reproduce the language the instructor used to communicate with the client about depth, and comfort of static methods.
- Correct one's body mechanics in response to instructor feedback during the application of static methods.

- If an instructor-selected method, explain in one's own words the type of force applied in Golgi tendon organ release (e.g., GTO release uses a bending force that deforms the tissue by compressing the inner surface of the tissue and elongating the outer surface of the tissue in order to load the GTOs and cause a reflex effect, etc.).
- If an instructor-selected method, explain in one's own words the type of force used in pincer compression (e.g., in pincer compression, a compressive force is applied to a trigger point nodule; the sides of the nodule are pressed towards each other with the therapist's fingers, etc.).
- If an instructor selected method, explain in one's own words the type of force used in static compression (e.g., in static compression, a compressive force is applied to a trigger point nodule; one side of the nodule is trapped by muscle fibers or a bone and the other side is pressed by the therapists fingers, thumb, or elbow, etc.).
- List two benefits or physiological effects of each instructor-selected static method (e.g., holding strokes introduce the client to touch, elicit the parasympathetic nervous system response, facilitate restful breathing, etc.).
- Identify two cautions or contraindications for each instructor-selected static method.
- List three guidelines for the proper application of each instructor-selected static method (e.g., for static compression guidelines might include to communicate with clients upfront about the potential for discomfort when deactivating a trigger point, encourage clients to breathe during treatment, place muscles in a lengthened position for treatment when possible, warm the tissue before applying static compression, use passive stretches and active range of motion post-treatment, etc.).
- List three different "anatomical tools" a therapist might use to apply static compression (e.g., reinforced thumb, reinforced fingers, elbow, etc.).

 List two examples of static methods used in different massage and bodywork forms or systems (e.g., neuromuscular therapy, proprioceptive neuromuscular facilitation, muscle energy technique, strain and counterstain, etc.).

## Level 2 Knowledge: Use and Connect **Skills: Practice and Refine** Apply Conditions: Having participated in an interactive Conditions: Having completed practice sessions, lecture or classroom activity, the learner will be the learner will be able to: able to: Demonstrate the correct application of instructor-selected static methods on all Discuss the forces that deform soft tissue for appropriate body areas. each instructor-selected static method. Demonstrate static compression using three Discuss the uses, benefits and effects, different "tools." cautions and contraindications for static methods. Use appropriate and effective language to communicate with the client about depth, Compare and contrast the physiological and comfort of static methods. effects of static methods that influence proprioceptors and static methods that Correct one's body mechanics based on reduce trigger points. instructor feedback. Discuss guidelines for the correct application of instructor-selected static methods. Discuss felt sensations when acting as a client and receiving static methods. Discuss felt sensations when acting as the therapist and applying static methods. Level 3 **Knowledge: Choose and Plan Skills: Naturalize and Adapt** Problem There are no relevant learning objectives for this Conditions: Having completed practice sessions, Solve sub-topic in level 3 of the cognitive domain. the learner will be able to: Integrate static methods with all other massage and bodywork methods learned so Correctly perform instructor-selected static methods on all appropriate body areas, using a variety of "tools," smooth transitions, and different depths and with attention to safe and comfortable client positioning, modest draping, client communication, and effective body

mechanics.

# **Sub-Topic: Joint Movement Methods**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these terms to their written descriptions: active joint movement, active assisted joint movement, active resisted joint movement, passive joint movement, passive stretching, end feel.
- Review relevant concepts related to joint structure and function learned in other topics.
- List two uses or goals for joint movement techniques (e.g., freedom of movement, encouragement of movement, etc.).
- List one anatomical, one physiological, and one pathological restriction that might limit joint movement.
- List three benefits or physiological effects of joint movement techniques (e.g., encourage movement of lymph, stimulate the production of synovial fluid to lubricate and nourish the joint, stretch muscles and fascia, reeducate the body about its movement potential, etc.).
- Identify two conditions that indicate caution or adaptations are required in the application of joint movement techniques (e.g., presence of pins, plates, screws, or rods, chronic osteoarthritis, history of dislocation, etc.).
- Identify two conditions that contraindicate the use of joint movement techniques (e.g., recent dislocation, acute sprain, rheumatoid arthritis in flare-up, gout, bursitis, etc.).
- List three guidelines for the proper application of active assisted, active resisted, and passive joint movements and passive stretches.

**Conditions:** Having viewed an instructor demonstration of joint movement methods, the learner will be able to:

- Imitate active resisted methods on two joints.
- Imitate passive joint movement methods on two joints.
- Imitate passive stretching methods on two joints.
- Pay attention to palpatory sensations that signal that soft tissue is changing as a result of joint movement methods.
- Pay attention to felt sensations as a joint nears the end of its range.
- Reproduce the language the instructor used to communicate with the client about comfort during joint movement application.
- Correct one's body mechanics in response to instructor feedback during the application of joint movement methods.

 List two examples of joint movement methods used in different massage and bodywork forms or systems (e.g., neuromuscular therapy uses passive and active movement at the end of sessions, proprioceptive neuromuscular facilitation, Swedish massage, etc.).

## Level 2

## **Knowledge: Use and Connect**

# **Skills: Practice and Refine**

# Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the uses, benefits and effects, cautions, adaptations, and contraindications for joint movement techniques.
- Discuss hard, soft, and firm end feel.
- Compare and contrast the physiological effects of active assisted, active resisted, and passive joint movements and passive stretches.
- Discuss the types of forces exerted on soft tissue from joint movement methods (e.g., passive stretching exerts a tensile force, passive movements might use momentum to generate forces, etc.).
- Discuss guidelines for the correct application of active assisted, active resisted, passive joint movement, and stretches.
- Discuss felt sensations when acting as a client and receiving joint movement methods.
- Discuss felt sensations when acting as the therapist and applying joint movement methods.

**Conditions:** Having completed practice sessions, the learner will be able to:

- Demonstrate the application of active resisted joint movement methods at two joints.
- Demonstrate the application of passive joint movement methods at two joints.
- Demonstrate the application of passive stretching methods at two joints.
- Use appropriate and effective language to communicate with the client about the comfort of joint movement methods.
- Correct one's body mechanics based on instructor feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:         <ul> <li>Integrate joint movement methods with previously learned strokes and techniques.</li> <li>Correctly perform joint movement methods on all appropriate joints, using technique variations (e.g., active-assisted, active-resisted, and passive joint movements and passive stretches) and smooth transitions and with attention to safe and comfortable client positioning, modest draping, client communication, and effective body mechanics.</li> </ul> </li> </ul>

# **Sub-Topic: Hot and Cold Methods**

evel 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *homeostasis*.
- Define the term *hydrotherapy*.
- Match these terms to their written descriptions: cryotherapy, thermotherapy, hydrocollator, hot pack, warm pack, cold pack, ice massage, footbath, ice immersion, paraffin dip, hot, warm, cold, neutral.
- List two characteristics of water that make it useful as a therapeutic modality (e.g., stores and transmits heat, good conductor, changes states over a narrow temperature range, effective cooling agent, etc.).
- List two general uses or goals for hot or cold methods (e.g., increase the benefits and effects of massage, support relaxation, client enjoyment of sessions, and therapeutic benefits in addition to massage, etc.).
- Describe one factor that influences the degree to which the body is affected by a hot or cold applications (e.g., the greater the temperature difference between the body and the hydrotherapy application the greater the physiological effect on the body, the length of the hydrotherapy application influences the physiological effect on the body, the larger the body area treated by hydrotherapy the greater the effect on the body, etc.).
- Match these temperatures to written descriptions of their physiological effects: hot, neutral, cold, contrasting temperatures.
- Review the stages of the inflammatory response learned in other sub-topics.
- Match effective hot or cold applications to the correct stage of the inflammatory response (e.g., cold applications for the acute stage, hot applications for the maturation stage, etc.).

**Conditions:** Having viewed one or more instructor demonstrations of hot and cold methods, the learner will be able to:

- Imitate the methods the instructor used to remove a hydrocollator pack from a hydrocollator, wrap it in four to six layers of towels, and apply it to a client.
- Imitate the methods the instructor used to prepare a cold pack by wrapping it in one thin layer and applying it to a client.
- Reproduce the language the instructor used to prepare the client for the application of a hot or cold pack and sensations possibly experienced from hydrotherapy applications.
- Reproduce the language the instructor used to ensure that a hot or cold application remains at a temperature that is comfortable for a client.
- Try applying warm and cold packs to different body areas while gathering feedback about the client's felt experience of different temperatures.
- Imitate the methods an instructor used to apply ice massage to a client.
- Imitate set-up, clean-up, and sanitation methods the instructor used during hot and cold applications.

- Identify two conditions that require extra caution or adaptations to sessions using cold methods.
- Identify two conditions that require extra caution or adaptations to sessions using hot methods.
- Identify two conditions that contraindicate the use of cold methods.
- Identify two conditions that contraindicate the use of hot methods.
- List two guidelines for the proper application of a hydrocollator pack.
- List two guidelines for the proper application of a microwavable warm pack.
- List two guidelines for the proper application of a cold pack.
- List two guidelines for the proper application of ice massage.
- List two guidelines for the proper application of an ice immersion treatment.

**Knowledge: Use and Connect** 

#### **Skills: Practice and Refine**

## Apply

Level 2

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the therapeutic characteristics of water.
- Discuss homeostasis and factors that influence the degree to which the body is affected by hot and cold methods.
- Discuss the uses and goals, general benefits and effects, and cautions and contraindications for hot and cold methods.
- Compare and contrast the physiological effects of cold applications with the physiological effects of hot applications.
- Analyze the roles of hot and cold applications in the management of pain.
- Compare and contrast the use of hot and cold methods for wellness or relaxation sessions with the use of hot and cold methods for health care massage or softtissue injury.

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Demonstrate correct methods for removing a hydrocollator pack from a hydrocollator, wrapping it in four to six layers of towels, and applying it to a client.
- Demonstrate correct methods to prepare a cold pack by wrapping it in one thin layer and applying it to a client.
- Demonstrate correct methods for the application of ice massage to a client.
- Demonstrate effective procedures to set up, clean, and sanitize equipment before, during, and after hot and cold applications.
- Use effective language to prepare the client for the application of a hot or cold pack and sensations possibly experienced from applications.

- Compare and contrast the effects of applications applied close to body temperature with those applied at greater temperature differences.
- Discuss guidelines for the proper application of these hot and cold methods: hydrocollator pack, microwavable warm pack, cold pack, ice massage, ice immersion applications, footbath.
- Compare and contrast palpatory findings before and after a heat pack application.
- Discuss felt sensations when acting as a client and receiving hot and cold methods.
- Discuss felt sensations when acting as the therapist and applying hot and cold methods.

 Use effective language to ensure that a hot or cold application remained at a temperature that is comfortable for the client.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having completed practice sessions, the learner will be able to:  • Integrate two different hot or cold methods (e.g., use of a hot pack or ice massage and a warm pack on a different body area, etc.) into a 1-hour massage or bodywork session demonstrating fluid sequencing and transitions between massage strokes and hot or cold methods.

# **Topic: The Massage or Bodywork Session**

# Learning Outcomes

**Conditions:** Having completed 30 hours of instruction in the massage or bodywork session, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to an overview of a massage session, session planning, customization of a session, and suggesting client self-care activities, on a written examination.
- Demonstrate a fluid and enjoyable 1-hour session including effective methods for opening the session, sequencing body regions, sequencing strokes and using an enjoyable 10-minute face routine and 20-minute foot routine on a practical evaluation.
- Effectively negotiate a customized session and deliver the agreed session via a
  massage integrating an effective opening, sequencing of body regions to meet the
  client's specifications, techniques and depth of work to meet the client's
  specifications, an effective closing, and the suggestion of one appropriate client selfcare activity, on a practical evaluation.

## **Key Terminology and Concepts**

- Auditory cue
- Client expectations
- Client health care goals
- Client self-care
- Client wants/needs
- Client wellness goals
- Closing a session
- Customization of a session
- Diaphragmatic breathing exercise
- Face routine
- Foot routine
- Greeting
- Health care session
- Health intake process
- Massage/bodywork session
- Negotiating a session
- Olfactory cue
- Opening a session
- Pursed-lip breathing exercise
- Rebooking
- Resting/holding strokes
- Routines
- Sequencing body regions
- Sequencing methods
- Wellness session

	Use of Terms  The terms in this topic appear to be consistent and widely accepted.	
-		
	Sub-Topics	
	<ul> <li>Overview of the Events in a Massage or Bodywork Session</li> <li>Integrating Methods into a Form and Session Plan</li> <li>Customization of the Session to Meet Client Wants and Needs</li> <li>Suggesting Client Self-Care</li> </ul>	

# Sub-Topic: Overview of the Events in a Massage or Bodywork Session

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term wellness session.
- List three events that commonly occur in a wellness session (e.g., greeting the client, health intake process, showing the client to the treatment room, massage/bodywork application, payment for the session, rebooking the client, the goodbye, etc.).
- Explain in one's own words two reasons the public seeks out wellness massage/bodywork (e.g., stress reduction, relaxation, relief from minor aches and pains, etc.).
- Review each event in a wellness massage/bodywork session in detail from the moment the client walks in the office door until the client leaves.
- Define the term *health care session*.
- List two events that may occur in a health care session but do not commonly occur in wellness sessions (e.g., formal postural assessment, formal range of motion assessment, formal post-massage/bodywork assessment, etc.).
- Explain in one's own words two reasons the public seeks out health care massage/bodywork (e.g., to manage the symptoms of a diagnosed condition, for chronic pain management, for soft-tissue injury, etc.).
- List three skills a therapist must use in addition to massage/bodywork during a session (e.g., draping, positioning, communication to obtain client health information, rebooking skills, etc.).

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss these events in a wellness massage/bodywork session: greeting the client, a tour of the facility, the health intake process, the client interview, showing the client to the treatment room and explaining how to get on the table, opening the session, massage/bodywork application, closing the session, collecting the fee for the session, booking the next session, saying goodbye, charting the session, sanitizing the room for the next client.</li> </ul>	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Integrating Methods into a Form and Session Plan**

Level 1 Knowledge: Attain and Comprehend

**Skills:** Observe and Imitate

# Receive Respond

**Conditions:** Having participated in an interactive lecture, or classroom activity, the learner will be able to:

- Review the term massage/bodywork session.
- Review session components (e.g., greeting, health intake process, opening the massage/bodywork session, application of massage/bodywork, closing the session, collection of the fee, rebooking the next session, the goodbye, documentation of the session, etc.).
- List two ways the paradigm of a massage or bodywork form or style might change session component delivery (e.g., assessment methods might be different, the sequencing of strokes might be specific to the form, the sequencing of body regions might be specific to the form, strokes in one system applied to deform tissue in a specific way might be applied in a different form to unblock chi, etc.).
- Define the term opening as it relates to a massage/bodywork session (e.g., a formal moment that recognizes the importance of what is coming and helps to frame the massage/bodywork experience, etc.).
- List three ways to formally open a massage/bodywork session (e.g., resting/holding strokes, use of a short breathing activity, use of an auditory cue, use of an olfactory cue, etc.)
- Explain application guidelines for applying a resting or holding stroke to open a massage (e.g., the hands are placed, without lubricant, on the client with the intent to greet the client and allow the client time to become accustomed to the therapist's touch, etc.).
- Give one example of a short breathing activity that might be used to open a massage session (e.g., based on instructor preferences such as the use of three simple breaths, a diaphragmatic breathing exercise, a pursed-lip breathing exercise, etc.).

**Conditions:** Having viewed and instructor demonstration, and worked with a peer group to choreograph a foot and face routine in writing, the learner will be able to:

- Imitate the methods an instructor used to:
  - Open a massage/bodywork session effectively.
  - Close a massage/bodywork session effectively.
  - Sequence body regions effectively beginning from a prone position.
  - Sequence body regions effectively beginning from a supine position.
  - Sequence methods effectively to enhance client comfort and enjoyment.
- Observe the methods an instructor used to:
  - Apply a fluid routine of strokes to the face.
  - Apply a fluid routine of strokes to the feet.
- Work with a peer group to:
  - Try different strokes to develop a fluid routine for the face.
  - Try different strokes to develop a fluid routine for the feet.

- Explain the benefits of using an auditory cue
  to open a massage/bodywork session (e.g.,
  an auditory cue, such as the ringing of a
  chime, is used at the opening or closing of a
  session to lend a sense of ritual or more
  spiritual formality to the session. Over
  multiple sessions, auditory cues become
  linked in the client's mind with relaxation and
  can trigger a relaxation response, etc.).
- Explain the benefits of using an olfactory cue to open a massage/bodywork session (e.g., natural aromas with sedative properties such as lavender or mandarin can cause olfactory responses that support relaxation, etc.).
- List two considerations for planning the sequence of body regions to be addressed during the sessions (e.g., benefits and drawbacks of starting prone or supine, areas where the client wants focused work, if sequencing in a specific order will lead to better therapeutic outcomes, sequencing might be prescriptive based on the paradigm of a particular form or style, etc.).
- List two considerations for planning the sequence of methods during the session (e.g., are the goals of the session relaxationoriented or is specific focused work required to meet therapeutic outcomes, how much depth has the client requested, how much warm-up is needed based on the client's resistance or openness to specific methods, what will feel most enjoyable and achieve desired results, the paradigm of a particular form or style might dictate the sequence of application methods, etc.).
- Define the term routine (e.g., a series of strokes that are planned in advance, delivered to body areas in a preset order, and practiced until they flow smoothly together, etc.).
- Explain in one's own words when the use of a routine is effective and appropriate (e.g., useful in relaxation or wellness sessions because they use a variety of techniques and are practiced to promote fluidity and so feel very enjoyable to receive; might also be used in forms or styles that follow particular protocols or stroke sequences as part of their paradigm, etc.).

- Explain in one's own words when the use of routines is not effective or appropriate (e.g., in health-care-oriented sessions or in sessions where clients have requested the therapist meet specific therapeutic goals, etc.).
- List two body areas where therapists commonly use routines in wellness, relaxation, or spa settings (e.g., face and feet, etc.).
- List two ways to enhance the client's enjoyment of a session (e.g., make sure the client is warm, choose relaxing and appropriate session music, keep the session client-centered by eliminating unnecessary chatter, etc.).
- Define the term closing the session (e.g., a method used at the end of a session to leave the client feeling complete, peaceful, and balanced, etc.).

#### Level 2

## **Knowledge: Use and Connect**

## **Skills: Practice and Refine**

## **Apply**

**Conditions:** Having participated in an interactive lecture, or classroom activity, the learner will be able to:

- Discuss methods to open a massage or bodywork session.
- List two ways the paradigm of a massage or bodywork form or style might change session component delivery
- Discuss considerations for planning the sequence of body regions to be addressed during a session.
- Discuss considerations for planning the sequence of massage/bodywork application methods.
- Compare and contrast the use of a massage/bodywork routine with the customization of a massage/bodywork session.
- Share one's feelings and ideas about what constitutes an excellent massage/bodywork session.

**Conditions:** Having participated in a practice session, the learner will be able to:

- Demonstrate an effective opening to a massage/bodywork session.
- Demonstrate an effective closing to a massage/bodywork session.
- Sequence body regions effectively beginning from a prone position.
- Sequence body regions effectively beginning from a supine position.
- Sequence methods effectively to enhance client comfort and enjoyment.
- Work with peers to refine the choreography for a fluid and enjoyable routine for the face.
- Work with peers to refine the choreography for a fluid and enjoyable routine for the feet.

- Outline two different 1-hour sessions including the opening, sequence of body areas, use of methods to enhance client enjoyment of the session, and closing.
- Discuss methods for the development of an exceptional foot routine.
- Discuss methods for the development of an exceptional face routine.
- Work with a peer group to choreograph a fluid and enjoyable 10-minute routine for the face in writing.
- Work with a peer group to choreograph a fluid and enjoyable 20-minute routine for the feet in writing.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having participated in ongoing hands-on practice sessions, the learner will be able to:</li> <li>Consistently demonstrate the use of effective opening and closing methods during sessions.</li> <li>Demonstrate a fluid and enjoyable 10-minute routine for the face.</li> <li>Demonstrate a fluid and enjoyable 20-minute routine for the feet.</li> </ul>

# **Sub-Topic:**

# **Customization of a Session to Meet Client Wants and Needs**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term customization of a session (e.g., to plan a session specifically to meet the needs and wants of the client).
- Describe one reason a therapist might decline meeting a client's wants or needs (e.g., if the client's wants or needs are illegal, would cause the therapist to behave unethically, would allow unethical behavior in the client, could potentially exacerbate the client's symptoms or condition, or are contraindicated, etc.).
- List the considerations a therapist makes when customizing a massage/bodywork session for clients (e.g., the client's previous experience with massage/bodywork, the client's expectations for session results, the client's wellness or health care goals, the body regions where the client would like focused massage/bodywork, the body regions where the client would not like massage/bodywork, the types of techniques the client has found effective in the past, the types of techniques the client would like to experience, the amount of depth the client has found effective in the past, the amount of depth the client would like to experience, client preferences for music, client preferences for lubricant, etc.).
- Define the term negotiate the session (e.g., a discussion between a therapist and client that results in an agreed plan for the session).
- Brainstorm client questions that would help a therapist negotiate and plan a massage/bodywork session.

**Conditions:** Having viewed an instructor demonstration of negotiating a customized session with a client, the learner will be able to:

 Imitate the methods, language, and behaviors the instructor used to effectively negotiate an agreed session plan.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture, the learner will be able to:	<b>Conditions:</b> Having participated in a practice session, the learner will be able to:
	<ul> <li>Discuss the reasons a therapist might decline meeting a client's wants or needs when planning a session.</li> </ul>	<ul> <li>Demonstrate effective methods, language, and behaviors to negotiate an agreed plan for a customized session.</li> </ul>
	<ul> <li>Discuss the considerations a therapist makes when customizing a massage/bodywork session for a client.</li> </ul>	
	<ul> <li>Discuss methods to effectively negotiate sessions with clients.</li> </ul>	
	<ul> <li>Conduct client interviews on four different peers and use good follow-up questions to negotiate the sessions.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having participated in ongoing practice sessions and student client, the learner will be able to:
		Consistently demonstrate effective methods, language, and behaviors to negotiate plans for customized sessions.

# **Sub-Topic: Suggesting Client Self-Care**

Level 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

# Receive Respond

**Conditions:** Having read assigned material and participated in a lecture and/or classroom activity, the learner will be able to:

- Define the term *client self-care* (or *client home-care*).
- List two benefits of suggesting and demonstrating self-care activities to clients (e.g., they prolong the benefits they experience from massage, provide a means for clients to be proactive about their physical condition, support symptom reduction, etc.).
- List three common self-care activities massage therapists suggest to clients (e.g., use of warm packs on chronic muscle tension, lying on a tennis ball to release tight muscles, stretches, etc.).
- Describe when and where self-care activities are suggested and demonstrated for the client (e.g., at the end of the session in the treatment room to preserve the client's privacy, etc.).

**Conditions:** Having viewed an instructor's demonstration, the learner will be able to:

- Imitate the instructor's language and behavior to demonstrate these self-care activities for clients:
  - Use of a warm pack.
  - Use of an ice pack.
  - Use of a tennis ball to release tight muscles.
  - Self-care stretches for three different joints.
  - Self-massage techniques.

#### Level 2

# Knowledge: Use and Connect

#### **Skills: Practice and Refine**

## Apply

**Conditions:** Having participated in a class discussion and analyzed client scenarios, the learner will be able to:

- Brainstorm client self-care activities (e.g., use of warm or ice packs, warm baths, lying on a tennis ball, simple strengthening exercises, modifications in work activities, better body mechanics at work, self-massage techniques, stretching, etc.).
- Identify two self-care stretches for five different muscles.
- Analyze two mock client health forms, interview questions and responses, and assessment data and suggest self-care activities that might benefit the client's condition.

**Conditions:** Having viewed an instructor's demonstration and participated in practice sessions, the learner will be able to:

- Practice using effective language and behavior to demonstrate these self-care activities for clients:
  - Use of a warm pack.
  - Use of an ice pack.
  - Use of a tennis ball to release tight muscles.
  - Self-care stretches for three different joints.
  - Self-massage techniques.

 Compare and contrast the role of self-care for clients who visit a massage business once and for clients regularly working with a therapist to meet goals outlined in a treatment plan.

	treatment plan.	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having participated in a classroom activity, the learner will be able to:</li> <li>Determine one self-care activity for each of five mock clients based on chart notes from mock sessions.</li> <li>Defend one's choices of self-care suggestions to peers and instructors.</li> <li>Critique the choices of peers when they present their self-care suggestions and provide useful feedback.</li> </ul>	Conditions: Having viewed an instructor demonstration and participated in practice sessions, the learner will be able to:  • Use effective language and behavior to demonstrate appropriate self-care activities for five mock clients.

# **Topic: Sample Form: Western Integration of Application Methods**

# Learning Outcomes

**Note:** Schools can choose to integrate application methods using a Western or Eastern approach or an approach based on their philosophy of massage or bodywork (50 hours total). The ELAP Work Group recommends Swedish massage, myofascial approaches, and neuromuscular approaches because profession stakeholder survey results indicate that these forms are those most widely practiced and valued by professional massage therapists. Swedish massage and "deep tissue" (which incorporates methods from myofascial and neuromuscular approaches) are the forms most widely requested by consumers.

**Conditions:** Having completed 50 hours of instruction and practice integrating application methods from a Western paradigm, including Swedish massage, myofascial approaches, and neuromuscular approaches, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to Swedish massage, myofascial approaches, and neuromuscular approaches, their therapeutic paradigms, their specific strokes, their physiological effects, their variations, and conditions that require cautious work or session adaptations and contraindications, on a written examination.
- Work from a Swedish massage therapeutic paradigm to integrate application methods in a fluid 1-hour general Swedish massage session with an effective opening, with the traditional sequencing of Swedish strokes, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics, on a practical evaluation.
- Work from a myofascial therapeutic paradigm to integrate application methods in a fluid 1-hour general myofascial massage session with an effective opening, with the correct application and sequencing of myofascial methods, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics, on a practical evaluation.
- Work from a neuromuscular therapeutic paradigm to integrate application methods in a 1-hour general neuromuscular session using an effective opening, appropriate warmup of the tissue, correct application and sequencing of neuromuscular methods, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics, on a practical evaluation.

## **Key Terminology and Concepts**

- Active trigger point
- Associated trigger point
- Attachment trigger point
- Central trigger point
- Closing
- Continuity of the massage\*
- Depth
- Direct pressure techniques\*
- Effleurage
- Fascia
- Fascial bowing
- Fascial cutting
- Fascial spreading
- Fascial stretching\*
- Fascial torqueing\*
- Flow of the massage\*
- Friction
- Ground substance
- Janet Travell
- Joint movement
- Key trigger point
- Latent trigger point
- Local pain
- Massage/bodywork routine
- Methods
- Motor endplate
- Myofascia
- Myofascial approaches\*
- Myofascial skin rolling
- Myofascial stretches
- Neuromuscular approaches\*
- Nodule
- Opening

- Pacing
- Paresthesia
- Passive stretches
- Petrissage
- Pincer compression
- Primary trigger point
- Range of motion
- Referred pain
- Restrictions to joint movement
- Sarcomeres
- Satellite trigger point
- Sequencing of body areas\*
- Sequencing of strokes/methods\*
- Skin rolling
- Sliding filament model
- Static compression
- Stroke depth
- Stroke direction
- Stroke duration
- Stroke pace
- Stroke rhythm
- Strokes
- Swedish massage
- Tapotement
- Techniques
- Thick myofilaments
- Thin myofilaments
- Thixotropy
- Transition\*
- Trigger point
- Vibration
- Z-lines

#### **Use of Terms**

\*These terms are not consistently used or consistently defined in the massage therapy profession at this time. Curriculum designers are encouraged to use the terminology specific with their school's philosophy or the definitions of similar terms used in their textbooks. For the purposes of this document, these terms are defined as:

**Continuity:** The continuous contact the therapist makes with the client's body and in which the overall pacing and rhythm of the massage remain consistent.

**Direct pressure techniques:** Often used interchangeably with *static compression* and *ischemic compression*.

Fascial stretching: Any stroke variation that applies tensile force to myofascial tissues.

**Fascial torqueing**: Any stroke variation that applies bending or rotary forces to myofascial tissues.

**Flow:** The smooth application of strokes where one stroke flows into another stroke via a smooth transition.

**Myofascial approaches:** Term used to recognize a number of myofascial forms and systems including connective tissue massage, myofascial mobilization, myofascial release, myofascial therapy, and myofascial unwinding, which address the myofascia of the body to promote therapeutic change.

**Neuromuscular Approaches:** Term used to recognize a number of forms and systems that address trigger points including *trigger point therapy*, neuromuscular therapy, *trigger point pressure release*. For the purposes of this document, neuromuscular approaches are defined as the treatment of myofascial pain and dysfunction utilizing any combination of techniques specifically directed at deactivating trigger points and/or tender points, restoring optimal muscle resting length, and reducing or normalizing muscular tension.

**Sequencing:** Refers both to the sequence of strokes (the order in which strokes are applied to a particular body area) and to the overall sequence of the massage (the order in which body areas are massaged).

**Transition:** Smooth and enjoyable movement from one type of technique to another type of technique, or the efficient progression of skills such as the change from undraping a body area to the introduction of the therapist's hands onto the client's body.

#### **Sub-Topics**

- Swedish Massage
- Myofascial Approaches
- Neuromuscular Approaches

# **Sub-Topic: Swedish Massage**

Level 1 Knowledge: Attain and Comprehend

## Skills: Observe and Imitate

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term Swedish massage.
- Recall two historical events or people related to the development of Swedish massage.
- List two primary benefits or effects of Swedish massage for clients (e.g., stress reduction, wellness, relief from general muscular soreness, pain, stiffness, etc.).
- List two assessment methods used in the Swedish massage therapeutic paradigm (e.g., mainly general assessment with a health form, client interview, and general observation, etc.).
- List the six strokes used in Swedish massage (effleurage, petrissage, friction, vibration, tapotement, joint movements).
- Match Swedish massage stroke names to previously learned application method categories (e.g., effleurage matches gliding methods, petrissage matches torsion methods, friction matches shearing methods, vibration matches oscillating methods, and tapotement matches percussive methods, etc.).
- List four general cautions, conditions, or situations that require session adaptations for Swedish massage.
- List five conditions that contraindicate the use of Swedish massage.
- List three general guidelines for the application of Swedish massage (e.g., clientcentered sessions, moderate use of lubricant, flowing and smooth, etc.).
- List two ways to enhance a client's enjoyment of a Swedish massage session (e.g., use of effective openings, closings, application of a warm pack to provide additional warmth, fluid application of strokes, etc.).

Conditions: Having viewed an instructor demonstration, the learner will be able to:

- Imitate the correct application of effleurage, petrissage, friction, vibration, tapotement, and joint movements.
- Imitate the sequencing of Swedish massage strokes and use methods to transition fluidly between strokes.
- Explore options for each Swedish stroke:
  - Pacing: Apply strokes at fast, moderate, and slow speeds.
  - Depth: Apply strokes at light, moderate, and deep depths.
  - Anatomical tools: Try strokes using at least two different "anatomical tools."
  - Variations: Try at least two variations of each stroke.
- Imitate the sequencing of body regions and enhancing methods used by the instructor to perform a fluid and refined Swedish massage.
- Pay attention to palpatory sensations that signal that soft tissue is changing during the application of strokes.
- Imitate the language an instructor used to communicate effectively with clients about depth, pace, and comfort of strokes.
- Correct one's body mechanics based on instructor feedback.

 Review the terms pacing and leading, engaging tissue, therapeutic edge, rhythm, flow, continuity of strokes, and sequencing in relationship to Swedish massage.

#### Level 2

#### **Knowledge: Use and Connect**

#### **Psychomotor: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture, or classroom activity, the learner will be able to:

- Discuss briefly the history of Swedish massage and its therapeutic paradigm.
- Discuss the benefits of Swedish massage for clients and the reasons clients seek it.
- Discuss general assessment methods used in the Swedish massage therapeutic paradigm.
- Discuss the methods used in the Swedish massage system:
  - Stroke names.
  - Comparison to methods already learned (e.g., effleurage to gliding, etc.).
  - Sequencing of methods in the Swedish massage system.
  - Discuss the way Swedish strokes are influenced by pace, depth, rhythm, flow, continuity, and sequencing.
- Discuss factors that ensure a fluid, flowing, enjoyable, and therapeutic Swedish massage session.

**Conditions:** Having completed a practice session, the learner will be able to:

- Practice the correct application of effleurage, petrissage, friction, vibration, tapotement, and joint movements on all appropriate body areas.
- Practice the sequencing of Swedish massage strokes and use methods to transition fluidly between strokes.
- Practice options for each Swedish stroke:
  - Pacing: Apply strokes at fast, moderate, and slow speeds.
  - Depth: Apply strokes at light, moderate, and deep depths.
  - Anatomical tools: Try strokes using at least two different "anatomical tools."
  - Variations: Try at least two variations of each stroke.
- Practice the sequencing of body regions and enhancing methods used by the instructor to perform a fluid and refined Swedish massage.
- Pay attention to palpatory sensations that signal that soft tissue is changing during the application of strokes.
- Practice using effective language to communicate with clients about depth, pace, and comfort of strokes.
- Correct one's body mechanics based on instructor feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:</li> <li>Work from a Swedish therapeutic paradigm to integrate methods into a fluid and refined 1-hour general Swedish massage session with an effective opening, using all the Swedish strokes, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics.</li> </ul>

# **Sub-Topic: Myofascial Approaches**

evel 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

# Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term myofascial approaches.
- Recall two historical events or people related to the development of myofascial approaches to massage/bodywork.
- Review terms and concepts related to the structure and function of fascia learned in other classes (see the subject Anatomy, Physiology, and Pathology and the topic The Fascial System).
- List two goals of application methods used in a myofascial therapeutic paradigm (e.g., to reduce myofascial restrictions and promote postural balance and pain-free movement, etc.).
- List two primary benefits or effects of myofascial massage/bodywork for clients (e.g., "melt" and "stir" ground substance to improve fascia health, reduce fascial restrictions, break hydrogen bonds that hold adhered strands of tissue together to increase tissue pliability, ensure that separate structures can slide freely over one another, etc.).
- List two assessment methods used in the myofascial therapeutic paradigm (e.g., fascial gliding, skin rolling, and passive range of motion might be used in addition to health forms and client interviews to identify fascial restrictions, etc.)
- List five methods commonly used in myofascial approaches (e.g., crossed-hand stretch, fascial spreading, fascial torqueing, fascial cutting, fascial bowing, arm and leg pulling, etc.).
- Match myofascial methods to previously learned application method categories (e.g., crossed-hands stretch is an elongation method, fascial torqueing is a torsion method, etc.).

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the methods the instructor used to identify fascial restrictions through fascial gliding, slow skin rolling, and passive range of motion.
- Review the correct application of myofascial methods learned previously (see the topic Application Methods in this subject): crossed-hand stretches, fascial spreading strokes, fascial torqueing strokes, fascial cutting strokes, fascial bowing strokes, fascial arm pulling and leg pulling.
- Try myofascial skin rolling very slowly on two body areas while paying attention to palpatory sensations that signal that tissue is "releasing."
- Try myofascial skin rolling in three directions (longitudinally, horizontally, and at oblique angles) on two body areas.
- Try crossed-hand stretches at two different depths (superficially and deeply) on two different body areas.
- Try crossed-hand stretches in three directions (longitudinally, horizontally, and at oblique angles) on two body areas.
- Try crossed-hand stretches using three different "tools" on two different body areas.
- Try fascial torqueing on three different body areas while paying attention to palpatory sensations that signal that tissue is "releasing."
- Try fascial cutting using two different "tools" on three different body areas (e.g., fingers, knuckles, edge of the hand, etc.).
- Try S-bowing and C-bowing on two different body areas while paying attention to palpatory sensations that signal that tissue is "releasing."

- List four general cautions, conditions, or situations that require session adaptations for myofascial massage/bodywork.
- List five conditions that contraindicate the use of myofascial massage/bodywork.
- List three general guidelines for the application of myofascial approaches (e.g., limited use of lubricant or no lubricant, take out the slack in fascia, work fascia in all directions, work slowly and wait for the tissue to unwind, let the tissue guide you, etc.).
- Imitate the methods the instructor used to adapt myofascial techniques to various body areas (e.g., looser skin in upper back can often be stretched farther than thoracolumbar fascia, etc.).
- Imitate the sequencing of myofascial methods the instructor used on all appropriate body regions.
- Imitate the methods an instructor used to adapt stroke depth, direction, or pace based on the client's verbal and nonverbal signals that indicate a stroke is too deep or uncomfortable.
- Reproduce the language the instructor used to communicate with the client about depth, pace, and comfort of strokes.
- Correct one's body mechanics in response to instructor feedback during the application of myofascial methods.
- Imitate the methods the instructor used to lead a client through active range of motion activities at the conclusion of a myofascial session.

#### Level 2

#### **Knowledge: Use and Connect**

#### **Psychomotor: Practice and Refine**

#### Apply

**Conditions:** Having participated in an interactive lecture, or classroom activity, the learner will be able to:

- Discuss briefly the history of myofascial approaches and the myofascial therapeutic paradigm.
- Discuss important terms and concepts related to the structure and function of fascia learned in other classes (see the subject Anatomy, Physiology, and Pathology and the topic The Fascial System).
- Discuss the goals of application methods used in a myofascial therapeutic paradigm.
- Discuss the benefits and effects of myofascial approaches.
- Discuss assessment methods used in the myofascial therapeutic paradigm.
- Discuss the methods used in myofascial approaches:

**Conditions:** Having completed a practice session, the learner will be able to:

- Practice methods to identify fascial restrictions through fascial gliding, slow skin rolling, and passive range of motion.
- Refine the application of myofascial methods learned previously (see the topic Application Methods in this subject): crossed-hand stretches, fascial spreading strokes, fascial torqueing strokes, fascial cutting strokes, fascial bowing strokes, fascial arm pulling and leg pulling.
- Demonstrate myofascial skin rolling very slowly on two body areas while paying attention to palpatory sensations that signal that tissue is "releasing."
- Demonstrate myofascial skin rolling in three directions (longitudinally, horizontally, and at oblique angles) on two body areas.

- Stroke names.
- Comparison to methods already learned (e.g., crossed-hands stretch to elongation methods, etc.).
- Sequencing of methods in the myofascial system.
- Discuss the way myofascial methods are influenced by pace, depth, rhythm, flow, continuity, and sequencing.
- Discuss factors that ensure a therapeutic myofascial session.

- Demonstrate crossed-hand stretches at two different depths (superficially and deeply) on two different body areas.
- Demonstrate crossed-hand stretches in three directions (longitudinally, horizontally, and at oblique angles) on two body areas.
- Demonstrate fascial torqueing on three different body areas while paying attention to palpatory sensations that signal that tissue is "releasing."
- Demonstrate fascial cutting using two different "tools" on three different body areas (e.g., fingers, knuckles, edge of the hand, etc.).
- Demonstrate S-bowing and C-bowing on two different body areas while paying attention to palpatory sensations that signal that tissue is "releasing."
- Demonstrate effective methods to adapt myofascial techniques to various body areas (e.g., looser skin in upper back can often be stretched farther than thoracolumbar fascia, etc.).
- Demonstrate the effective sequencing of myofascial methods on three body regions.
- Adapt stroke depth, direction, or pace based on the client's verbal and nonverbal signals that indicate a stroke is too deep or uncomfortable.
- Use effective language to communicate with clients about depth, pace, and comfort of strokes.
- Correct one's body mechanics in response to instructor feedback during the application of myofascial methods.
- Lead a client through active range of motion activities at the conclusion of a myofascial session.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having completed practice sessions, the learner will be able to:  • Work from a myofascial therapeutic paradigm to integrate methods into an competent 1-hour general myofascial session with an effective opening, using a variety of myofascial methods, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics.

Subject- Massage and Bodywork Application, Topic — Western Integration of Application Methods

	Subject- Massage and Bodywork Application, T	Topic – Western Integration of Application Methods
Sub-To	ppic: Neuromuscular Approaches	
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Define the term neuromuscular approaches.</li> <li>Recall two historical people related to the development of neuromuscular approaches to massage/bodywork (e.g., Dr. Janet Travell, Dr. David Simons, Raymond Nimmo, James Vannerson, Leon Chaitow, Paul St. John, Judith DeLaney, etc.).</li> <li>List four characteristics of trigger points (e.g., they feel like nodules, they are hypersensitive, they cause hyperirritability in local tissue, they are found in taut bands of muscle, they cause symptoms locally and in regions distant to the point, etc.).</li> <li>Match these terms related to the formation of trigger points to their written descriptions: sarcomeres, thick myofilaments, thin myofilaments, Z-lines, sliding filament model,</li> </ul>	<ul> <li>Conditions: Having viewed an instructor demonstration, the learner will be able to:         <ul> <li>Imitate the methods the instructor used to locate trigger points in a particular body area.</li> <li>Try locating trigger points in three different body areas.</li> <li>Pay attention to felt sensations that signal trigger point locations.</li> <li>Imitate the methods the instructor used to warm up the tissue in the region of trigger points before trigger point deactivation.</li> <li>Imitate the methods the instructor used to apply static compression to four different trigger points.</li> <li>Try static compression methods with two different "anatomical tools" (e.g., elbow, reinforced fingers, reinforced thumb, etc.).</li> <li>Try pincer compression on two different</li> </ul> </li> </ul>
	motor endplate.	trigger points.

- Match these trigger point types to their written descriptions: active, associated, attachment, central, key, latent, primary, satellite.
- List four factors that contribute to the formation of trigger points (e.g., muscle overload, muscle trauma, vitamin or mineral deficiency, metabolic disorders, mental and emotional stress, exposure to cold, infection, conditions like fibromyalgia, etc.).
- List five symptoms of trigger points (e.g., local pain, referred pain, paresthesia, muscle tension, reduced range of motion, general motor function disturbances, sleep disturbances, etc.).
- List three techniques commonly used in neuromuscular therapy (e.g., warm the tissue with massage or hydrotherapy, apply static compression to points, stretch the muscle after deactivation of points, pincer compression might also be used, etc.).
- List three ways one might be alerted to the presence of trigger points during assessment procedures or massage/bodywork (e.g., muscular imbalances that show up during posture assessment indicate regions where trigger points are likely located, reduced range of motion indicates trigger points may be present in restricted muscles, the client complains of pain with compression of specific tissue during massage, a compressed point refers pain out to another location, etc.).
- List two goals or uses of neuromuscular approaches (e.g., locate and treat myofascial trigger points to prevent or reduce chronic pain, etc.).
- List three benefits or physiological effects of neuromuscular approaches (e.g., reduce local and referred pain, reduce or eliminate paresthesia, reduce muscle tension, improve range of motion, promote muscular balance, reduce or prevent chronic pain, improve muscle function, etc.).
- Identify two conditions that require caution or session adaptations for neuromuscular approaches.

- Reproduce the language the instructor used to encourage clients to use a verbal pain scale to describe their experience of static compression or pincer compression methods.
- Pay attention to felt sensations that signal the correct or incorrect use of depth when clients give feedback using a pain scale.
- Imitate methods the instructor used to passively stretch muscles and encourage active movement after trigger point deactivation.
- Correct one's body mechanics in response to instructor feedback.
- Imitate the sequence of methods the instructor used to provide a neuromuscularbased session.

- Identify two conditions that contraindicate the use of neuromuscular approaches.
- List four guidelines for the application of neuromuscular therapy (e.g., communicate with clients upfront about the potential for discomfort when deactivating a trigger point, encourage clients to breathe during treatment, identify areas that contain clusters of trigger points and focus on those areas first, identify the most irritable point in a cluster and deactivate first, treat trigger points that are medial and superior before points that are distal and lateral, treat superficial points before deep points when points occur in muscles stacked in layers, treat muscle bellies before points occurring at attachment sites, place muscles in a lengthened position for treatment when possible, warm the tissue before applying static compression, use passive stretches and active range of motion post treatment, etc.).
- Describe one pain scale method that can be used to help clients communicate about their sensations during neuromuscular sessions.

#### Level 2

Apply

## **Knowledge: Use and Connect**

# Conditions: Having participate

**Conditions:** Having participated in an interactive lecture, or classroom activity, the learner will be able to:

- Discuss briefly the history of neuromuscular approaches and the neuromuscular therapeutic paradigm.
- Discuss theories about how trigger points form.
- Discuss the factors that contribute to the formation of trigger points.
- Discuss characteristics of trigger points, types of trigger points, locations, and symptoms of trigger points.
- Compare and contrast an active trigger point to a latent trigger point.

## **Psychomotor: Practice and Refine**

**Conditions:** Having completed a practice session, the learner will be able to:

- Practice the methods the instructor used to locate trigger points in a particular body area.
- Locate trigger points in three different body areas
- Describe verbally the felt sensations that signal trigger point locations.
- Demonstrate appropriate methods to warm up the tissue in the region of trigger points before trigger point deactivation.
- Demonstrate the used of static compression on four different trigger points.
- Demonstrate the use of static compression methods with two different "anatomical tools".
- Demonstrate the use of pincer compression on two different trigger points.

- Discuss factors that signal that trigger points may be present in a body area (e.g., present in areas of muscle tension, taut bands of muscle, places where range of motion is decreased, or when the client complains of increased or referred pain when an area of tissue is compressed, etc.).
- Discuss the goals and uses, and benefits and effects, of neuromuscular approaches.
- Discuss the cautions, session adaptations, and contraindications for neuromuscular approaches.
- Discuss application guidelines for use of methods in neuromuscular approaches.
- Discuss the use of a fixed verbal pain scale with clients so they can communicate their experience clearly (e.g., a variety of scales such as (1) very little pain and too little pressure, (2) tolerable pain and the right amount of pressure, (3) too much pain and too much pressure, etc.).

- Demonstrate appropriate language to encourage clients to use a verbal pain scale to describe their experience of static compression or pincer compression methods.
- Respond appropriately to felt sensations that signal the correct or incorrect use of depth when clients give feedback using a pain scale.
- Demonstrate the use of passive stretching and active movement after trigger point deactivation.
- Correct one's body mechanics in response to instructor feedback.
- Demonstrate effective sequencing of methods to provide a neuromuscular-based session.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	Conditions: Having completed practice sessions, the learner will be able to:  • Work from a neuromuscular therapeutic paradigm to integrate methods into an competent 1-hour general neuromuscular session with an effective opening, appropriate warm-up of tissue, location of trigger points, the use of appropriate neuromuscular methods, and with attention to time management, safe and comfortable client positioning, modest draping, professional and effective client communication, and proper body mechanics.

# **Topic: Sample Form: Eastern Integration of Application Methods**

# Learning Outcomes

**Note:** Schools can choose to integrate application methods using a Western or Eastern approach or an approach based on their philosophy of massage or bodywork (50 hours total). The ELAP Work Group recommends Swedish massage, myofascial approaches, and neuromuscular approaches because profession stakeholder survey results indicate that these forms are those most widely practiced and valued by professional massage therapists. Swedish massage and "deep tissue" (which incorporates methods from myofascial and neuromuscular approaches) are the forms most widely requested by consumers.

**Conditions:** Having completed 50 hours of instruction and practice integrating application methods from an Eastern paradigm, including shiatsu, tuina, and Thai massage, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to Traditional Chinese/Japanese Medicine concepts that underlie many Asian bodywork therapies and basic concepts related to shiatsu, tuina, and Thai massage, their therapeutic paradigms, their specific strokes or methods, their physiological effects, their variations, conditions that require cautious work or session adaptations and contraindications, on a written examination.
- Work from an Eastern therapeutic paradigm to integrate application methods in a 1-hour general shiatsu session demonstrating the correct application of instructor-selected methods, and with attention to time management, safe and comfortable client positioning, professional and effective client communication, and proper body mechanics, on a practical evaluation.
- Work from an Eastern therapeutic paradigm to integrate application methods in a 1-hour general tuina session demonstrating the correct application of instructor-selected methods, and with attention to time management, safe and comfortable client positioning, professional and effective client communication, and proper body mechanics, on a practical evaluation.
- Work from an Eastern therapeutic paradigm to integrate application methods in a 1-hour general Thai massage session demonstrating the correct application of instructor-selected methods, and with attention to time management, safe and comfortable client positioning, professional and effective client communication, and proper body mechanics, on a practical evaluation.

#### **Key Terminology and Concepts**

- Acupoint
- Asian bodywork therapies
- Asking
- Blood
- Body fluid
- Chi
- Collapsed qi
- Consuming relationships
- Controlling relationships
- Deficient qi
- Disharmony of qi
- Earth
- Eastern therapeutic paradigm
- Essential substances
- Excess qi
- Fire
- Hara
- Infinite divisibility
- Interdependence
- Intertransformation
- Jing
- Ki
- Listening
- Meridian system
- Metal

- Movement
- Observation
- Opposition
- Promoting relationships
- Protection
- Qi
- Rebellious qi
- Shen
- Shiatsu
- Sinking qi
- Stabilization
- Stagnant qi
- Supporting relationships
- Thai massage
- Touching
- Traditional Chinese Medicine
- Traditional Japanese Medicine
- Transformation
- Tuina (Tui na)
- Warmth
- Water
- Wood
- Yang
- Yin

# **Use of Terms**

The terms used in this topic appear to be consistent and widely used.

# Sub-Topics

- Basic Concepts of Traditional Chinese/Japanese Medicine
- Shiatsu
- Tuina
- Thai Massage

# Sub-Topic: Basic Concepts of Traditional Chinese/Japanese Medicine

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *Asian bodywork therapies*.
- Define the term *Traditional Chinese Medicine*.
- Define the term *Traditional Japanese Medicine*.
- Define the term *yin*.
- Define the term yang.
- List three phenomena that can be classified as yin.
- List three phenomena that can be classified as yang.
- Match these principles of yin and yang to their written descriptions: opposition, interdependence, consuming and supporting relationship, intertransformation, infinite divisibility.
- List the five essential substances (qi, jing, shen, blood, body fluid).
- Match the five essential substances to their written descriptions.
- Define the term qi (also chi and ki).
- Match the five primary functions of qi in the body to their written descriptions: transformation, movement, stabilization, protection, warmth.
- List three forms of outside energy that might alter the flow of qi in and around the body to influence health and wellness (e.g., changing of the seasons, nutritional value of food, the quality of the air, pathogens, environmental factors like cold and damp, etc.).
- List two reasons that "disharmony of qi" arises in the body (e.g., deficient qi, collapsed or sinking qi, stagnant or excess qi, rebellious qi, etc.).

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

- Explain in one's own words the goal of treatment in Asian bodywork therapies (e.g., promote the harmonious flow of qi through and around the body to positively influence health and wellness, etc.).
- List the five elements (wood, fire, earth, metal, water).
- Match each of the five elements to written descriptions of the physical, mental, emotional, and spiritual characteristics of people.
- Define the term *promoting relationships* in relationship to the five elements.
- Define the term *controlling relationships* in relationship to the five elements.
- Define the term *meridian system*.
- Define the term *acupoint*.
- On diagrams of the body draw the twelve primary channels of the meridian system and their acupoints.
- List three assessment methods commonly used in Asian bodywork therapies (e.g., observation, listening, asking, touching, etc.).
- Match these common assessment methods to their written descriptions: observation, listening, asking, touching.
- Explain in one's words the role of bodywork in Traditional Chinese/Japanese Medicine (e.g., originally, bodywork was one form of treatment used by TCM doctors along with a number of other treatments forms, etc.).

Level 2	Knowledge: Use and Connect	Psychomotor: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture, or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	<ul> <li>Discuss broadly the development of Traditional Chinese/Japanese Medicine and its relationship with modern practices of Asian bodywork therapies.</li> </ul>	
	<ul> <li>Discuss the concepts of yin and yang and phenomena classified as yin and yang.</li> </ul>	
	<ul> <li>Discuss principles of yin and yang including opposition, interdependence, consuming and supporting relationship, intertransformation, and infinite divisibility.</li> </ul>	
	• Discuss the five essential substances.	
	<ul> <li>Discuss qi and the primary functions of qi in the body.</li> </ul>	
	<ul> <li>Discuss forms of outside energy that alter the flow of qi in and around the body.</li> </ul>	
	<ul> <li>Discuss factors that cause "disharmony of qi" to arise in the body.</li> </ul>	
	<ul> <li>Discuss the primary goal of treatment in Asian bodywork therapies.</li> </ul>	
	<ul> <li>Discuss the five elements and their relationship to the physical, mental, emotional, and spiritual characteristics of people.</li> </ul>	
	<ul> <li>Discuss promoting relationships and controlling relationships as they correspond to the five elements.</li> </ul>	
	<ul> <li>Discuss the meridian system, the twelve primary channels, and acupoints and their use in Asian bodywork therapies.</li> </ul>	
	<ul> <li>Discuss the assessment methods commonly used in Asian bodywork therapies.</li> </ul>	
	<ul> <li>Discuss the role of bodywork in Traditional Chinese/Japanese Medicine and the practice of Asian bodywork therapies in the United States.</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Shiatsu**

Level 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *shiatsu*.
- Recall two historical events or people related to the development of shiatsu as a form of Asian bodywork therapies.
- List two primary benefits or effects of shiatsu for clients.
- List two assessment methods used to assess clients before use of shiatsu methods.
- List six instructor-selected methods used in shiatsu.
- Match instructor-selected methods used in shiatsu to their written descriptions.
- List four general cautions, conditions, or situations that require session adaptations for shiatsu.
- List five conditions that contraindicate the use of shiatsu.
- List three general guidelines for the application of shiatsu (e.g., work from the hara, shiatsu applied to a fully dressed client without lubricant, etc.).

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the use of kneeling or squatting stances used to apply shiatsu methods to a client on a mat.
- Imitate the methods an instructor used to work from hara during application of shiatsu methods.
- Imitate the correct application of instructorselected shiatsu methods on all appropriate body areas.
- Imitate the sequencing of shiatsu methods used by the instructor.
- Explore options for each shiatsu method as appropriate:
  - Pacing: Apply methods at fast, moderate, and slow speeds as appropriate.
  - Depth: Apply methods at light, moderate, and deep depths as appropriate.
  - Anatomical tools: Try methods using different "anatomical tools" as appropriate.
  - Variations: Try variations of methods as appropriate.
- Imitate the sequencing of body regions and enhancing methods used by the instructor to perform a fluid and refined shiatsu session.
- Pay attention to palpatory sensations that signal that ki harmony is changing during the application of methods.
- Imitate the language an instructor used to communicate effectively with clients about depth, pace, and the comfort of shiatsu methods.
- Correct one's body mechanics based on instructor feedback.

#### **Knowledge: Use and Connect**

#### **Psychomotor: Practice and Refine**

#### Apply

**Conditions:** Having participated in an interactive lecture, or classroom activity, the learner will be able to:

- Discuss historical events or people related to the development of shiatsu as a form of Asian bodywork therapies.
- Discuss the primary benefits or effects of shiatsu for clients.
- Discuss assessment methods used to assess clients before the use of shiatsu methods.
- Discuss instructor-selected methods used in shiatsu including their therapeutic benefits and effects.
- Discuss cautions, contraindications, or session adaptations for shiatsu.
- Discuss general guidelines for the application of shiatsu (e.g., work from the hara, shiatsu applied to a fully dressed client without lubricant, etc.).

**Conditions:** Having completed a practice session, the learner will be able to:

- Practice the use of kneeling or squatting stances used to apply shiatsu methods to a client on a mat.
- Practice the methods an instructor used to work from hara during application of shiatsu methods.
- Practice the correct application of instructorselected shiatsu methods on all appropriate body areas.
- Practice the effective sequencing of shiatsu methods.
- Practice options for each shiatsu method as appropriate:
  - Pacing: Apply methods at fast, moderate, and slow speeds as appropriate.
  - Depth: Apply methods at light, moderate, and deep depths as appropriate.
  - Anatomical tools: Apply methods using different "anatomical tools" as appropriate.
  - Variations: Use variations of methods as appropriate.
- Demonstrate the sequencing of body regions and enhancing methods used by the instructor to perform a fluid and refined shiatsu session.
- Pay attention to palpatory sensations that signal that ki harmony is changing during the application of methods.
- Use effective language to communicate with clients about depth, pace, and comfort of shiatsu methods.
- Correct one's body mechanics based on instructor feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:</li> <li>Work from a Eastern therapeutic paradigm to integrate methods into a fluid and refined 1-hour general shiatsu session working from the hara, using an effective sequencing of shiatsu methods that are applied correctly, and with attention to time management, safe and comfortable client positioning, professional and effective client communication, and proper body mechanics.</li> </ul>

	Subject- Massage and Bodywork Application,	Topic – Eastern Integration of Application Methods
	opic: Tuina	
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Define the term tuina (or tui na).</li> <li>Recall two historical events or people related to the development of tuina as a form of Asian bodywork therapies.</li> <li>List two primary benefits or effects of tuina for clients.</li> <li>List two assessment methods used to assess clients before use of tuina methods.</li> <li>List six instructor-selected methods used in tuina.</li> <li>Match instructor-selected methods used in tuina to their written descriptions.</li> <li>List four general cautions, conditions, or situations that require session adaptations for tuina.</li> <li>List five conditions that contraindicate the use of tuina.</li> <li>List three general guidelines for the application of tuina (e.g., tuina is applied to a fully dressed client without lubricant, etc.).</li> </ul>	<ul> <li>Conditions: Having viewed an instructor demonstration, the learner will be able to:</li> <li>Imitate the correct application of instructor-selected tuina methods on all appropriate body areas.</li> <li>Imitate the sequencing of tuina methods used by the instructor.</li> <li>Explore options for each tuina method as appropriate: <ul> <li>Pacing: Apply methods at fast, moderate, and slow speeds as appropriate.</li> <li>Depth: Apply methods at light, moderate, and deep depths as appropriate.</li> <li>Anatomical tools: Try methods using different "anatomical tools" as appropriate.</li> <li>Variations: Try variations of methods as appropriate.</li> <li>Imitate the sequencing of body regions and enhancing methods used by the instructor to perform a fluid and refined tuina session.</li> <li>Pay attention to palpatory sensations that signal that client energy is shifting during the application of methods.</li> <li>Imitate the language an instructor used to communicate effectively with clients about depth, pace, and comfort of tuina methods.</li> <li>Correct one's body mechanics based on instructor feedback.</li> </ul> </li> </ul>
Level 2	Knowledge: Use and Connect	Psychomotor: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture, or classroom activity, the learner will be able to:	Conditions: Having completed a practice session, the learner will be able to:  • Practice the correct application of instructor

Discuss historical events or people related to

 Practice the correct application of instructorselected tuina methods on all appropriate body areas.

- Discuss the primary benefits or effects of tuina for clients.
- Discuss assessment methods used to assess clients before the use of tuina methods.
- Discuss instructor-selected methods used in tuina including their therapeutic benefits and effects.
- Discuss cautions, contraindications, or session adaptations for tuina.
- Discuss general guidelines for the application of tuina.

- Practice the effective sequencing of tuina methods.
- Practice options for each tuina method as appropriate:
  - Pacing: Apply methods at fast, moderate, and slow speeds as appropriate.
  - Depth: Apply methods at light, moderate, and deep depths as appropriate.
  - Anatomical tools: Apply methods using different "anatomical tools" as appropriate.
  - Variations: Use variations of methods as appropriate.
- Demonstrate the sequencing of body regions and enhancing methods used by the instructor to perform a fluid and refined tuina session.
- Pay attention to palpatory sensations that signal that client energy is shifting during the application of methods.
- Use effective language to communicate with clients about depth, pace, and comfort of tuina methods.
- Correct one's body mechanics based on instructor feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:</li> <li>Work from a Eastern therapeutic paradigm to integrate methods into a fluid and refined 1-hour general tuina session using an effective sequencing of tuina methods that are applied correctly, and with attention to time management, safe and comfortable client positioning, professional and effective client communication, and proper body mechanics.</li> </ul>

# **Sub-Topic: Thai Massage**

Level 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *Thai massage*.
- Recall two historical events or people related to the development of Thai massage as a form of Asian bodywork therapies.
- List two primary benefits or effects of Thai massage for clients.
- List two assessment methods used before Thai massage methods.
- List six instructor-selected methods used in Thai massage.
- Match instructor-selected methods used in Thai massage to their written descriptions.
- List four general cautions, conditions, or situations that require session adaptations for Thai massage.
- List five conditions that contraindicate the use of Thai massage.
- List three general guidelines for the application of Thai massage (e.g., Thai massage is applied to a fully dressed client without lubricant who reclines on a mat, etc.).

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the correct application of instructorselected Thai massage methods on all appropriate body areas.
- Imitate the sequencing of Thai massage methods used by the instructor.
- Explore options for each Thai massage method as appropriate:
  - Pacing: Apply methods at fast, moderate, and slow speeds as appropriate.
  - Depth: Apply methods at light, moderate, and deep depths as appropriate.
  - Anatomical tools: Try methods using different "anatomical tools" as appropriate.
  - Variations: Try variations of methods as appropriate.
- Imitate the sequencing of body regions and enhancing methods used by the instructor to perform a fluid and refined Thai massage session.
- Pay attention to palpatory sensations that signal that client energy is shifting during the application of methods.
- Imitate the language an instructor used to communicate effectively with clients about depth, pace, and comfort of Thai massage methods.
- Correct one's body mechanics based on instructor feedback.

Level 2	Knowledge: Use and Connect	Psychomotor: Practice and Refine
Level 2 Apply	<ul> <li>Conditions: Having participated in an interactive lecture, or classroom activity, the learner will be able to:</li> <li>Discuss historical events or people related to the development of Thai massage as a form of Asian bodywork therapies.</li> <li>Discuss the primary benefits or effects of Thai massage for clients.</li> <li>Discuss assessment methods used before Thai massage methods.</li> <li>Discuss instructor-selected methods used in Thai massage including their therapeutic benefits and effects.</li> <li>Discuss cautions, contraindications, or session adaptations for Thai massage.</li> <li>Discuss general guidelines for the application of Thai massage.</li> </ul>	Psychomotor: Practice and Refine  Conditions: Having completed a practice session, the learner will be able to:  Practice the correct application of instructor-selected Thai massage methods on all appropriate body areas.  Practice the effective sequencing of Thai massage methods.  Practice options for each Thai massage method as appropriate:  Pacing: Apply methods at fast, moderate, and slow speeds as appropriate.  Pepth: Apply methods at light, moderate, and deep depths as appropriate.  Anatomical tools: Apply methods using different "anatomical tools" as appropriate.  Variations: Use variations of methods as appropriate.
		Variations: Use variations of methods as

instructor feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
	e are no relevant learning objectives for this opic in 3 of the cognitive domain.	<ul> <li>Conditions: Having completed practice sessions, the learner will be able to:</li> <li>Work from a Eastern therapeutic paradigm to integrate methods into a fluid and refined 1-hour general Thai massage session using an effective sequencing of Thai massage methods that are applied correctly, and with attention to time management, safe and comfortable client positioning, professional and effective client communication, and proper body mechanics.</li> </ul>

	Entry-Level Education Blueprint  Palpation and Movement
Topic	Orientation to Palpation and Movement
Sub-Topics	<ul><li>Developing Palpation Skills</li><li>Basics of Human Movement</li></ul>
Topic	The Shoulder and Arm
Sub-Topics	<ul> <li>Bones and Bony Landmarks</li> <li>Joints, Ligaments, and Range of Motion</li> <li>Muscles and their Actions</li> </ul>
Topic	The Elbow, Forearm, Wrist, and Hand
Sub-Topics	<ul> <li>Bones and Bony Landmarks</li> <li>Joints, Ligaments, and Range of Motion</li> <li>Muscles and their Actions</li> </ul>
Topic	The Spine and Thorax
Sub-Topics	<ul> <li>Bones and Bony Landmarks</li> <li>Joints, Ligaments, and Range of Motion</li> <li>Muscles and their Actions</li> </ul>
Topic	The Head, Neck, and Jaw
Sub-Topics	<ul> <li>Bones and Bony Landmarks</li> <li>Joints, Ligaments, and Range of Motion</li> <li>Muscles and their Actions</li> </ul>
Topic	The Pelvis and Hip
Sub-Topics	<ul> <li>Bones and Bony Landmarks</li> <li>Joints, Ligaments, and Range of Motion</li> <li>Muscles and their Actions</li> </ul>
Topic	The Thigh and Knee
Sub-Topics	<ul> <li>Bones and Bony Landmarks</li> <li>Joints, Ligaments, and Range of Motion</li> <li>Muscles and their Actions</li> </ul>

Topic	The Leg, Ankle, and Foot
Sub-Topics	<ul> <li>Bones and Bony Landmarks</li> <li>Joints, Ligaments, and Range of Motion</li> <li>Muscles and their Actions</li> </ul>

# **Topic: Orientation to Palpation and Movement**

# Learning Outcomes

**Conditions:** Having completed 4 hours of instruction on an orientation to palpation and movement, the learner is expected to:

• Demonstrate knowledge of the key terms and concepts related to the development of palpation skills and the basics of human movement on a written examination.

#### **Key Terminology and Concepts**

- Abduction
- Active range of motion
- Adduction
- Adhesion
- Agonists
- Amphiarthrotic
- Anatomical restrictions
- Anatomical tools
- Antagonists
- Anterior
- Anterior tilt
- Attachment sites
- Ball and socket
- Bilateral
- Bone
- Bony landmarks
- Bursae
- Bursitis
- Cartilaginous
- Cognitive skills
- Communication skills
- Concentric contraction
- Conductivity
- Contractility
- Coxal
- Deep
- Depression
- Diarthrotic
- Distal
- Downward rotation
- Eccentric contraction
- Elasticity
- Elevation
- Ellipsoid/condyloid
- Eversion
- Excitability

- Joint capsule
- Joint cavity
- Joints
- Kinesthetic skills
- Lateral
- Lateral flexion
- Lateral (external) rotation
- Layers of tissue
- Ligaments
- Longitudinal axis
- Medial
- Medial (internal) rotation
- Motor unit recruitment
- Muscle bellies
- Muscle spindle
- Muscles
- Palpate
- Palpation
- Passive range of motion
- Physical characteristics
- Physiological restrictions
- Pivot
- Posterior
- Posterior tilt
- Proprioception
- Protraction
- Proximal
- Quality of movement
- Radiocarpal joint
- Radioulnar joint
- Range of motion
- Resisted range of motion
- Restricted
- Retraction
- Rotation
- Scapulothoracic joint

- Extensibility
- Extension
- Fascia
- Fast twitch fibers
- Fiber direction
- Fibrous
- Firm end feel
- Flexion
- Frontal axis
- Frontal plane
- Glenohumeral joint
- Gliding
- Golgi tendon organ
- Hard end feel
- Hinge
- Healthy
- Humeroradial joint
- Humeroulnar joint
- Hypertonic
- Hypotonic
- Inferior
- Inflammation
- Intermediate fibers
- Inversion
- Irregular
- Isometric contraction
- Isotonic

- Saddle
- Sagittal axis
- Sagittal plane
- Skeletal muscles
- Slow twitch fibers
- Smooth
- Soft end feel
- Spinal joints
- Structural asymmetry
- Superficial
- Superficial fascia
- Superior
- Symmetry
- Synarthrotic
- Synergists
- Synovial
- Synovial fluid
- Synovial membrane
- Talocrural joint
- Target muscle
- Temperature differences
- Tendons
- Tissue quality
- Tissue texture
- Transverse plane
- Upward rotation

#### **Use of Terms**

The terms used in this subject appear to be consistent and widely accepted.

#### **Sub-Topics**

- Developing Palpation Skills
- Basics of Human Movement

# **Sub-Topic: Developing Palpation Skills**

Level 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having read assigned material, participated in a lecture, and completed a written assignment, the learner will be able to:

- Define the term palpation.
- List three or more reasons massage
  therapists should develop good palpation
  skills (e.g., better understand the health of
  the client's tissue, locate specific structures,
  compare tissue from one session to the next,
  choose effective techniques during a
  massage, inform session goal setting, etc.).
- List three anatomical "tools" massage therapists use to palpate tissue (e.g., fingertips, palms, knuckles, forearms, elbows, etc.).
- List three general goals of palpation (e.g., detect irregularity in tissue textures, detect irregularity in tissue tone, sense differences in tissue temperature, notice variations in tissue hydration, spot structural asymmetry, identify restrictions that are causing a reduction in range of motion, recognize areas that are painful, locate a specific structure, identify fiber direction of a muscle to apply a specific technique correctly, distinguish between changes in tissue from the beginning of a session to the end of a session, etc.).
- Match these general palpation skills to their written descriptions: cognitive skills (e.g., the knowledge that informs touch such as the ability to name body landmarks in a particular region), kinesthetic discrimination skills (e.g., the ability to sense, feel and interpret normal and altered qualities of the body's tissues such as temperature, texture, fiber direction, density, depth, hydration, and tone, etc.), communication skills (e.g., the ability to use correct terminology and name sensations so that perceptions of tissue can be categorized and analyzed more easily, etc.).

**Conditions:** With ongoing guidance from an instructor during one or more palpation activities, the learner will be able to:

- Imitate the methods an instructor uses and notice physical characteristics during a palpation exploration:
  - Sense possible temperature differences when palpating regions of the body (e.g., some regions may feel noticeably warmer while others feel noticeably cooler).
  - Sense tissue quality and notice tissue variations during palpation of the skin's surface (e.g., notice dryness, moistness, bumps, roughness, decreased elasticity, skin color, skin temperature, etc.).
  - Sense tissue quality and notice tissue variations during palpation of the superficial fascia (e.g., notice if lymph nodes can be felt, amount of "lift," if fascia is "glued down," can it glide easily over underlying muscle, etc.).
  - Sense tissue quality and notice tissue variations during palpation of bony landmarks (e.g., notice that bones feel hard, have irregular shapes with knobs, grooves, holes, spines, depressions, and angles, etc.).
  - Sense tissue quality and notice tissue variations during palpation of skeletal muscles (e.g., notice that muscles are layered and that deeper muscles are palpated by dropping through superficial layers, notice if muscles glide easily past or over one another, notice the differences between muscle bellies and where the muscle transitions into tendon at attachment sites, notice if the edges of muscles can be felt, notice if muscle feels "plump," "springy," "full," "pliable," "dense," "hard," "ropey," etc.).

- Match these specific palpation skills to examples of each skill in action:
  - Locate a specific structure through touch (e.g., find the gastrocnemius).
  - Differentiate between two structures in the same region (e.g., "I know that I am on the teres minor and not on the infraspinatus because...", etc.).
  - Differentiate layers of tissue through touch (e.g., "I know I have sunk through the gluteus maximus to palpate the piriformis because...", etc.).
  - Assess the quality or condition of softtissue structures through touch (e.g., the ability to recognize if a muscle is hypertonic, hypotonic, or healthy).
  - Make comparisons between tissues bilaterally, before and after sessions, or from one session to another through touch (e.g. "the right scalene feels like X while the left scalene feels like Y").
  - Verbally describe palpable findings using the correct pronunciation of structure names and technical language (e.g., "There is a palpable hypertonicity in the muscle just inferior to the proximal attachment site").
  - Verbally describe palpable findings using a rich vocabulary of personal descriptive words (e.g., "This tendon feels bound, ropy, and grainy").

- Sense tissue quality and notice tissue variations during palpation of tendons and ligaments (e.g., notice that tendon feels smoother and denser than muscle, notice that ligaments tend to feel taut regardless of the position of the joint, etc.).
- Verbally describe three palpable findings for each palpation step during a palpation exploration (e.g., describe the muscle as feeling "plump," "springy," "full," "pliable," "dense," "hard," "ropey," etc.).

Outline a specific step-by-step approach to the palpation of a region (e.g., the school or instructor should determine the approach students are expected to take when palpating structures in a region; in a general example one approach might be to (a) review the anatomical structures present in a specific region and make a list of structures to palpate, (b) look at the surface area of the region to palpate and visualize the structures using a textbook, (c) use a full palmar surface to palpate, (d) work from superficial layers to deeper layers, (e) palpate "normal" first, (f) palpate muscle tissue in at least two different directions, (g) utilize isometric muscle contractions to make the target muscle easier to identify, (h) ask the client to give feedback on the sensations noticed while the tissue is palpated).

#### Level 2 Knowledge: Use and Connect

#### Apply

**Conditions:** Having participated in a class discussion and completed an activity, the learner will be able to:

- Discus three or more reasons massage therapists should develop good palpation skills (e.g., to better understand the health of the client's tissue, to locate specific structures, to compare tissue from one session to the next, to support the therapist in choosing effective techniques during a massage, to inform session goal setting, etc.).
- Discuss the general goals of palpation (see the example list of general goals of palpation in level 1).
- Discuss general palpation skills and their components (e.g., cognitive skills, kinesthetic differentiation skills, and communication skills).
- Discuss specific palpation skills and their components (see the example list of specific palpation skills in level 1).
- Compare and contrast palpable findings noticed when palpating these structures: skin's surface, superficial fascia, skeletal muscle, tendon, ligament, and bones (e.g., how do you know you're on a tendon and not a muscle?).

#### **Skills: Practice and Refine**

**Conditions:** Having completed a written outline of the school's or instructor's approach to palpation, the learner will be able to use it in one or more practice sessions. For example:

- Identify one region to palpate and list palpable anatomical structures present in that region.
- Look at the surface area of the selected region and visualize the superficial structures.
- Verbally describe temperature differences in the region while palpating the body's surface.
- Verbally describe palpable findings while palpating the skin's surface in the selected region.
- Verbally describe palpable findings while palpating the superficial fascia in the selected region.
- Palpate bony landmarks in the selected region.
- Palpate the muscle bellies, attachment sites, edges, and fiber directions of three superficial muscles in the selected region.

- Verbally describe palpable findings related to quality of tissue while palpating superficial muscles in the selected region.
- Palpate the muscle bellies, attachment sites, edges, and fiber directions of three deeper muscles in the selected region.
- Verbally describe palpable findings related to quality of tissue while palpating deeper muscles in the selected region.
- Verbally describe palpable findings related to muscle differences while palpating one muscle on the left and the same muscle on the right in the selected region.
- Palpate ligaments in the selected region.
- Verbally describe palpable findings that differentiate tendon, muscle, and ligament.
- Use passive range of motion to palpate quality of movement in joints located in the selected region.
- Verbally describe palpable findings while palpating the passive range of motion of one or more joints.
- Utilize isometric contractions midway through the joint's range of motion in order to make the target muscle easier to identify through palpation.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Basics of Human Movement**

Level 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having participated in an interactive review, the learner will be able to:

- Review the structures involved in human movement (joint, bone, ligament, muscle, tendon, fascia).
- Review the function that each of these structures play in human movement: bone, ligament, muscle, tendon, and fascia.
- Review these directional terms: *superior*, *inferior*, *posterior*, *anterior*, *proximal*, *distal*, *lateral*, *medial*, *superficial*, *deep*.
- Review these body planes: sagittal plane, frontal plane, transverse plane.
- Review these axes: frontal axis, sagittal axis, longitudinal axis.
- Match each plane (sagittal, frontal, transverse) and axis (frontal, sagittal, and longitudinal) to these movements: flexion, extension, abduction, adduction, rotation (e.g., sagittal plane and frontal axis would be matched with flexion, etc.).
- Review the structure and function of bones as they relate to movement (e.g., bones act as rigid levers upon which muscles pull to produce movement; bones articulate to form joints; when the body is stationary, bones, muscles, and outside forces such as gravity work to maintain the body's position in space; etc.).
- Review the three categories used to describe a joint's structure (e.g., fibrous, cartilaginous, and synovial).
- Review the three categories used to describe a joint's function (e.g., synarthrotic, amphiarthrotic, diarthrotic).
- Review the unique features related to the structure of synovial joints (e.g., joint capsule including the fibrous capsule and synovial membrane, synovial fluid, joint cavity, bursae, articular cartilage, fibrous cartilage, etc.).

**Conditions:** While working with a peer and consulting a textbook as needed, the learner will be able to:

- Move his or her body actively through these actions:
  - Flexion and extension of the neck at the cervical spinal joints.
  - Right and left lateral flexion of the neck at the cervical spinal joints.
  - Right and left rotation of the neck at the cervical spinal joints.
  - Flexion and extension of the trunk at the spinal joints.
  - Right and left lateral flexion of the trunk at the spinal joints.
  - Right and left rotation of the trunk at the spinal joints.
  - Posterior tilt of the pelvis at the lumbosacral joint and coxal joints while standing.
  - Anterior tilt of the pelvis at the lumbosacral joint and coxal joints while standing.
  - Flexion and extension of the thigh at the coxal joint.
  - Abduction and adduction of the thigh at the coxal joint.
  - Lateral and medial rotation of the thigh at the coxal joint.
  - Flexion and extension of the leg at the tibiofemoral joint.
  - Lateral and medial rotation of the leg at the tibiofemoral joint.
  - Dorsiflexion and plantar flexion of the foot at the talocrural joint.
  - Eversion and inversion of the foot at the tarsal joints.

- Review synovial joint types that allow different movement possibilities (ball and socket, hinge, pivot, ellipsoid/condyloid, saddle, gliding).
- Review the properties of skeletal muscle (extensibility, elasticity, excitability, conductivity, contractility).
- Review the physiology of muscle contraction (e.g., how nerves and muscles communicate during muscle contraction).
- Review concepts related to motor unit recruitment.
- Review skeletal muscle fiber types (e.g., slow twitch fibers, fast twitch fibers, intermediate fibers, and distribution of fiber types).
- Review types of muscle contractions
   (isometric, isotonic, concentric, eccentric and
   integrating contraction types in human
   movement).
- Review muscle roles and relationships (agonists, synergists, antagonists).
- Review these terms: proprioception, range of motion.
- Match these proprioceptors to their written descriptions: muscle spindle, Golgi tendon organ.
- List two normal factors that naturally limit a joint's range of motion (e.g., anatomical restrictions caused by the structures that make up the joint, and physiological restrictions that limit the movement of a joint before anatomical restrictions are reached such as when muscles reach the extent of their ability to lengthen, etc.).
- Match the three different types of end feel (hard, soft, firm) to their written descriptions.
- Review two possible pathological restrictions that might abnormally limit a joint's range of motion (e.g., inflammation and fluid accumulation in the area, injury, adhesions in muscle or fascia, weakened muscles, degeneration of joint cartilage, bursitis, etc.).

- Elevation and depression of the scapula at the scapulothoracic joint
- Upward rotation and downward rotation of the scapula at the scapulothoracic joint.
- Protraction (abduction) and retraction (adduction) of the scapula at the scapulothoracic joint.
- Flexion and extension of the arm at the glenohumeral joint.
- Abduction and adduction of the arm at the glenohumeral joint.
- Lateral rotation and medial rotation of the arm at the glenohumeral joint.
- Flexion and extension of the forearm at the humeroulnar and humeroradial joint.
- Pronation and supination of the forearm at the radioulnar joint.
- Flexion and extension of the hand at the radiocarpal joint.
- Radial deviation (abduction) and ulnar deviation (adduction) of the hand at the radiocarpal joint.
- Sense movement quality while moving all joints listed above passively through their respective movements (e.g., notice if the movement feels free, smooth, full, or irregular, restricted, stiff, or shortened, etc.).

	<ul> <li>Review these terms and concepts related to range of motion: range of motion, active range of motion, passive range of motion, resisted range of motion.</li> </ul>	
	<ul> <li>Verbally describe each of these general movements: flexion, extension, abduction, adduction, lateral flexion, rotation.</li> </ul>	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	There are no relevant learning objectives for this sub-topic in level 2 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: The Shoulder and Arm**

# Learning Outcomes

**Conditions:** Having completed 9.5 hours of instruction on the shoulder and arm, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the shoulder and arm, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles and identify muscle fiber direction and muscle actions, on a practical evaluation.

### **Key Terminology and Concepts**

- Abduction
- Acromial end
- Acromioclavicular joint (AC)
- Acromioclavicular ligaments
- Acromion
- Action
- Adduction
- Antagonist
- Articulations
- Attachment sites
- Biceps brachii
- Body mechanics
- Brachialis
- Circumduction
- Clavicle
- Conoid
- Coracobrachialis
- Coracoid process
- Deltoid
- Deltoid tuberosity
- Depression
- Downward rotation
- Elevation
- Extension
- Fiber direction
- Flexion
- Frozen shoulder
- Glenohumeral joint (GH).
- Glenoid cavity
- Greater tubercle
- Head of the humerus
- Horizontal abduction
- Horizontal adduction

- Lateral edge
- Lateral rotation
- Latissimus dorsi
- Lesser tubercle
- Ligament
- Mechanical function
- Medial border
- Medial rotation
- Muscle bellies
- Origin
- Palpable findings
- Palpate
- Palpation
- Pectoralis major
- Pectoralis minor
- Physical characteristics
- Posture
- Pronunciation
- Protraction
- Range of motion
- Retraction
- Rhomboid major
- Rhomboid minor
- Rotation
- Scapula
- Scapulothoracic articulation (ST)
- Serratus anterior
- Shoulder separation
- Spine of the scapula
- Sternal end
- Sternoclavicular joint (SC)
- Sternum
- Subscapular fossa

- Humerus
- Inferior angle
- Infraglenoid tubercle
- Infraspinatus
- Infraspinous fossa
- Insertion
- Isometric muscle contraction
- Intertubercular groove
- Joint
- Labrum of the glenohumeral joint
- Landmarks
- Lateral border

- Subscapularis
- Superior angle
- Supraglenoid tubercle
- Supraspinatus
- Supraspinous fossa
- Teres major
- Teres minor
- Tissue quality
- Trapezoid
- Triceps brachii
- Upward rotation

# Use of Terms

The terms used in this subject appear to be consistent and widely accepted.

# Sub-Topics

- Bones and Bony Landmarks
- Joints, Ligaments, and Range of Motion
- Muscles and their Actions

# **Sub-Topic: Bones and Bony Landmarks**

Level 1

#### Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- List the three bones that make up the shoulder girdle (scapula, humerus, clavicle).
- Identify the bone that the medial end of the clavicle articulates with (sternum).
- Label these bones and/or landmarks of the shoulder and arm on diagrams with the aid of a reference book:
  - Scapula, acromion, coracoid process, superior angle, medial border, subscapular fossa, inferior angle, lateral border, infraglenoid tubercle, glenoid cavity, supraglenoid tubercle, infraspinous fossa, spine of the scapula, and supraspinous fossa.
  - ii. Humerus, greater tubercle, head of the humerus, lesser tubercle, intertubercular grove, deltoid tuberosity.
- iii. Clavicle, acromial end, sternal end.
- Label seven bones and/or landmarks from memory on a diagram of the shoulder and arm.

**Conditions:** With ongoing guidance from an instructor during one or more practice sessions, the learner will be able to:

- Imitate the instructor's pronunciation of the bones and/or landmarks of the shoulder and arm
- Imitate the instructor's palpation method while palpating the following bones and/or landmarks of the shoulder and arm on a physical model of the skeleton:
  - Scapula, spine of the scapula, acromion, medial border, inferior angle, superior angle, lateral border, infraspinous fossa, supraspinous fossa, subscapular fossa.
  - Humerus, greater tubercle, intertubercular groove, lesser tubercle.
  - c. Clavicle, acromial end, sternal end.
- Imitate the instructor's body mechanics and client positioning methods while palpating the following bones and/or landmarks of the shoulder and arm on a partner:
  - Scapula, spine of the scapula, acromion, medial border, inferior angle, superior angle, lateral border, infraspinous fossa, supraspinous fossa, subscapular fossa.
  - Humerus, greater tubercle, intertubercular groove, lesser tubercle.
  - Clavicle, acromial end, sternal end.

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

Apply

There are no relevant learning objectives for this sub-topic in level 2 of the cognitive domain.

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Correctly pronounce the names of bones and/or landmarks of the shoulder and arm.
- Demonstrate proper body mechanics and client positioning methods while palpating bones and/or landmarks of the shoulder and arm.

		<ul> <li>Locate through palpation eight instructor-selected bones and/or landmarks of the shoulder and arm.</li> <li>Compare and contrast palpable findings related to the physical characteristics of bones and/or landmarks of the shoulder and arm using correct technical language.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# Sub-Topic: Joints, Ligaments, and Range of Motion

evel 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

#### Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following joints/articulations of the shoulder complex on diagrams with the aid of a reference book: sternoclavicular joint (SC), acromioclavicular joint (AC), scapulothoracic articulation (ST), glenohumeral joint (GH).
- Define the SC joint by describing the joint type and the bones that articulate to make up the joint (e.g., the sternoclavicular joint is a gliding synovial joint where the sternal end of the clavicle articulates with the upper lateral edge of the sternum).
- Label the following major ligament(s) of the SC joint on diagrams with the aid of a reference book: costoclavicular ligament, interclavicular ligament, and anterior and posterior sternoclavicular ligaments.
- Name the movements possible at the SC joint (elevation, depression, protraction, retraction, and rotation).
- Define the AC joint by describing the joint type and the bones that articulate to make up the joint (e.g., the acromioclavicular joint is a gliding synovial joint in which the lateral aspect of the clavicle articulates with the acromion of the scapula).
- Label the following major ligaments of the AC joint on diagrams with the aid of a reference book: superior and inferior acromioclavicular ligaments, trapezoid, conoid.
- Name the movements possible at the AC joint (rotation of the clavicle, rotation of the scapula).
- Define the scapulothoracic articulation (e.g., the scapulothoracic articulation describes the movement of the scapula across the posterior surface of the thorax; it does not have the usual joint components and so is considered a false joint, etc.).

**Conditions:** With ongoing instructor guidance, the learner will be able to:

- Imitate the instructor's pronunciation of the names of the joints/articulations of the shoulder and arm.
- Imitate the instructor's pronunciation of the names of selected ligaments of the shoulder and arm.
- Imitate the instructor's body mechanics and client positioning methods while palpating the joints/articulations and ligaments of the shoulder and arm.
- Palpate the joints/articulations of the shoulder and arm using a reference book as a guide.
- Actively move one's own body through these movements of the shoulder using a reference book as a guide: flexion, extension, medial rotation, lateral rotation, abduction, adduction, horizontal abduction, horizontal adduction, circumduction, elevation, depression, retraction, protraction.
- Working with a partner, passively move the shoulder through these movements with guidance from the instructor: flexion, extension, medial rotation, lateral rotation, abduction, adduction, horizontal abduction, horizontal adduction, circumduction, elevation, depression, retraction, protraction.

- Name the movements possible at the scapulothoracic articulation (elevation, depression, adduction, abduction, upward rotation, downward rotation).
- Define the glenohumeral joint by describing the joint type and the bones that articulate to make up the joint (e.g., the glenohumeral joint is a ball and socket synovial joint consisting of the glenoid fossa of the scapula and the head of the humerus).
- Describe the function of the labrum of the glenohumeral joint (e.g., deepens the glenoid cavity to add stability to the joint, etc.).
- Name the movements possible at the glenohumeral joint (flexion, extension, abduction, adduction, medial rotation, lateral rotation, horizontal adduction, horizontal abduction and circumduction).

# Level 2 Knowledge: Use and Connect Skills: Practice and Refine

#### Apply

**Conditions:** Having participated in a classroom discussion, the learner will be able to:

- Discuss the structure of the following joints/articulations of the shoulder and arm: SC joint, AC joint, ST articulations, GH joint.
- Discuss the action of the following joints/articulations of the shoulder and arm: SC joint, AC joint, ST articulation, GH joint.
- Discuss basic dysfunction and injury related to the AC joint (e.g., a fall on the shoulder can tear the acromioclavicular ligament and cause the clavicle to ride on top of the acromion, called a shoulder separation, etc.).
- Discuss dysfunction and injury related to the glenohumeral joint (e.g., the joint is susceptible to dislocation and resulting longterm shoulder instability; the joint capsule may develop "frozen shoulder," the joint may experience impingement syndromes or bursitis, etc.).

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Correctly pronounce the names of instructor-selected structures of the shoulder and arm.
- Demonstrate proper body mechanics and client positioning methods while palpating structures of the shoulder and arm.
- Locate through palpation, each joint of the shoulder and arm.
- Locate through palpation, instructorselected ligaments of the shoulder and arm.
- Actively produce on one's own body the movements of the joints of the shoulder and arm from memory.
- Demonstrate on a partner the correct methods while passively moving the joints of the shoulder and arm through their available movements.

# Problem There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.

#### Skills: Naturalize and Adapt

There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Muscles and Their Actions**

evel 1 Knowledge: Attain and Comprehend

#### Skills: Observe and Imitate

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following muscles of the shoulder and arm on diagrams showing anterior, posterior, and lateral views and views showing both superficial and deep muscles: deltoid, supraspinatus, infraspinatus, teres minor, teres major, latissimus dorsi, rhomboid major, rhomboid minor, pectoralis major, serratus anterior, biceps brachii, triceps brachii, subscapularis, pectoralis minor, coracobrachialis, brachialis.
- Write out in correct technical language the origin, insertion, and actions of the following muscles of the shoulder and arm on a worksheet with guidance from a reference book: deltoid, supraspinatus, infraspinatus, teres minor, teres major, latissimus dorsi, rhomboid major, rhomboid minor, pectoralis major, serratus anterior, biceps brachii, triceps brachii.
- State the primary action and general location of the following muscles of the shoulder and arm: subscapularis, pectoralis minor, coracobrachialis, brachialis. (e.g., subscapularis: medial rotation, anterior surface of scapula).
- List three muscles that flex the shoulder joint (e.g., anterior deltoid, pectoralis major, biceps brachii, coracobrachialis, etc.).
- List three muscles that are antagonists to flexion at the shoulder joint (e.g., muscles that extend the shoulder joint).
- List three muscles that extend the shoulder joint (e.g., posterior deltoid, latissimus dorsi, teres minor, triceps brachii, etc.).
- List three muscles that are antagonists to extension at the shoulder joint (muscles that flex the shoulder joint).

- Imitate the instructor's pronunciation of the names of muscles of the shoulder and arm.
- Imitate the instructor's body mechanics and client positioning methods while palpating muscles and tendons of the shoulder and arm
- Imitate the methods an instructor uses to locate through palpation the muscle bellies and accessible attachment sites of muscles of the shoulder and arm.
- Try to palpate muscle bellies, tendons, and attachment sites of the following muscles of the shoulder and arm: deltoid, supraspinatus, infraspinatus, teres minor, teres major, latissimus dorsi, rhomboid major, rhomboid minor, pectoralis major, serratus anterior, biceps brachii, triceps brachii.
- Identify three easily palpated muscle bellies of the shoulder and arm.
- Identify two easily palpated attachment sites of muscles of the shoulder and arm.
- Identify two muscle bellies of the shoulder and arm that are more difficult to palpate or inaccessible.
- Identify four attachment sites of muscles of the shoulder and arm that are more difficult to palpate or inaccessible.
- Using a reference book as a guide, attempt to identify through palpation the edges and fiber directions of four muscles of the shoulder and arm.
- Using a reference book as a guide, attempt to identify through palpation one muscle that is deep to another in the shoulder and arm.

- List three muscles that perform medial rotation at the shoulder joint (e.g., pectoralis major, latissimus dorsi, teres major, anterior deltoid, etc.).
- List three muscles that are antagonists to medial rotation at the shoulder joint (muscles that laterally rotate the shoulder joint).
- List three muscles that perform lateral rotation at the shoulder joint (e.g., infraspinatus, teres minor, posterior deltoid).
- List three muscles that are antagonists to lateral rotation at the shoulder joint (muscles that medially rotate the shoulder joint).
- List two muscles that perform abduction at the shoulder joint (e.g., deltoid, supraspinatus, biceps brachii).
- List three muscles that are antagonists to abduction at the shoulder joint (muscles that adduct the shoulder joint).
- List three muscles that perform adduction at the shoulder joint (e.g., latissimus dorsi, pectoralis major, bicips brachii, triceps brachii, etc.).
- List two muscles that are antagonists to adduction at the shoulder joint (muscles that abduct the shoulder joint).
- List four muscles, each of which can perform one of the following movements of the shoulder: elevation, depression, protraction, and retraction (e.g., serratus anterior: protraction, etc.).
- List the four primary muscles that stabilize the scapula (rhomboids, trapezius, levator scapula, and serratus anterior).
- List the four muscles of the rotator cuff (supraspinatus, infraspinatus, teres minor, and subscapularis).

 Actively move one's body through the movements produced by each of the following muscles using a reference book as a guide: deltoid, supraspinatus, infraspinatus, teres minor, teres major, latissimus dorsi, rhomboid major, rhomboid minor, pectoralis major, serratus anterior, biceps brachii, triceps brachii, subscapularis, pectoralis minor, coracobrachialis, brachialis.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in a classroom discussion, the learner will be able to:	Conditions: Having participated in practice sessions, the learner will be able to:
	Discuss the origins, insertions, actions, and roles of the muscles of the shoulder and arm.	Correctly pronounce the names of muscles of the shoulder and arm.
	<ul> <li>Discuss palpable findings related to quality and condition of tissue and a comparison of tissue bilaterally from palpation sessions.</li> </ul>	Demonstrate proper body mechanics and client positioning methods while palpating muscles of the shoulder and arm.
	Discuss the implications of tissue quality and condition to muscular health, posture, and correct mechanical function of the shoulder	Locate through palpation the muscle bellies of five instructor-selected muscles of the shoulder and arm.
	<ul> <li>Discuss in a simple way the function of the four primary muscles that stabilize the</li> </ul>	Locate through palpation the attachment sites of one instructor-selected muscle of the shoulder and arm.
	scapula (e.g., the rhomboids, trapezius, levator scapula, and serratus anterior must contract to stabilize the scapula against the rib cage before the rotator cuff and deltoid	Identify through palpation the edges and fiber directions of two instructor-selected muscles of the shoulder and arm.
	<ul> <li>contract to elevate the arm).</li> <li>Discuss in a simple way the function of the rotator cuff muscles (e.g., they act to dynamically stabilize the genohumeral joint</li> </ul>	<ul> <li>Demonstrate correct body mechanics while passively moving a partner's body through the actions of four instructor-selected muscles of the shoulder and arm.</li> </ul>
	<ul> <li>dynamically stabilize the genohumeral joint especially when the arm is elevated).</li> <li>Discuss in a simple way common shoulder region muscular imbalances (e.g., a protracted shoulder can be caused by overdevelopment of the pectoralis and subscapularis and weakness in the rhomboids and middle trapezius, etc.).</li> </ul>	Palpate four muscles of the shoulder and arm bilaterally on a partner, and verbally describe physical characteristics in muscle quality.
		Palpate three muscles of the shoulder and arm consecutively on two partners, and verbally describe physical characteristics in muscle quality.
		Use an isometric muscle contraction to isolate five instructor-selected muscles of the shoulder and arm, using a reference book as a guide and with support from an instructor.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# Topic: The Elbow, Forearm, Wrist, and Hand

# Learning Outcomes

**Conditions:** Having completed 9.5 hours of instruction on the elbow, forearm, wrist, and hand, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the elbow, forearm, wrist, and hand, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, muscles and identify muscle fiber direction, and muscle actions, on a practical evaluation.

## **Key Terminology and Concepts**

- Abduction (radial deviation)
- Action
- Adduction (ulnar deviation)
- Annular ligament
- Antagonist
- Body mechanics
- Brachioradialis
- Capitate
- Capitulum
- Carpal ligament
- Carpal tunnel
- Carpals
- Carpometacarpal joints
- Coronoid fossa
- Coronoid process
- Distal interphalangeal joints
- Distal radioulnar joint
- Elbow
- Ellipsoid synovial
- Extension
- Extensor carpi radialis brevis
- Extensor carpi radialis longus
- Extensor carpi ulnaris
- Extensor digitorum
- Extensor retinaculum
- Fiber direction
- Flexion
- Flexor carpi radialis
- Flexor carpi ulnaris
- Flexor digitorum profundus
- Flexor digitorum superficialis
- Flexor retinaculum
- Forearm

- Medial condyle (trochlea)
- Medial epicondyle
- Medial supracondylar ridge
- Metacarpals
- Metacarpophalangeal joints
- Midcarpal joints
- Middle and distal interphalangeal joints
- Muscle bellies
- Neck
- Olecranon process
- Opposition
- Origin
- Palmar aponeurosis
- Palmaris longus
- Palpable findings
- Palpate
- Palpation
- Phalanges
- Physical characteristics
- Pisiform
- Posture
- Pronation
- Pronator teres
- Pronunciation
- Proximal
- Proximal interphalangeal joints
- Proximal radioulnar joint
- Radial collateral ligament
- Radial notch
- Radial tuberosity
- Radiocarpal joint
- Radius
- Saddle joint

- Hamate
- Hand
- Head
- Humeroradial joint
- Humeroulnar joint
- Humerus
- Interosseous membrane in the forearm
- Insertion
- Intercarpal joints
- Isometric muscle contraction
- Landmarks
- Lateral condyle (capitulum)
- Lateral epicondyle
- Lateral supracondylar ridge
- Lunate
- Mechanical function

- Scaphoid
- Shaft
- Styloid process
- Supination
- Supinator
- Synovial hinge
- Tissue quality
- Transverse carpal ligament
- Trapezium
- Trapezoid
- Triquetrum
- Trochlear notch
- Ulna
- Ulnar collateral ligament
- Wrist

## **Use of Terms**

The terms used in this subject appear to be consistent and widely accepted.

# **Sub-Topics**

- Bones and Bony Landmarks
- Joints, Ligaments, and Range of Motion
- Muscles and their Actions

# **Sub-Topic: Bones and Bony Landmarks**

Level :

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- List the two bones that make up the forearm (e.g., radius and ulna).
- Identify the bone that the radius and ulna articulate with to form the elbow joint (humerus).
- List the three groups of bones that make up the wrist and hand (carpals, metacarpals, and phalanges).
- Identify the carpal bones on a skeletal model of the elbow, forearm, wrist, and hand (triquetrum, lunate, scaphoid, trapezium, trapezoid, capitate, hamate, pisiform).
- Label these bones and/or landmarks of the elbow, forearm, wrist, and hand on diagrams with the aid of a reference book:
  - Humerus, medial condyle (trochlea), medial epicondyle, medial supracondylar ridge, coronoid fossa, lateral condyle (capitulum), lateral epicondyle, lateral supracondylar ridge.
  - Radius, head, neck, radial tuberosity, shaft, styloid process.
  - Ulna, olecranon process, trochlear notch, radial notch, coronoid process, shaft, head, styloid process.
  - Carpals.
  - Metacarpals.
  - Phalanges.
- Label eight bones and/or landmarks from memory on a diagram of the elbow, forearm, wrist, and hand.

**Conditions:** With ongoing guidance from an instructor during one or more practice sessions, the learner will be able to:

- Imitate the instructor's pronunciation of the bones and landmarks of the elbow, forearm, wrist, and hand.
- Imitate the instructor's palpation method while palpating the following bones and landmarks of the elbow, forearm, wrist, and hand on a physical model of the skeleton:
  - Humerus, medial epicondyle, medial supracondylar ridge, lateral epicondyle, lateral supracondylar ridge.
  - Radius, head, shaft, styloid process.
  - Ulna, olecranon process, shaft, styloid process.
  - Carpals as a group.
  - Metacarpals, heads, shafts.
  - Phalanges.
- Imitate the instructor's body mechanics and client positioning methods while palpating the following bones and/or landmarks of the elbow, forearm, wrist and hand on a partner:
  - Humerus, medial epicondyle, medial supracondylar ridge, lateral epicondyle, lateral supracondylar ridge.
  - Radius, head, shaft, styloid process.
  - Ulna, olecranon process, shaft, styloid process.
  - Carpals.
  - Metacarpals, heads, shafts.
  - Phalanges.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	There are no relevant learning objectives for this sub-topic in level 2 of the cognitive domain.	<b>Conditions:</b> Having participated in practice sessions, the learner will be able to:
		Correctly pronounce the names of bones and landmarks of the elbow, forearm, wrist, and hand.
		Demonstrate proper body mechanics and client positioning methods while palpating bones and landmarks of the elbow, forearm, wrist, and hand.
		Locate through palpation eight instructor- selected bones or landmarks of the elbow, forearm, wrist, and hand.
		Compare and contrast palpable findings related to the physical characteristics of bones and landmarks of the elbow, forearm, wrist, and hand using correct technical language.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# Sub-Topic: Joints, Ligaments, and Range of Motion

Level 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following joint(s) of the elbow, forearm, wrist, and hand on diagrams with the aid of a reference book: humeroulnar joint, humeroradial joint, proximal radioulnar joint, distal radioulnar joint, radiocarpal joint, midcarpal joints, carpometacarpal joints, metacarpophalangeal joints, proximal, middle and distal interphalangeal joints.
- Define the humeroulnar joint by describing the joint type and the bones that articulate to make up the joint (e.g., the humeroulnar joint is a synovial hinge joint where the trochlea of the humerus articulates with the trochlear notch of the ulna, etc.).
- Name the movements possible at the humeroulnar joint (flexion, extension).
- Define the humeroradial joint by describing the joint type and the bones that articulate to make up the joint (e.g., a synovial hinge joint formed between an articulation of the capitulum of the humerus and the head of the radius).
- Name the movements possible at the humeroradial joint (flexion, extension).
- Define the proximal and distal radioulnar joints by describing the joint type and the bones that articulate to make up these joints (e.g., synovial pivot joint formed between the radius and the ulna).
- Name the movements possible at the proximal and distal radioulnar joints (e.g., pronation and supination of the forearm involving the radius crossing over the ulna).
- Using a reference book, label these major ligaments of the elbow and forearm: ulnar collateral ligament, radial collateral ligament, annular ligament.
- Identify the location of the interosseous membrane in the forearm.

- Imitate the instructor's pronunciation of the names of the joints of the elbow, forearm, wrist, and hand.
- Imitate the instructor's pronunciation of the names of selected ligaments of the elbow, forearm, wrist, and hand.
- Imitate the instructor's body mechanics and client positioning methods while palpating the joints and ligaments of the elbow, forearm, wrist, and hand.
- Palpate the joint(s) of the elbow, forearm, wrist, and hand using a reference book as a guide.
- Palpate instructor-selected ligaments of the elbow joint using a reference book as a guide.
- Actively move one's own body through these movements of the humeroulnar and humeroradial joints using a reference book as a guide: flexion, extension.
- Actively move one's own body through these movements of the proximal and distal radioulnar joints using a reference book as a guide: supination, pronation.
- Actively move one's own body through these movements of the radiocarpal and intercarpal joints using a reference book as a guide: abduction (radial deviation), adduction (ulnar deviation), flexion, extension.
- Actively move one's own body through these movements of the metacarpophalangeal joints using a reference book as a guide: extension, flexion, abduction, adduction.
- Actively move one's own body through these movements of the proximal and distal interphalangeal joints using a reference book as a guide: extension, flexion.

- Define the radiocarpal joint by describing the joint type and the bones that articulate to make up the joint (e.g., the radiocarpal joint is an ellipsoid synovial joint where the distal end of the radius articulates with the proximal row of carpal bones).
- Define the intercarpal joints by describing the joint type and the bones that articulate to make up the joint (e.g., the intercarpal joints are synovial gliding joints made up by the articulation of the proximal row of carpals with the distal row of carpals).
- On a diagram label these major ligaments and structures of the wrist: transverse carpal ligament, flexor retinaculum, palmar aponeurosis, extensor retinaculum.
- Name the movements possible at the radiocarpal and intercarpal joints (e.g., the wrist has four basic movements: abduction, adduction, flexion, extension).
- Define the carpometacarpal joints by describing the joint type and the bones that articulate to make the joint (e.g., the carpometacarpal joints are formed by the distal row of carpal bones and the base of the metacarpals; the first carpometacarpal joint is the thumb and is described as a saddle joint with the following movements: flexion, extension, abduction, adduction, opposition).
- Define the metacarpophalangeal joints by describing the joint type and the bones that articulate to make up the joint (e.g., these joints are ellipsoid joints formed by articulations between the heads of metacarpals and the bases of the phalanges).
- Define the interphalangeal joints by describing the joint type and the bones that articulate to make up the joints (e.g., synovial hinge joints formed by articulations between the proximal and distal phalanges).
- Name the possible movements of the fingers (e.g., fingers: flexion, extension, adduction, abduction; thumb: flexion, extension, abduction, adduction, opposition).

- Actively move one's own thumb through opposition using a reference book as a guide.
- Working with a partner, passively move the humeroulnar and humeroradial joints through these movements with guidance from an instructor: flexion, extension.
- Working with a partner, passively move the proximal and distal radioulnar joints through these movements with guidance from an instructor: supination, pronation.
- Working with a partner, passively move the radiocarpal and intercarpal joints through these movements with guidance from an instructor: abduction (radial deviation), adduction (ulnar deviation), flexion, extension.
- Working with a partner, passively move the metacarpal phalangeal joints through these movements with guidance from an instructor: extension, flexion, abduction, adduction.
- Working with a partner, passively move the interphalangeal joints through these movements with guidance from an instructor: extension, flexion.
- Working with a partner, passively move the thumb through opposition with guidance from an instructor.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in a classroom discussion, the learner will be able to:</li> <li>Discuss the structure of the following joints of the elbow, forearm, wrist, and hand: humeroulnar joint, humeroradial joint, proximal radioulnar joint, distal radioulnar joint, radiocarpal joint, midcarpal joints, carpometacarpal joints, metacarpophalangeal joints, proximal, middle and distal interphalangeal joints.</li> </ul>	<ul> <li>Conditions: Having participated in practice sessions, the learner will be able to:</li> <li>Correctly pronounce the names of instructor-selected structures of the elbow, forearm, wrist, and hand.</li> <li>Demonstrate proper body mechanics and client positioning methods while palpating structures of the elbow, forearm, wrist, and hand.</li> </ul>
	<ul> <li>Discuss the action of the following joints of the elbow, forearm, wrist, and hand: humeroulnar joint, humeroradial joint, proximal radioulnar joint, distal radioulnar joint, radiocarpal joint, midcarpal joints, carpometacarpal joints, metacarpophalangeal joints, proximal and distal interphalangeal joints.</li> <li>Discuss simply the function of the transverse carpal ligament (e.g., forms part of the carpal tunnel through which the median nerve travels, along with the nine flexor tendons of the thumb and fingers).</li> </ul>	<ul> <li>Locate through palpation each joint of the elbow, forearm, wrist, and hand.</li> <li>Locate through palpation instructor-selected ligaments of the elbow, forearm, wrist, and hand.</li> <li>Actively produce in one's own body the movements of the joints of the elbow, forearm, wrist, and hand from memory.</li> <li>Demonstrate on a partner correct methods of passively moving the joints of the elbow, forearm, wrist, and hand through their available movements.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Muscles and Their Actions**

Level 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following muscles of the elbow, forearm, wrist, and hand on diagrams showing anterior, posterior, lateral views and views showing both superficial and deep muscles: brachioradialis, extensor digitorum, extensor carpi radialis longus, extensor carpi ulnaris, palmaris longus, flexor carpi ulnaris, flexor carpi radialis, extensor carpi radialis brevis, flexor digitorum superficialis, flexor digitorum profundus, pronator teres, supinator.
- Write out in correct technical language the origin, insertion, and actions of the following muscles of the elbow, forearm, wrist, and hand on a worksheet with guidance from a reference book: brachioradialis, extensor digitorum, extensor carpi radialis longus, extensor carpi ulnaris, palmaris longus, flexor carpi ulnaris, flexor carpi radialis.
- State the primary action and general location the following muscles of the elbow, forearm, wrist, and hand: extensor carpi radialis brevis, flexor digitorum superficialis, flexor digitorum profundus, pronator teres, supinator (e.g., pronator teres: forearm pronation, anterior/proximal forearm).
- List three muscles that flex the elbow joint (e.g., brachialis, biceps brachii, brachioradialis).
- List one muscle that is antagonistic to elbow flexion (any of the muscles that extend the elbow joint).
- List one muscle that extends the elbow joint (e.g., triceps brachii).
- List three muscles that are antagonists to elbow extension (muscles that flex the elbow joint).

- Imitate the instructor's pronunciation of the names of muscles of the elbow, forearm, wrist, and hand.
- Imitate the instructor's body mechanics and client positioning methods while palpating muscles and tendons of the elbow, forearm, wrist, and hand.
- Imitate the methods an instructor uses to locate through palpation the muscle bellies and accessible attachment sites of muscles of the elbow, forearm, wrist, and hand.
- Try to palpate muscle bellies, tendons, and attachment sites of these muscles of the elbow, forearm, wrist, and hand: brachioradialis, extensor digitorum, extensor carpi radialis longus, extensor carpi ulnaris, palmaris longus, flexor carpi ulnaris, flexor carpi radialis.
- Identify four easily palpated muscle bellies of muscles of the elbow, forearm, wrist, and hand.
- Identify four easily palpated tendons or attachment sites of the elbow, forearm, wrist, and hand.
- Identify two muscle bellies of the elbow, forearm, wrist, and hand that are more difficult to palpate or inaccessible.
- Identify four attachments sites of muscles of the elbow, forearm, wrist, and hand that are more difficult to palpate or inaccessible.
- Using a reference book as a guide, attempt to identify through palpation the edges and fiber directions of four muscles of the elbow, forearm, wrist, and hand.
- Using a reference book as a guide, attempt to identify through palpation one muscle that is deep to another in the elbow, forearm, wrist, and hand.

- List three muscles that extend the wrist joint (e.g., extensor carpi radialis longus, extensor carpi ulnaris, extensor carpi radialis brevis).
- List three muscles that are antagonists to wrist extension (the muscles that flex the wrist).
- List three muscles that flex the wrist joint (e.g., flexor carpi ulnaris, flexor carpi radialis, palmaris longus).
- List three muscles that are antagonists to wrist flexion (the muscles that extend the wrist).

- Verbally describe two palpable findings related to the quality and condition of five instructor-selected muscles of the elbow, forearm, wrist, and hand.
- Actively move one's body through the movements produced by each of the following muscles using a reference book as a guide: brachioradialis, extensor digitorum, extensor carpi radialis longus, extensor carpi ulnaris, palmaris longus, flexor carpi ulnaris, flexor carpi radialis, extensor carpi radialis brevis, flexor digitorum superficialis, flexor digitorum profundus, pronator teres, supinator.

#### Level 2 Knowledge: Use and Connect

#### Rhowledge: Use and Conne

# Apply Conditions: Having participated in a classroom discussion, the learner will be able to:

- Discuss the origins, insertions, actions, and roles of the muscles of the elbow, forearm, wrist, and hand.
- Discuss palpable findings related to quality and condition of the tissue and a comparison of the tissue bilaterally from palpation sessions.
- Discuss the implications of tissue quality and condition to muscular health, posture, and correct mechanical function of the elbow, forearm, wrist, and hand.

#### **Skills: Practice and Refine**

# **Conditions:** Having participated in practice sessions, the learner will be able to:

- Correctly pronounce the names of muscles of the elbow, forearm, wrist, and hand.
- Demonstrate proper body mechanics and client positioning methods while palpating muscles of the elbow, forearm, wrist, and hand.
- Locate through palpation the muscle bellies of five instructor-selected muscles of the elbow, forearm, wrist, and hand.
- Locate through palpation the attachment sites of three instructor-selected muscles of the elbow, forearm, wrist, and hand.
- Identify through palpation the edges and fiber direction of two instructor-selected muscles of the elbow, forearm, wrist, and hand.
- Demonstrate correct body mechanics while passively moving a partner's body through the actions of five instructor-selected muscles of the elbow, forearm, wrist, and hand.
- Palpate four muscles of the elbow, forearm, wrist, and hand bilaterally on a partner and verbally describe physical characteristics in muscle quality.

		<ul> <li>Palpate four muscles of the elbow, forearm, wrist, and hand consecutively on two partners and verbally describe physical characteristics in muscle quality.</li> <li>Use an isometric muscle contraction to isolate five instructor-selected muscles of the elbow, forearm, wrist, and hand, using a reference book as a guide and with support from an instructor.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: The Spine and Thorax**

# Learning Outcomes

**Conditions:** Having completed 9.5 hours of instruction on the spine and thorax, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the spine and thorax, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles, and identify muscle fiber direction and muscle actions, on a practical evaluation.

## **Key Terminology and Concepts**

- Action
- Angle
- Antagonist
- Anterior longitudinal ligament
- Articular facet
- Articulations
- Atlanto-axial joint
- Atlanto-occipital joint
- Atlas (C1)
- Attachment sites
- Axis (C-2)
- Body mechanics
- Body of the sternum
- Cervical vertebrae
- Clavicle
- Coccyx
- Collapse
- Costal cartilage
- Costochondral joints
- Costotransverse joints
- Costovertebral joints
- Depression
- Diaphragm
- Disc degeneration
- Disc disorders
- Elevation
- Erector spinae group
- Expansion
- External obliques
- External occipital protuberance
- False ribs 8-12
- First rib
- Floating ribs 11-12

- Ligamentum nuchae
- Longissimus
- Lumbar vertebrae
- Manubrium
- Mechanical function
- Multifidi
- Muscle bellies
- Neck
- Odontoid process
- Origin
- Palpable findings
- Palpate
- Palpation
- Passively
- Physical characteristics
- Posterior longitudinal ligament
- Posterior tubercle
- Posture
- Pronunciation
- Primary function
- Quadratus lumborum
- Rectus abdominis
- Respiratory diaphragm
- Ribs
- Rotatores
- Sacrum
- Scoliosis
- Skeleton
- Spinalis
- Spine
- Spinous processes
- Sternocostal joints
- Supraspinous ligament

- Head
- Hyperkyphosis
- Hyperlordosis
- Iliocostalis
- Inferior facets
- Insertion
- Internal obliques
- Interspinous ligament
- Intertransverse ligament
- Intervertebral discs
- Intervertebral joints
- Isometric muscle contraction
- Jugular notch of the sternum
- Lamina
- Lamina groove
- Landmarks

- Sternal angle
- Sternum
- Superior facets
- Thoracic vertebrae
- Thoracolumbar aponeurosis
- Thorax
- Tissue quality
- Transverse abdominis
- Transverse foramen
- Transverse processes
- True ribs 1-7
- Tubercle
- Vertebral foramen
- Vertebral spinous process
- Xiphoid process

## **Use of Terms**

The terms used in this subject appear to be consistent and widely accepted.

## **Sub-Topics**

- Bones and Bony Landmarks
- Joints, Ligaments, and Range of Motion
- Muscles and their Actions

# **Sub-Topic: Bones and Bony Landmarks**

Level 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

## Receive Respond

Conditions: Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- List the names and/or numbers of the 24 vertebrae of the vertebral column (atlas C1, axis C-2, cervical vertebrae C3-C7, thoracic vertebrae T1-T12, and lumbar vertebrae L1-L5).
- Define the term lamina groove.
- Label these bones and landmarks of the spine and thorax on diagrams with the aid of a reference book:
  - Anterior view of the spine and thorax: clavicle, ribs, costal cartilage, intervertebral discs, xiphoid process, body of the sternum, sternal angle, manubrium, first rib.
  - Posterior view of the spine and thorax: atlas, axis, C3-C7, T1-T12, L1-L5, ribs, sacrum, coccyx.
  - Lateral and superior views of the atlas (C-1): posterior tubercle, transverse process, transverse foramen, superior and inferior facets, articular facet for odontoid process, transverse process, vertebral foramen.
  - Lateral and superior views of the axis (C-2): spinous process, transverse process, transverse foramen, superior and inferior facets, odontoid process (or dens), vertebral foramen.
  - Lateral and superior view of a cervical vertebra: transverse process, spinous process, canal for spinal nerve, transverse foramen, body, lamina groove, superior and inferior facets.
  - Lateral and superior view of a thoracic vertebra: transverse process, superior and inferior facets, body, costal facets, spinous process, vertebral foramen, body, lamina groove, lamina.

Conditions: With ongoing guidance from an instructor during one or more practice sessions, the learner will be able to:

- Imitate the instructor's pronunciation of the bones and landmarks of the spine and thorax.
- Imitate the instructor's palpation method while palpating the following bones and landmarks of the spine and thorax on a physical model of the skeleton:
  - Vertebral spinous processes: cervical, thoracic, and lumbar.
  - Vertebral transverse processes: cervical, thoracic, and lumbar.
  - Lamina groove: cervical, thoracic, and lumbar.
  - C2 vertebra: differentiate between the spinous process and the external occipital protuberance.
  - Sternum: jugular notch, manubrium, body of the sternum, and xiphoid process.
  - Ribs and costal cartilage.
  - Twelfth rib: follow its shaft to the spinous process of T12.
- Imitate the instructor's body mechanics and client positioning methods while palpating the following bones and landmarks of the spine and thorax on a partner:
  - Vertebral spinous processes: cervical, thoracic, and lumbar.
  - Vertebral transverse processes: cervical.
  - Lamina groove: cervical, thoracic, and lumbar.
  - C2 vertebra: differentiate between the spinous process and the external occipital protuberance.

- Lateral and superior view of a lumbar vertebra: spinous process, transverse process, body, superior and inferior facets, lamina groove, vertebral foramen.
- Sternum: manubrium, body, xiphoid.
- Thorax: true ribs 1-7, false ribs 8-12, floating ribs 11-12.
- Rib: sternal end, vertebral end, head, neck, tubercle, angle (note: the first rib has no angle.).
- On a diagram of the spine and thorax, label ten instructor-selected bones and/or landmarks from memory.

- Sternum: jugular notch, manubrium, body of the sternum, and xiphoid process.
- Ribs and costal cartilage.
- Twelfth rib: follow its shaft to the spinous process of T12.
- Verbalize physical characteristics in the shape and spacing of the cervical, thoracic, and lumbar spinous processes (e.g., the spinus processes of the lumbar vertebrae are larger than the thoracic or cervical and there is more space between them, etc.).
- Verbalize physical characteristics in the shape and angle of the ribs and the spaces between them (e.g., notice how the angle of the ribs changes in different places, notice how the spaces between the ribs changes with a deep inward breath or exhalation, etc.).

## Level 2 **Knowledge: Use and Connect Skills: Practice and Refine** There are no relevant learning objectives for this **Conditions:** Having participated in practice Apply sessions, the learner will be able to: sub-topic in level 2 of the cognitive domain. Correctly pronounce the names of bones and landmarks of the spine and thorax. Demonstrate proper body mechanics and client positioning methods while palpating bones and landmarks of the spine and thorax. Locate through palpation ten instructorselected bones and/or landmarks of the spine and thorax. Locate through palpation the twelfth rib and follow its shaft to the spinous process of T12. Locate through palpation C2 and the external occipital protuberance. Compare and contrast palpable findings related to the physical characteristics of bones and landmarks of the spine and thorax using correct technical language (e.g., "the angle of this rib is different from the same rib on the left side, the spaces between these ribs on the left gets tighter during inhalation than the same ribs on the right," etc.).

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Subject - Palpation and Movement, Topic - The Spine and Thorax

# Sub-Topic: Joints, Ligaments, and Range of Motion

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following joints of the spine and thorax on diagrams with the aid of a reference book: atlanto-occipital joint, atlanto-axial joint, intervertebral joints, costotransverse joints, costovertebral joints, sternocostal joints, costochondral joints.
- Name the movements possible at the following joints:
  - Atlanto-occipital joint (slight flexion and extension for nodding movements, and slight lateral flexion of the head).
  - Atlanto-axial joint (e.g., the pivot of the odontoid process of the axis and anterior arch of the atlas allows rotation, flexion, extension, slight lateral flexion, slight rotation).
  - Cervical, thoracic and lumbar vertebral joints (flexion, extension, lateral flexion, rotation).
- Match these major ligaments of the spine to written descriptions of their functions: ligamentum nuchae, anterior longitudinal ligament, posterior longitudinal ligament, interspinous ligaments, supraspinous ligament, intertransverse ligaments.

- Imitate the instructor's pronunciation of the names of the joints of the spine and thorax.
- Imitate the instructor's pronunciation of the names of selected ligaments of the spine and thorax.
- Imitate the instructor's body mechanics and client positioning methods while palpating the joints and ligaments of the spine and thorax.
  - Joint: sternocostal.
  - Ligaments: ligamentum nuchae, supraspinous ligament.
- Verbally describe one physical characteristic when palpating the joints and ligaments of the spine and thorax (e.g., "I can feel the difference in texture as I move from the sternum to the branch of the rib").
- Using a reference book as a guide, actively move one's own body through these movements of the head and neck at the cervical vertebral joints: flexion, extension, lateral flexion, rotation.
- Using a reference book as a guide, actively move one's own body through these trunk movements of the vertebral joints: flexion, extension, rotation, lateral flexion.

		Using a reference book as a guide, actively move one's own body through these movements of the ribs: elevation/expansion, depression/collapse.
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in a classroom discussion, the learner will be able to:         <ul> <li>Discuss the general structure (articulations) of these joints of the spine and thorax: atlanto-occipital joint, atlanto-axial joint, intervertebral joints.</li> </ul> </li> <li>Discuss the function of these joints of the spine and thorax: atlanto-occipital joint, atlanto-axial joint, intervertebral joints.</li> <li>Discuss the functions of selected ligaments of the spine and thorax (e.g., the supraspinous ligament extends inferiorly from the ligamentum nuchae and continues down the spine to attach to the spinous processes of the thoracic and lumbar vertebrae and support the vertebral column, etc.).</li> <li>Discuss in a simple way common factors leading to disc disorders like degeneration of the vertebral facets or disc herniation.</li> </ul>	<ul> <li>Conditions: Having participated in practice sessions, the learner will be able to:         <ul> <li>Correctly pronounce the names of instructor-selected structures of the spine and thorax.</li> <li>Demonstrate correct body mechanics and client positioning methods while palpating the joints and ligaments of the spine and thorax.</li> </ul> </li> <li>Actively move one's body through the movements of the joints of the spine and thorax from memory.</li> <li>Passively move the joints of the cervical spine and thorax through their movements using correct methods (e.g., hold the head securely to provide safety and stability, etc.).</li> <li>Demonstrate these movements of the ribs in oneself: elevation/expansion, depression/collapse.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Muscles and Their Actions**

evel 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following muscles of the spine and thorax on diagrams showing anterior, posterior, and lateral views and views showing both superficial and deep muscles: rectus abdominis, external obliques, internal obliques, erector spinae group, quadratus lumborum, transverse abdominis, spinalis, longissimus, iliocostalis, multifidi, rotatores, respiratory diaphragm.
- Write out in correct technical language the origin, insertion, and actions of the following muscles of the spine and thorax on a worksheet with guidance from a reference book: rectus abdominis, external obliques, internal obliques, erector spinae group, quadratus lumborum.
- State the primary action and general location of the following muscles of the spine and thorax: transverse abdominis, spinalis, longissimus, iliocostalis, multifidi, rotatores, respiratory diaphragm. (e.g., transverse abdominis: compresses abdominal contents, abdominal region deep to internal obliques).
- Define the term thoracolumbar aponeurosis (e.g., a broad, flat tendon stretching across the thorax and lumbar regions).
- Name the primary function of the thoracolumbar aponeurosis (e.g., serves as an anchor for several muscles of the thorax and hips).
- List the three muscles of the erector spinae group (spinalis, longissimus, iliocostalis).
- List the four muscles commonly called the abdominals (rectus abdominis, external oblique, internal oblique, transverse abdominis).
- List two muscles that flex the torso (e.g., rectus abdominis, external oblique, internal oblique).

- Imitate the instructor's pronunciation of the names of muscles of the spine and thorax.
- Imitate the instructor's body mechanics and client positioning methods while palpating muscles and tendons of the spine and thorax.
- Imitate the methods an instructor uses to locate through palpation the muscle bellies and accessible attachment sites of muscles of the spine and thorax.
- Try to palpate muscle bellies, tendons, and attachment sites of the following muscles of the spine and thorax: rectus abdominis, external obliques, internal obliques, erector spinae group, quadratus lumborum.
- Identify three easily palpated muscle bellies of the spine and thorax.
- Identify two easily palpated attachment sites of muscles of the spine and thorax.
- Identify two muscle bellies of the spine and thorax that are more difficult to palpate or inaccessible.
- Identify four attachment sites of muscles of the spine and thorax that are more difficult to palpate or inaccessible.
- Using a reference book as a guide, attempt to identify through palpation the edges and fiber directions of four muscles of the spine and thorax.
- Using a reference book as a guide, attempt to identify through palpation one muscle that is deep to another in the spine and thorax.

- List two muscles that are antagonists to flexion of the torso (muscles that extend the torso).
- List two muscles that extend the torso (e.g., spinalis, longissimus, iliocostalis).
- List two muscles that are antagonists to extension of the torso (muscles that flex the torso).
- List two muscles that perform rotation of the torso (e.g., external oblique, internal oblique, multifidi, rotatores).
- List two muscles that perform lateral flexion of the torso (e.g., quadratus lumborum, iliocostalis, multifidi).
- Identify the primary function of the respiratory diaphragm. (e.g., increase space in thoracic cavity to create a vacuum that draws air into the lungs).

- Actively move one's body through the movements produced by each of the following muscles using a reference book as a guide: rectus abdominis, external obliques, internal obliques, erector spinae group, quadratus lumborum, transverse abdominis, spinalis, longissimus, iliocostalis, multifidi, rotatores, respiratory diaphragm.
- Use an isometric muscle contraction to isolate four instructor-selected muscles of the spine and thorax, using a reference book as a guide and with support from an instructor.

#### Level 2 Knowledge: Use and Connect

# Apply Conditions: Having pa

**Conditions:** Having participated in a classroom discussion, the learner will be able to:

- Discuss the origins, insertions, actions, and roles of the muscles of the spine and thorax.
- Discuss palpable findings related to quality and condition of tissue and a comparison of tissue bilaterally from palpation sessions.
- Discuss the implications of tissue quality and condition to muscular health, posture, and correct mechanical function of the spine and thorax.
- Discuss the role of the diaphragm in respiration.
- Discuss the structure and organization of the erector spinae group and the thoracolumbar aponeurosis.
- Discuss the structure, organization, and special function of the abdominal muscles (e.g., they form a muscular girdle through their span and overlapping arrangement that helps to stabilize the core of the body, etc.).

#### **Skills: Practice and Refine**

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Correctly pronounce the names of muscles of the spine and thorax.
- Demonstrate proper body mechanics and client positioning methods while palpating muscles of the spine and thorax.
- Locate through palpation the muscle bellies of four instructor-selected muscles of the spine and thorax.
- Locate through palpation the attachment sites of three instructor-selected muscles of the spine and thorax.
- Identify through palpation the edges and fiber directions of two instructor-selected muscles of the spine and thorax.
- Palpate three muscles of the spine and thorax bilaterally on a partner, and verbally describe physical characteristics in muscle quality.
- Palpate three muscles of the spine and thorax consecutively on two partners, and verbally describe physical characteristics in muscle quality.

	<ul> <li>Discuss simply one common muscular imbalance of the spine and thorax related to postural faults like hyperkyphosis, hyperlordosis, or scoliosis (e.g., muscle imbalances related to a hyperlordosis include short and tight erector spinae, quadratus lumborum, and decreased spinal mobility, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# Topic: The Head, Neck, and Jaw

# Learning Outcomes

**Conditions:** Having completed 9.5 hours of instruction on the head, neck, and jaw, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the head, neck, and jaw, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles, and identify muscle fiber direction and muscle actions of the head, neck, and jaw, on a practical evaluation.

## **Key Terminology and Concepts**

- Action
- Actively
- Angle of the mandible
- Antagonist
- Anterior scalene
- Articular disc
- Atlanto-axial joint
- Atlanto-occipital joint
- Body
- Body mechanics
- Cervical intervertebral joints
- Clenching
- Condyle
- Coronal suture
- Coronoid process
- Depression
- Deviation
- Elevation
- Ethmoid bone
- External auditory meatus
- External occipital protuberance
- Fossa
- Frontal bone
- Frontalis
- Grinding
- Inferior facets
- Insertion
- Intervertebral joints
- Isometric muscle contraction
- Lacrimal bone
- Landmarks
- Levator scapulae

- Modified synovial hinge
- Muscle bellies
- Muscle strain
- Nasal bone
- Nuchal line
- Occipitalis
- Occiput
- Origin
- Palpable findings
- Palpate
- Palpation
- Parietal bone
- Passively
- Physical characteristics
- Posterior scalene
- Posture
- Pronunciation
- Protraction
- Ramus of the mandible
- Retraction
- Skull
- Sphenoid
- Splenius capitis
- Sternocleidomastoid
- Styloid process of the temporal bone
- Submandibular fossa
- Superior facets
- Sutures
- Temporal bone
- Temporal lines of the parietal bones
- Temporalis
- Temporomandibular joint

- Ligmentum nuchae
- Mandible
- Masseter
- Mastoid process
- Maxilla
- Mechanical function
- Mental foramen
- Middle scalene

- Tissue quality
- Trapezius
- Vomer
- Whiplash
- Zygomatic bone
- Zygomatic arch

## Use of Terms

The terms used in this subject appear to be consistent and widely accepted.

# **Sub-Topics**

- Bones and Bony Landmarks
- Joints, Ligaments, and Range of Motion
- Muscles and their Actions

# **Sub-Topic: Bones and Bony Landmarks**

Level 1

Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

## Receive Respond

**Note:** Some knowledge and skill components related to the cervical vertebrae are discussed in the topic: The Spine and Thorax.

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label these bones and landmarks of the head, neck, and jaw on diagrams with the aid of a reference book:
  - Skull: frontal, temporal, ethmoid, lacrimal, maxilla, parietal, sphenoid, nasal, zygomatic, vomer, mandible, occiput, external occipital protuberance, temporal lines of the parietal bones, coronal suture, external auditory meatus, mastoid process, styloid process of the temporal bone, zygomatic arch.
  - Mandible, body, submandibular fossa, angle, ramus, condyle, mental foramen, coronoid process.
- On a diagram of the skull, label six instructorselected bones, landmarks, or structures from memory.

**Conditions:** With ongoing guidance from an instructor during one or more practice sessions, the learner will be able to:

- Imitate the instructor's pronunciation of the bones and landmarks of the head, neck, and jaw.
- Imitate the instructor's palpation method while palpating the following bones and landmarks of the head, neck, and jaw on a physical model of the skeleton:
  - Skull: occiput, external occipital protuberance, superior nuchal lines, parietal bone, temporal bone, mastoid process, zygomatic arch, styloid process, frontal bone, zygomatic, and maxilla.
  - Mandible: body, angle, ramus, coronoid process, condyle.
- Imitate the instructor's body mechanics and client positioning methods while palpating the following bones and landmarks of the head, neck, and jaw on a partner:
  - Skull: occiput, external occipital protuberance, superior nuchal lines, parietal bone, temporal bone, mastoid process, zygomatic arch, styloid process, frontal bone, zygomatic, and maxilla.
  - Mandible: body, angle, ramus, coronoid process, condyle.
- Verbalize physical characteristics in the shape and textures of the external occipital protuberance and superior nuchal lines (e.g., "the external occipital protuberance feels like a point while the superior nuchal lines feel like thin bumpy ridges").
- Verbalize physical characteristics in the shape and texture of the mastoid process, styloid process, and zygomatic arch (e.g., "the mastoid process feels like a large bump right behind the ear, while the styloid process feels like a hole too deep to actually palpate").

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	There are no relevant learning objectives for this sub-topic in level 2 of the cognitive domain.	<b>Conditions:</b> Having participated in practice sessions, the learner will be able to:
		Correctly pronounce the names of bones and landmarks of the head, neck, and jaw.
		Demonstrate proper body mechanics and client positioning methods while palpating bones and landmarks of the head, neck, and jaw.
		Locate through palpation eight instructor- selected bones and/or landmarks of the head, neck, and jaw.
		Compare and contrast palpable findings related to the physical characteristics of bones and landmarks of the head, neck, and jaw using correct technical language (e.g., "the external occipital protuberance feels like a large bump on Jim but like a small ridge on Kathy,").
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# Sub-Topic: Joints, Ligaments, and Range of Motion

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

## Receive Respond

**Note:** Some knowledge and skill components related to the cervical vertebrae are discussed in the topic The Spine and Thorax.

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following joints of the head, neck, and jaw on diagrams with the aid of a reference book: atlanto-occipital joint, atlanto-axial joint, cervical intervertebral joints, superior and inferior facets, temporomandibular joint.
- Review the articulations and functions of the following cervical joints (see The Spine and Thorax sub-topic):
  - Atlanto-occipital.
  - Atlanto-axial.
  - Intervertebral joints.
  - Superior and inferior facets.
- Review the following ligament of the cervical region: ligamentum nuchae.
- Define the temporomandibular joint (TMJ) by describing the joint type and the bones that articulate to make the joint (e.g., a modified synovial hinge joint formed by the temporal bone, articular disk, and the mandible).
- Name the movements possible at the TMJ
   (e.g., elevation of the mandible, depression
   of the mandible, protraction of the mandible,
   retraction of the mandible, left and right
   lateral deviation of the mandible).

- Imitate the instructor's pronunciation of the names of the joints of the head, neck, and jaw.
- Imitate the instructor's pronunciation of the names of selected ligaments of the head, neck, and jaw.
- Imitate the instructor's body mechanics and client positioning methods while palpating the joints and ligaments of the head, neck, and jaw.
- Using a reference book as a guide, attempt to palpate the temporomandibular joint.
- Verbally describe one palpable finding when palpating the temporomandibular joint (e.g., "I can feel the condyle shift as the client opens and closes his mouth at the TMJ").
- Using a reference book as a guide, actively move one's own body through these movements of the mandible at the temporomandibular joint: elevation, depression, protraction, retraction, lateral deviation.
- Using a reference book as a guide, actively move one's own body through these movements of the cervical vertebral joints: flexion, extension, left and right rotation, left and right lateral flexion.
- With guidance from the instructor, passively move the cervical vertebral joints through these movements: flexion, extension, rotation, lateral flexion.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	Conditions: Having participated in a classroom discussion, the learner will be able to:  Discuss the structure (type, ligaments, articulations, etc.) of these joints of the head, needs and investigates at least a positive interest.	Conditions: Having participated in practice sessions, the learner will be able to:  Correctly pronounce the names of instructor-selected structures of the head,
	neck, and jaw: sutures, atlanto-occipital joint, atlanto-axial joint, cervical vertebral joints, intervertebral joints, temporomandibular joints.	<ul> <li>neck, and jaw.</li> <li>Demonstrate correct body mechanics and client positioning methods while palpating the temporomandibular joint.</li> </ul>
	<ul> <li>Discuss the function of these joints of the head, neck, and jaw: sutures, atlanto- occipital joint, atlanto-axial joint, cervical vertebral joints, intervertebral joints,</li> </ul>	<ul> <li>Actively move one's own body through the movements of the joints of the head, neck, and jaw from memory.</li> </ul>
	<ul> <li>Compare and contrast the atlanto-occipital, atlanto-axial, and intervertebral joints C-3 through C-7 (e.g., no discs between vertebrae in atlanto-occipital and atlanto-axial joints providing less stability, etc.).</li> </ul>	<ul> <li>Working with a partner, passively move the joints of the head, neck, and jaw through their movements using correct methods. (e.g., hold the head securely to provide safety and stability, etc.).</li> </ul>
	• Discuss simply basic dysfunctions and injury related to the cervical spine (e.g., whiplash is caused by any jolt to the head and neck, such as a rear-end auto collision, fall off a bike or horse, or sports accident that causes injuries to ligaments, cartilage of the facets, discs, nerves, and muscles, etc.).	
	<ul> <li>Discuss simply basic dysfunction and injury related to the temporomandibular joint (e.g., clenching or grinding causing wear and tear leading to pain and loss of function, muscle strain, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Muscles and Their Actions**

Level 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following muscles of the head, neck, and jaw on diagrams showing anterior, posterior, and lateral views and views showing both superficial and deep muscles: trapezius, levator scapulae, sternocleidomastoid, anterior scalene, middle scalene, posterior scalene, masseter, temporalis, splenius capitis, frontalis, occipitalis.
- Write out in correct technical language the origin, insertion, and actions of the following muscles of the head, neck, and jaw on a worksheet with guidance from a reference book: trapezius, levator scapulae, sternocleidomastoid, anterior scalene, middle scalene, posterior scalene, masseter, temporalis.
- State the primary action and general location of the following muscles of the head, neck, and jaw: splenius capitis, frontalis, occipitalis (e.g., splenius capitis: extension of the head, located on posterior aspect of neck).
- List two muscles that flex the head and neck (e.g., sternocleidomastoid, anterior scalene).
- List two muscles that are antagonists to flexion of the head and neck (muscles that extend the head and neck).
- List two muscles that extend the head and neck (e.g., trapezius, splenius capitis).
- List two muscles that are antagonists to extension of the head and neck (muscles that flex the head and neck).
- List two muscles that perform rotation of the head and neck (e.g., sternocleidomastoid, trapezius).
- List two muscles that perform lateral flexion of the head and neck (e.g., sternocleidomastoid, upper trapezius).

- Imitate the instructor's pronunciation of the names of muscles of the head, neck, and jaw.
- Imitate the instructor's body mechanics and client positioning methods while palpating muscles and tendons of the head, neck, and jaw.
- Imitate the methods an instructor uses to locate through palpation the muscle bellies and accessible attachment sites of muscles of the head, neck, and jaw.
- Try to palpate muscle bellies, tendons, and attachment sites of the following muscles of the head, neck, and jaw: trapezius, levator scapulae, sternocleidomastoid, anterior scalene, middle scalene, posterior scalene, masseter, temporalis.
- Identify three easily palpated muscle bellies of the head, neck, and jaw.
- Identify two easily palpated attachment sites of muscles of the head, neck, and jaw.
- Identify two muscle bellies of the head, neck, and jaw that are more difficult to palpate or inaccessible.
- Identify four attachment sites of muscles of the head, neck, and jaw that are more difficult to palpate or inaccessible.
- Using a reference book as a guide, attempt to identify through palpation the edges and fiber directions of four muscles of the head, neck, and jaw.
- Using a reference book as a guide, attempt to identify through palpation one muscle that is deep to another in the head, neck, and jaw.

- List two muscles that elevate the mandible (e.g., masseter, temporalis).
- Actively move one's body through the movements produced by each of the following muscles using a reference book as a guide: trapezius, levator scapulae, sternocleidomastoid, anterior scalene, middle scalene, posterior scalene, masseter, temporalis, splenius capitis, frontalis, occipitalis.
- Use an isometric muscle contraction to isolate five instructor-selected muscles of the head, neck, and jaw using a reference book as a guide and with support from an instructor.

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

#### Apply

**Conditions:** Having participated in a classroom discussion, the learner will be able to:

- Discuss the origins, insertions, actions, and roles of the muscles of the head, neck, and jaw.
- Discuss palpable findings related to quality and condition of tissue and a comparison of tissue bilaterally from palpation sessions.
- Discuss the implications of tissue quality and condition to muscular health, posture, and correct mechanical function of the head, neck, and jaw.

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Correctly pronounce the names of muscles of the head, neck, and jaw.
- Demonstrate proper body mechanics and client positioning methods while palpating muscles of the head, neck, and jaw.
- Locate through palpation the muscle bellies of five instructor-selected muscles of the head, neck, and jaw.
- Locate through palpation the attachment sites of one instructor-selected muscle of the head, neck, and jaw.
- Identify through palpation the edges and fiber directions of two instructor-selected muscles of the head, neck, and jaw.
- Demonstrate correct body mechanics while passively moving a partner's body through the actions of four instructor-selected muscles of the head, neck, and jaw.
- Palpate four muscles of the head, neck, and jaw bilaterally on a partner, and verbally describe physical characteristics in muscle quality.
- Palpate three muscles of the head, neck, and jaw consecutively on two partners, and verbally describe physical characteristics in muscle quality.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: The Pelvis and Hip**

# Learning Outcomes

**Conditions:** Having completed 9.5 hours of instruction on the pelvis and hip, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the pelvis and hip, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles, and identify muscle fiber direction and muscle actions of the pelvis and hip, on a practical evaluation.

## **Key Terminology and Concepts**

- Abduction
- Acetabulum
- Action
- Actively
- Adduction
- Adductor brevis
- Adductor longus
- Adductor magnus
- Antagonist
- Anterior inferior iliac spine (AIIS)
- Anterior sacroiliac ligament
- Anterior superior iliac spine (ASIS)
- Attachment sites
- Body mechanics
- Circumduction
- Coccyx
- Connective tissue sleeve
- Coxofemoral
- Extension
- Femoral neck
- Femur
- Fiber direction
- Flexion
- Gluteal tuberosity
- Gluteus maximus
- Gluteus medius
- Gluteus minimus
- Greater trochanter
- Head
- Hip joint
- Iliac crest
- Iliac tubercle

- Ischium
- Isometric muscle contraction
- Labrum
- Landmarks
- Lateral rotation
- Lesser trochanter
- Ligamentum teres
- Mechanical function
- Medial rotation
- Muscle bellies
- Neck
- Obturator foramen
- Origin
- Palpable findings
- Palpate
- Palpation
- Partly fibrous
- Partly synovial
- Passively
- Pectineus
- Pelvis
- Physical characteristics
- Piriformis
- Posterior inferior iliac spine (PIIS)
- Posterior sacroiliac ligament
- Posterior superior iliac spine (PSIS)
- Pronunciation
- Psoas
- Pubic symphysis
- Pubic tubercle
- Pubis
- Pubofemoral ligament

- Iliacus
- Iliofemoral ligament
- Iliolumbar ligament
- Ilium
- Innominate
- Insertion
- Interosseous sacroiliac ligament
- Intertrochanteric line
- Ischial spine
- Ischial tuberosity
- Ischiofemoral ligament

- Quadratus femoris
- Ramus of the ischium
- Sacroiliac joint (SI)
- Sacrospinous ligament
- Sacrotuberous ligament
- Sacrum
- Symphysis pubis
- Tensor fascia latae
- Tissue quality

## **Use of Terms**

The terms used in this subject appear to be consistent and widely accepted.

## **Sub-Topics**

- Bones and Bony Landmarks
- Joints, Ligaments, and Range of Motion
- Muscles and their Actions

# **Sub-Topic: Bones and Bony Landmarks**

level 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Define these terms: pelvis (bony compartment comprising the innominate bones, sacrum, and coccyx), hip (the region lateral to the ilium of the pelvic bone).
- Label these bones and landmarks of the pelvis and hip on diagrams with the aid of a reference book:
  - Ilium, anterior superior iliac spine (ASIS), anterior inferior iliac spine (AIIS), iliac crest, posterior inferior iliac spine (PIIS), posterior superior iliac spine (PSIS), iliac tubercle.
  - Pubis, symphysis pubis, pubic tubercle.
  - Ischium, ramus of the ischium, ischial tuberosity, ischial spine.
  - Sacrum, coccyx, acetabulum, obturator foramen.
  - Femur, greater trochanter, head, neck, lesser trochanter, intertrochanteric line, gluteal tuberosity.
- Label ten bones and landmarks from memory on a diagram of the pelvis and hip.

**Conditions:** With ongoing guidance from an instructor during one or more practice sessions, the learner will be able to:

- Imitate the instructor's pronunciation of the bones and landmarks of the pelvis and hip.
- Imitate the instructor's palpation method while palpating the following bones and landmarks of the pelvis and hip on a physical model of the skeleton:
  - Ilium, anterior superior iliac spine
    (ASIS), anterior inferior iliac spine (AIIS),
    iliac crest, posterior superior iliac spine
    (PSIS), iliac tubercle.
  - Ischium, ischial tuberosity.
  - Pubis, sacrum, coccyx.
  - Femur, greater trochanter, lesser trochanter.
- Imitate the instructor's body mechanics and client positioning methods while palpating the following bones and landmarks of the pelvis and hip on a partner:
  - Ilium, anterior superior iliac spine
    (ASIS), anterior inferior iliac spine (AIIS),
    iliac crest, posterior superior iliac spine
    (PSIS), iliac tubercle.
  - Ischium, ischial tuberosity.
  - Pubis, sacrum, coccyx.
  - Femur, greater trochanter, lesser trochanter.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	There are no relevant learning objectives for this sub-topic in level 2 of the cognitive domain.	<ul> <li>Conditions: Having participated in practice sessions, the learner will be able to:         <ul> <li>Correctly pronounce the names of bones and landmarks of the pelvis and hip.</li> <li>Demonstrate proper body mechanics and client positioning methods while palpating bones and landmarks of the pelvis and hip.</li> <li>Locate through palpation eight instructor-selected bones and/or landmarks of the pelvis and hip.</li> </ul> </li> <li>Compare and contrast palpable findings related to the physical characteristics of bones and landmarks of the pelvis and hip using correct technical language.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# Sub-Topic: Joints, Ligaments, and Range of Motion

evel 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following join(s of the pelvis and hip on diagrams with the aid of a reference book: pubic symphysis, sacroiliac joint (SI), coxofemoral joint.
- Define the pubic symphysis by describing the joint type and the bones that articulate to make up the joint (e.g., the pubic symphysis is a cartilaginous joint formed between the superior rami of the left and right pubic bones).
- Define the SI joint by describing the joint type and the bones that articulate to make up the joint (e.g., the SI joint is a partly synovial and partly fibrous gliding joint formed by the ilium of the pelvis and the sacrum).
- Label the following major ligaments of the SI joint on diagrams with the aid of a reference book: anterior sacroiliac ligament, interosseous sacroiliac ligament, posterior sacroiliac ligament, sacrotuberous ligament, sacrospinous ligament, iliolumbar ligament.
- Define the coxofemoral (hip) joint by describing the joint type and the bones that articulate to make up the joint (e.g., the coxofemoral joint is a synovial ball and socket joint formed by the head of the femur and the acetabulum of the pelvis).
- Describe the joint capsule of the coxofemoral (hip) joint (e.g., a thick and strong connective tissue sleeve that attaches proximally around the entire circumference of the labrum and distally around the femoral neck).
- Label the following major ligaments of the coxofemoral joint on diagrams with the aid of a reference book: ligamentum teres, iliofemoral ligament, pubofemoral ligament, ischiofemoral ligament.

- Imitate the instructor's pronunciation of the names of the joints of the pelvis and hip.
- Imitate the instructor's pronunciation of the names of selected ligaments of the pelvis and hip.
- Imitate the instructor's body mechanics and client positioning methods while palpating the joints and ligaments of the pelvis and hip.
- Palpate the joints of the pelvis and hip using a reference book as a guide.
- Actively move one's own body through these movements of the hip joint using a reference book as a guide: flexion, extension, medial rotation, lateral rotation, abduction, adduction, circumduction.
- Working with a partner, passively move the hip joint through these movements with guidance from the instructor: flexion, extension, medial rotation, lateral rotation, abduction, adduction, circumduction.

	<ul> <li>Name the movements possible at the coxofemoral joint (flexion, extension, medial rotation, lateral rotation, abduction, adduction, circumduction).</li> </ul>	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in a classroom discussion, the learner will be able to:</li> <li>Discuss the structure of the coxofemoral joint of the pelvis and hip.</li> <li>Discuss the action of the coxofemoral joint of the pelvis and hip.</li> </ul>	<ul> <li>Conditions: Having participated in practice sessions, the learner will be able to:</li> <li>Correctly pronounce the names of instructor-selected structures of the pelvis and hip.</li> <li>Demonstrate proper body mechanics and client positioning methods while palpating structures of the pelvis and hip.</li> <li>Locate through palpation the joints of the pelvis and hip.</li> <li>Locate through palpation instructor-selected ligaments of the pelvis.</li> <li>Actively produce the movements of the joints of the pelvis and hip from memory on one's own body.</li> <li>Demonstrate on a partner correct methods while passively moving the joints of the hip through their available movements.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Muscles and Their Actions**

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following muscles of the pelvis and hip on diagrams showing anterior, posterior, and lateral views and views showing both superficial and deep muscles: tensor fascia latae, gluteus maximus, gluteus medius, gluteus minimus, psoas, iliacus, piriformis, quadratus femoris, adductor magnus, adductor longus, adductor brevis, pectineus.
- Write out in correct technical language the origin, insertion, and actions of the following muscles of the pelvis and hip on a worksheet with guidance from a reference book: tensor fascia latae, gluteus maximus, gluteus medius, gluteus minimus.
- State the primary action and general location of the following muscles of the pelvis and hip: psoas, iliacus, piriformis, quadratus femoris, adductor magnus, adductor longus, adductor brevis, pectineus. (e.g., iliacus: hip flexion, anterior surface of ilium).
- List three muscles that flex the hip joint (e.g., psoas, iliacus, tensor fasciae latae, sartorius).
- List three muscles that are antagonists to flexion at the hip joint (muscles that extend the hip joint).
- List three muscles that extend the hip joint (e.g., gluteus maximus, gluteus medius posterior fibers, adductor magnus posterior fibers, etc.).
- List three muscles that are antagonists to extension at the hip joint (muscles that flex the hip joint).
- List three muscles that perform medial rotation at the hip joint (e.g., gluteus medius anterior fibers, gluteus minimus, adductor magnus, tensor fasciae latae).
- List three muscles that are antagonists to medial rotation at the hip joint (muscles that laterally rotate the hip joint).

- Imitate the instructor's pronunciation of the names of muscles of the pelvis and hip.
- Imitate the instructor's body mechanics and client positioning methods while palpating muscles and tendons of the pelvis and hip.
- Imitate the methods an instructor uses to locate through palpation the muscle bellies and accessible attachment sites of muscles of the pelvis and hip.
- Try to palpate muscle bellies, tendons, and attachment sites of the following muscles of the pelvis and hip: tensor fascia latae, gluteus maximus, gluteus medius, gluteus minimus.
- Identify three easily palpated muscle bellies of the pelvis and hip.
- Identify two easily palpated attachment sites of muscles of the pelvis and hip.
- Identify two muscle bellies of the pelvis and hip that are more difficult to palpate or inaccessible.
- Identify four attachment sites of muscles of the pelvis and hip that are more difficult to palpate or inaccessible.
- Using a reference book as a guide, attempt to identify through palpation the edges and fiber directions of four muscles of the pelvis and hip.
- Using a reference book as a guide, attempt to identify through palpation one muscle that is deep to another in the pelvis and hip.
- Actively move one's body through the movements produced by each of the following muscles using a reference book as a guide: tensor fascia latae, gluteus maximus, gluteus medius, gluteus minimus, psoas, iliacus, piriformis, quadratus femoris, adductor magnus, adductor longus, adductor brevis, pectineus.

- List three muscles that perform lateral rotation at the hip joint (e.g., gluteus maximus, piriformis, quadratus femoris).
- List three muscles that are antagonists to lateral rotation at the hip joint (muscles that medially rotate the hip joint).
- List three muscles that perform abduction at the hip joint (e.g., gluteus maximus, tensor fasciae latae, gluteus medius).
- List three muscles that are antagonists to abduction at the hip joint (muscles that adduct the hip joint).
- List three muscles that perform adduction at the hip joint (e.g., adductor magnus, adductor longus, adductor brevis).
- List three muscles that are antagonists to adduction at the hip joint (muscles that abduct the hip joint).

#### Skills: Practice and Refine

### Apply

Level 2

**Conditions:** Having participated in a classroom discussion, the learner will be able to:

**Knowledge: Use and Connect** 

- Discuss the origins, insertions, actions, and roles of the muscles of the pelvis and hip.
- Discuss palpable findings related to quality and condition of tissue and a comparison of tissue bilaterally from palpation sessions.
- Discuss the implications of tissue quality and condition to muscular health, posture, and correct mechanical function of the pelvis and hip.

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Correctly pronounce the names of muscles of the pelvis and hip.
- Demonstrate proper body mechanics and client positioning methods while palpating muscles of the pelvis and hip.
- Locate through palpation the muscle bellies of five instructor-selected muscles of the pelvis and hip.
- Locate through palpation the attachment sites of one instructor-selected muscle of the pelvis and hip.
- Identify through palpation the edges and fiber directions of two instructor-selected muscles of the pelvis and hip.
- Demonstrate correct body mechanics while passively moving a partner's body through the actions of four instructor-selected muscles of the pelvis and hip.
- Palpate four muscles of the pelvis and hip bilaterally on a partner, and verbally describe physical characteristics in muscle quality.

		<ul> <li>Palpate three muscles of the pelvis and hip consecutively on two partners, and verbally describe physical characteristics in muscle quality.</li> <li>Use an isometric muscle contraction to isolate five instructor-selected muscles of the pelvis and hip, using a reference book as a guide and with support from an instructor.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: The Thigh and Knee**

# Learning Outcomes

**Conditions:** Having completed 9.5 hours of instruction on the thigh and knee, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the thigh and knee, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles, and identify muscle fiber direction and muscle actions of the thigh and knee, on a practical evaluation.

## **Key Terminology and Concepts**

- Action
- Actively
- Acute injury
- Adductor tubercle
- Antagonist
- Anterior cruciate ligament
- Attachment sites
- Biceps femoris long head
- Biceps femoris short head
- Body mechanics
- Cumulative stresses
- Extension
- Femur
- Fiber direction
- Fibula
- Fibular collateral ligament
- Flexion
- Gerdy's tubercle
- Gracilis
- Head of the fibula
- Insertion
- Isometric muscle contraction
- Landmarks
- Lateral condyle
- Lateral epicondyle
- Lateral rotation
- Lateral tibial tubercle
- Linea aspera
- Mechanical function
- Medial condyle
- Medial epicondyle
- Medial rotation
- Menisci

- Muscle bellies
- Muscular health
- Origin
- Palpable findings
- Palpate
- Palpation
- Passively
- Patella
- Patellar ligament
- Patellofemoral joint
- Pes anserinus
- Physical characteristics
- Posterior cruciate ligament
- Posture
- Pronunciation
- Rectus femoris
- Sartorius
- Semimembranosus
- Semitendinosus
- Shaft of the femur
- Synovial modified hinge
- Technical language
- Tibia
- Tibial collateral ligament
- Tibial plateau
- Tibial tuberosity
- Tibiofemoral joint
- Tissue quality
- Trochlear groove
- Vastus intermedius
- Vastus lateralis
- Vastus medialis

Use of Terms
The terms used in this subject appear to be consistent and widely accepted.
Sub-Topics
<ul> <li>Bones and Bony Landmarks</li> <li>Joints, Ligaments, and Range of Motion</li> <li>Muscles and their Actions</li> </ul>

Sub-Topic: Bones and Bony Landmarks		
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	Conditions: Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:  List the three bones that make up the knee	Conditions: With ongoing guidance from an instructor during one or more practice sessions, the learner will be able to:  Imitate the instructor's pronunciation of the
	<ul> <li>Joint (femur, tibia, patella).</li> <li>Identify one additional bone that provides an attachment site for muscles and ligaments that act on the knee joint (fibula).</li> <li>Label these bones and landmarks of the thigh and knee on diagrams with the aid of a reference book:         <ul> <li>Patella.</li> <li>Femur, shaft, adductor tubercle, medial epicondyle, medial condyle, lateral epicondyle, lateral condyle, linea aspera.</li> <li>Tibia, tibial tuberosity, tibial plateau, pes anserinus attachment site, lateral tibial tubercle (Gerdy's tubercle).</li> <li>Fibula, head of the fibula.</li> </ul> </li> <li>Label five bones and landmarks from memory on a diagram of the thigh and knee.</li> </ul>	<ul> <li>Imitate the instructor's palpation method while palpating the following bones and landmarks of the thigh and knee on a physical model of the skeleton:         <ul> <li>Patella.</li> <li>Femur, medial epicondyle, medial condyle, lateral epicondyle, lateral condyle.</li> <li>Tibia, tibial tuberosity, pes anserinus attachment site, lateral tibial tubercle (Gerdy's tubercle).</li> <li>Fibula, head of the fibula.</li> </ul> </li> <li>Imitate the instructor's body mechanics and client positioning methods while palpating the following bones and landmarks of the thigh and knee on a partner:         <ul> <li>Patella.</li> <li>Femur, medial epicondyle, medial condyle, lateral epicondyle, lateral condyle.</li> <li>Tibia, tibial tuberosity, pes anserinus attachment site, lateral tibial tubercle (Gerdy's tubercle).</li> </ul> </li> </ul>
		Fibula, head of the fibula.
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	There are no relevant learning objectives for this sub-topic in level 2 of the cognitive domain.	<ul> <li>Conditions: Having participated in practice sessions, the learner will be able to:</li> <li>Correctly pronounce the names of bones and landmarks of the thigh and knee.</li> <li>Demonstrate proper body mechanics and client positioning methods while palpating bones and landmarks of the thigh and knee.</li> </ul>

		<ul> <li>Locate through palpation eight instructor-selected bones and landmarks of the thigh and knee.</li> <li>Compare and contrast palpable findings related to the physical characteristics of bones and landmarks of the thigh and knee using correct technical language.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Joints, Ligaments, and Range of Motion**

evel 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following joints of the knee on diagrams with the aid of a reference book: tibiofemoral and patellofemoral.
- Define the tibiofemoral joint by describing the joint type and the bones that articulate to make up the joint (e.g., a synovial modified hinge joint formed by an articulation of the distal end of the femur and the proximal end of the tibia).
- Define the patellofemoral joint by describing the joint type and the bones that articulate to make up the joint (e.g., an articulation of the patella and the trochlear groove on the distal femur).
- Define the term *menisci*.
- Label the following major ligaments of the knee joint on diagrams with the aid of a reference book: tibiofemoral joint ligaments, tibial collateral ligament, fibular collateral ligament, anterior cruciate ligament, posterior cruciate ligament, patellar ligament.
- Name the movements possible at the knee (flexion, extension, some rotation).

- Imitate the instructor's pronunciation of the names of the joints of the knee.
- Imitate the instructor's pronunciation of the names of selected ligaments of the knee.
- Imitate the instructor's body mechanics and client positioning methods while palpating the joints and ligaments of the knee.
- Palpate instructor-selected ligaments of the knee joint using a reference book as a guide.
- Actively move one's own body through these movements of the tibiofemoral joint using a reference book as a guide: flexion, extension.
- Working with a partner, passively move the tibiofemoral joint through these movements with guidance from the instructor: flexion, extension.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in a classroom discussion, the learner will be able to:</li> <li>Discuss the structure of the tibiofemoral joint of the thigh and knee.</li> <li>Discuss the action of the tibiofemoral joint of the thigh and knee.</li> <li>Discuss simply basic dysfunction and injury related to the knee joint (e.g., injuries to ligaments and tendons also cause knee problems; a common injury is to the anterior cruciate ligament (ACL) through sudden twisting motions, the menisci are susceptible to cumulative stresses and acute injury, etc.).</li> </ul>	<ul> <li>Conditions: Having participated in practice sessions, the learner will be able to:</li> <li>Correctly pronounce the names of instructor-selected structures of the thigh and knee.</li> <li>Demonstrate proper body mechanics and client positioning methods while palpating structures of the thigh and knee.</li> <li>Locate through palpation each joint of the thigh and knee.</li> <li>Locate through palpation instructor-selected ligaments of the thigh and knee.</li> <li>Actively produce on one's own body the movements of the joints of the thigh and knee from memory.</li> <li>Demonstrate on a partner correct methods while passively moving the joints of the thigh and knee through their available movements.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Muscles and Their Actions**

evel 1

Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following muscles of the thigh and knee on diagrams showing anterior, posterior, and lateral views and views showing both superficial and deep muscles: biceps femoris long and short heads, semitendinosus, semimembranosus, rectus femoris, sartorius, vastus lateralis, vastus medialis, gracilis, vastus intermedius.
- Write out in correct technical language the origin, insertion, and actions of the following muscles on a worksheet with guidance from a reference book: biceps femoris long and short heads, semitendinosus, semimembranosus, rectus femoris, sartorius, vastus lateralis, vastus medialis, gracilis.
- State the primary action and general location of the vastus intermedius (e.g., knee extension, anterior thigh deep to rectus femoris).
- Name the four muscles that make up the group of muscles commonly referred to as the quadriceps (rectus femoris, vastus medialis, vastus lateralis, vastus intermedius).
- Name the action that is performed by the entire quadriceps group at the tibiofemoral joint (extend the tibiofemoral joint).
- Name the three muscles that make up the group of muscles commonly referred to as hamstrings (biceps femoris long and short heads, semitendinosus, semimembranosus).
- Name the action that is performed by all of the hamstrings at the tibiofemoral joint (flex the tibiofemoral joint).
- List three muscles that flex the tibiofemoral joint (e.g., biceps femoris long/short heads, semitendinosus, semimembranosus, etc.).

- Imitate the instructor's pronunciation of the names of muscles of the thigh and knee.
- Imitate the instructor's body mechanics and client positioning methods while palpating muscles and tendons of the thigh and knee.
- Imitate the methods an instructor uses to locate through palpation the muscle bellies and accessible attachment sites of muscles of the thigh and knee.
- Try to palpate muscle bellies, tendons, and attachment sites of these muscles of the thigh and knee: biceps femoris long and short heads, semitendinosus, semimembranosus, rectus femoris, sartorius, vastus lateralis, vastus medialis, gracilis.
- Identify four easily palpated muscle bellies of the thigh and knee.
- Identify four easily palpated attachment sites of muscles of the thigh and knee.
- Identify two muscle bellies of the thigh and knee that are more difficult to palpate or inaccessible.
- Identify four attachment sites of muscles of the thigh and knee that are more difficult to palpate or inaccessible.
- Using a reference book as a guide, attempt to identify through palpation the edges and fiber directions of four muscles of the knee and thigh.
- Using a reference book as a guide, attempt to identify through palpation one muscle that is deep to another in the knee and thigh.
- Verbally describe two palpable findings related to the quality and condition of six instructor-selected muscles of the thigh and knee.

- List three muscles that are antagonists to flexion of the tibiofemoral joint (muscles that extend the tibiofemoral joint).
- List three muscles that extend the tibiofemoral joint (e.g., vastus lateralis, vastus medialis, vastus intermedius, rectus femoris).
- List three muscles that are antagonists to extension of the tibiofemoral joint (muscles that flex the tibiofemoral joint).

 Actively move one's body through the movements produced by each of the following muscles using a reference book as a guide: biceps femoris long and short heads, semitendinosus, semimembranosus, rectus femoris, vastus lateralis, vastus medialis, vastus intermedius.

#### Level 2 Knowledge: Use and Connect Skills: Practice and Refine

### Apply

**Conditions:** Having participated in a classroom discussion, the learner will be able to:

- Discuss the origins, insertions, actions, and roles of the muscles of the thigh and knee.
- Discuss palpable findings related to quality and condition of tissue and a comparison of tissue bilaterally from palpation sessions.
- Discuss the implications of tissue quality and condition to muscular health, posture, and correct mechanical function of the thigh and knee.

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Correctly pronounce the names of muscles of the thigh and knee.
- Demonstrate proper body mechanics and client positioning methods while palpating muscles of the thigh and knee.
- Locate through palpation the muscle bellies of five instructor-selected muscles of the thigh and knee.
- Locate through palpation the attachment sites of three instructor-selected muscles of the thigh and knee.
- Identify through palpation the edges and fiber directions of two instructor-selected muscles of the thigh and knee.
- Demonstrate correct body mechanics while passively moving a partner's body through the actions of four instructor-selected muscles of the thigh and knee.
- Palpate four muscles of the thigh and knee bilaterally on a partner, and verbally describe physical characteristics in muscle quality.
- Palpate three muscles of the thigh and knee consecutively on two partners, and verbally describe physical characteristics in muscle quality.
- Use an isometric muscle contraction to isolate five instructor-selected muscles of the thigh and knee, using a reference book as a guide and with support from an instructor.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: The Leg, Ankle, and Foot**

# Learning Outcomes

**Conditions:** Having completed 9.5 hours of instruction on the leg, ankle, and foot, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the bones, bony landmarks, ligaments, joints, muscles, and actions of the leg, ankle, and foot, on a written examination.
- Locate instructor-selected bones, bony landmarks, joints, ligaments, and muscles, and identify muscle fiber direction and muscle actions of the leg, ankle, and foot, on a practical evaluation.

### **Key Terminology and Concepts**

- Ankle
- Antagonist
- Anterior talofibular ligament
- Base
- Body mechanics
- Calcaneofibular ligament
- Calcaneus
- Cuboid
- Cuneiforms
- Deep posterior compartment
- Deltoid ligament
- Distal tibiofibular joint
- Dorsiflexion
- Eversion
- Extension
- Extensor digitorum longus
- Extensor hallucis longus
- Extrinsic
- Fibula
- Flexion
- Flexor digitorum longus
- Flexor hallucis longus
- Flexor retinaculum
- Foot
- Gastrocnemius
- Heads
- Inferior extensor retinaculum
- Inferior fibular retinaculum
- Insertion
- Interosseous membrane
- Interphalangeal joints
- Inversion

- Medial longitudinal arch
- Medial malleolus
- Metatarsals
- Metatarsophalangeal joints
- Muscle bellies
- Navicular
- Origin
- Palpable findings
- Palpate
- Palpation
- Peroneus brevis
- Peroneus longus
- Phalanges
- Phalanx bones
- Physical characteristics
- Plantar flexion
- Posterior talofibular ligament
- Pronunciation
- Shaft
- Soleus
- Styloid process of the fifth metatarsal
- Subtalar joint
- Superior extensor retinaculum
- Superior fibular retinaculum
- Synovial ellipsoid articulation
- Synovial hinge
- Talocrural joint
- Talus
- Tarsal bones
- Tarsometatarsal joints
- Tibia
- Tibialis anterior

- Isometric muscle contraction
- Landmarks
- Lateral longitudinal arch
- Lateral malleolus
- Leg
- Mechanical function

- Tibialis posterior
- Tibiofibular joint
- Transverse arch
- Transverse tarsal joint

# Use of Terms

The terms used in this subject appear to be consistent and widely accepted.

# Sub-Topics

- Bones and Bony Landmarks
- Joints, Ligaments, and Range of Motion
- Muscles and their Actions

# **Sub-Topic: Bones and Bony Landmarks**

Level 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

## Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- List the two bones that make up the leg (fibula, tibia).
- Define the term *foot* (e.g., everything distal to the tibia and fibula).
- Identify the tarsal bones on a skeletal model of the leg, ankle, and foot (talus, calcaneus, navicular, cuboid, three cuneiforms).
- Label these bones and landmarks of the leg, ankle, and foot on diagrams with the aid of a reference book:
  - Tibia, shaft, medial malleolus.
  - Fibula, lateral malleolus, shaft.
  - Metatarsals, base, heads, shafts, styloid process of the fifth metatarsal.
  - Phalanges.
- Label five bones and landmarks from memory on a diagram of the leg, ankle, and foot.

**Conditions:** With ongoing guidance from an instructor during one or more practice sessions, the learner will be able to:

- Imitate the instructor's pronunciation of the bones and landmarks of the leg, ankle, and foot.
- Imitate the instructor's palpation method while palpating the following bones and landmarks of the leg, ankle, and foot on a physical model of the skeleton:
  - Tibia, shaft, medial malleolus.
  - Fibula, lateral malleolus, shaft.
  - Tarsals (calcaneus, talus, navicular, medial, middle, and lateral cuneiforms, cuboid)
  - Metatarsals, base, heads, shafts, styloid process of the fifth metatarsal.
  - Phalanges.
- Imitate the instructor's body mechanics and client positioning methods while palpating the following bones and landmarks of the leg, ankle, and foot on a partner:
  - Tibia, shaft, medial malleolus.
  - Fibula, lateral malleolus, shaft.
  - Tarsals (calcaneus, talus, navicular, medial, middle, and lateral cuneiforms, cuboid).
  - Metatarsals, base, heads, shafts, styloid process of the fifth metatarsal.
  - Phalanges.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	There are no relevant learning objectives for this sub-topic in level 2 of the cognitive domain.	<b>Conditions:</b> Having participated in practice sessions, the learner will be able to:
		Correctly pronounce the names of bones and landmarks of the leg, ankle, and foot.
		Demonstrate proper body mechanics and client positioning methods while palpating bones and landmarks of the leg, ankle, and foot.
		Locate through palpation eight instructor- selected bones and/or landmarks of the leg, ankle, and foot.
		Compare and contrast palpable findings related to the physical characteristics of bones and landmarks of the leg, ankle, and foot using correct technical language.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# Sub-Topic: Joints, Ligaments, and Range of Motion

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following joints of the leg, ankle, and foot on diagrams with the aid of a reference book: distal tibiofibular joint, talocrural joint, subtalar joint, transverse tarsal joint, tarsometatarsal joints, metatarsophalangeal joints, interphalangeal joints.
- Identify the location of the interosseous membrane in the leg.
- Define the talocrural joint by describing the joint type and the bones that articulate to make up the joint (e.g., a synovial hinge joint between the tibia, fibula, and talus).
- List the movements available at the talocrural joint (plantar flexion, dorsiflexion).
- Label the following major ligaments of the talocrural joint on diagrams with the aid of a reference book: deltoid ligament, anterior talofibular ligament, posterior talofibular ligament, calcaneofibular ligament.
- Label these retinacula of the talocrural joint on diagrams with the aid of a reference book: superior extensor retinaculum, inferior extensor retinaculum, flexor retinaculum, superior fibular retinaculum, inferior fibular retinaculum.
- Describe the basic movements allowed by the subtalar, transverse tarsal, and tarsometatarsal joints (e.g., they interact and allow inversion and eversion).
- Define the metatarsophalageal joints by describing the joint types and the bones that articulate to make up the joints (e.g., synovial ellipsoid articulations between the metatarsals and phalanges).

- Imitate the instructor's pronunciation of the names of the joints of the leg, ankle, and foot.
- Imitate the instructor's pronunciation of the names of selected ligaments of the leg, ankle, and foot.
- Imitate the instructor's body mechanics and client positioning methods while palpating the joints and ligaments of the leg, ankle, and foot.
- Palpate the joints of the leg, ankle, and foot using a reference book as a guide.
- Palpate instructor-selected ligaments of the talocrural joint using a reference book as a guide.
- Actively move one's own body through these movements of the talocrural joint using a reference book as a guide: plantar flexion, dorsiflexion.
- Actively move one's own body through these movements of the subtalar and transverse tarsal joints using a reference book as a guide: inversion, eversion.
- Actively move one's own body through these movements of the metatarsophalangeal joints using a reference book as a guide: extension, flexion, abduction, adduction.
- Actively move one's own body through these movements of the proximal and distal interphalangeal joints using a reference book as a guide: extension, flexion.
- Working with a partner, passively move the talocrural joint through these movements with guidance from the instructor: plantar flexion, dorsiflexion.

- Define the interphalangeal joints by describing the joint types and the bones that articulate to make up the joints (e.g., synovial hinge joints formed between the heads, shafts, and bases of the phalanx bones).
- Define these terms: medial longitudinal arch, lateral longitudinal arch, transverse arch.
- Working with a partner, passively move the subtalar and transverse tarsal joints through these movements with guidance from the instructor: inversion, eversion.
- Working with a partner, passively move metatarsophalangeal joints through these movements with guidance from the instructor: extension, flexion, abduction, adduction.
- Working with a partner, passively move the proximal and distal interphalangeal joints through these movements with guidance from the instructor: extension, flexion.

#### from the instructor: extension, flexion. Level 2 **Knowledge: Use and Connect Skills: Practice and Refine** Apply Conditions: Having participated in a classroom Conditions: Having participated in practice sessions, the learner will be able to: discussion, the learner will be able to: Discuss the structure of the following joints Correctly pronounce the names of of the leg, ankle, and foot: distal tibiofibular instructor-selected structures of the leg, joint, talocrural joint, subtalar joint, ankle, and foot. transverse tarsal joint, tarsometatarsal joints, Demonstrate proper body mechanics and metatarsophalangeal joints, interphalangeal client positioning methods while palpating joints. structures of the leg, ankle, and foot. Discuss the action of the following joints of Locate through palpation each joint of the the leg, ankle and foot: distal tibiofibular leg, ankle, and foot. joint, talocrural joint, subtalar joint, transverse tarsal joint, tarsometatarsal joints, Locate through palpation instructor-selected metatarsophalangeal joints, interphalangeal ligaments of the leg, ankle, and foot. joints. Actively produce the movements of the Discuss simply basic dysfunction and injury joints of the leg, ankle, and foot from related to the talocrural joint (e.g., ankle memory in one's own body. sprains and the weak anterior talofibular Demonstrate on a partner correct methods ligament, and after ankle sprains the ankle for passively moving the joints of the leg, becomes fibrous and stiff with decreased ankle, and foot through their available ROM or becomes unstable, etc.). movements. Level 3 **Knowledge: Choose and Plan Skills: Naturalize and Adapt** Problem There are no relevant learning objectives for this There are no relevant learning objectives for this Solve sub-topic in level 3 of the cognitive domain. sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: Muscles and Their Actions**

Level 1

Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having read class materials, participated in a lecture, and/or participated in classroom activities, the learner will be able to:

- Label the following muscles of the leg, ankle, and foot on diagrams showing anterior, posterior, and lateral views and views showing both superficial and deep muscles: tibialis anterior, extensor digitorum longus, peroneus longus, peroneus brevis, gastrocnemius, soleus, tibialis posterior, extensor hallucis longus, flexor digitorum longus, flexor hallucis longus.
- Write out in correct technical language the origin, insertion, and actions of the following muscles of the foot, ankle, and leg on a worksheet with guidance from a reference book: tibialis anterior, extensor digitorum longus, peroneus longus, peroneus brevis, gastrocnemius, soleus, tibialis posterior, extensor hallucis longus.
- State the primary action and general location of the following muscles of the foot, ankle, and leg: flexor digitorum longus, flexor hallucis longus (e.g., flexor digitorum longus: toe flexion, deep posterior compartment of leg).
- List three muscles that plantar flex the talocrural joint (e.g., gastrocnemius, soleus, tibialis posterior).
- List three muscles that are antagonists to plantar flexion (any of the muscles that dorsiflex).
- List thee muscles that dorsiflex the talocrural joint (e.g., tibialias anterior, extensor digitorum longus, extensor hallucis longus).
- List three muscles that are antagonists to dorsiflexion (muscles that plantar flex the ankle joint).
- List three muscles that invert the foot and toes (e.g., tibialis anterior, flexor hallucis longus, tibialis posterior).

- Imitate the instructor's pronunciation of the names of muscles of the leg, ankle, and foot.
- Imitate the instructor's body mechanics and client positioning methods while palpating muscles and tendons of the leg, ankle, and foot.
- Imitate the methods an instructor uses to locate through palpation the extrinsic muscle bellies and accessible attachment sites of muscles of the leg, ankle, and foot.
- Try to palpate muscle bellies, tendons, and attachment sites of these muscles of the leg, ankle, and foot: tibialis anterior, extensor digitorum longus, peroneus longus, peroneus brevis, gastrocnemius, soleus, tibialis posterior, extensor hallucis longus.
- Identify four easily palpated muscle bellies of muscles of the leg, ankle, and foot.
- Identify four easily palpated tendons or attachment sites of the leg, ankle, and foot.
- Identify two muscle bellies of the leg, ankle, and foot that are more difficult to palpate or inaccessible.
- Identify four attachments sites of muscles of the leg, ankle, and foot that are more difficult to palpate or inaccessible.
- Using a reference book as a guide, attempt to identify through palpation the edges and fiber directions of four muscles of the leg, ankle, and foot.
- Using a reference book as a guide, attempt to identify through palpation one muscle that is deep to another in the leg, ankle, and foot.
- Verbally describe two palpable findings related to the quality and condition of five instructor-selected muscles of the leg, ankle, and foot.

- List three muscles that are antagonists to inversion (the muscles that evert the foot).
- List three muscles that evert the foot and toes (e.g., peroneus longus, peroneus brevis, extensor digitorum longus).
- List three muscles that are antagonists to eversion (the muscles that invert the foot and toes).

 Actively move one's body through the movements produced by each of the following muscles using a reference book as a guide: tibialis anterior, extensor digitorum longus, extensor hallucis longus, peroneus longus, peroneus brevis, gastrocnemius, soleus, tibialis posterior, flexor digitorum longus, flexor hallucis longus.

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

#### Apply

**Conditions:** Having participated in a classroom discussion, the learner will be able to:

- Discuss the origins, insertions, actions, and roles of the muscles of the leg, ankle, and foot.
- Discuss palpable findings related to quality and condition of tissue and a comparison of tissue bilaterally from palpation sessions.
- Discuss the implications of tissue quality and condition to muscular health, posture, and correct mechanical function of the leg, ankle, and foot.

**Conditions:** Having participated in practice sessions, the learner will be able to:

- Correctly pronounce the names of extrinsic muscles of the leg, ankle, and foot.
- Demonstrate proper body mechanics and client positioning methods while palpating muscles of the leg, ankle, and foot.
- Locate through palpation the muscle bellies of five instructor-selected muscles of the leg, ankle, and foot.
- Locate through palpation the attachment sites of three instructor-selected muscles of the leg, ankle, and foot.
- Identify through palpation the edges and fiber direction of two instructor-selected muscles of the leg, ankle, and foot.
- Demonstrate correct body mechanics while passively moving a partner's body through the actions of five instructor-selected muscles of the leg, ankle, and foot.
- Palpate four muscles of the leg, ankle, and foot bilaterally on a partner and verbally describe physical characteristics in muscle quality.
- Palpate four muscles of the leg, ankle, and foot consecutively on two partners and verbally describe physical characteristics in muscle quality.
- Use an isometric muscle contraction to isolate five instructor-selected muscles of the leg, ankle, and foot, using a reference book as a guide and with support from an instructor.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

	Entry-Level Massage Education Blueprint Adapting Sessions for Clients
Topic	Adapting Sessions for the Stages of Healing
Sub-Topics	<ul> <li>An Overview of the Inflammatory Response and Healing Cycle</li> <li>The Acute Stage of Healing</li> <li>The Subacute Stage of Healing</li> <li>The Maturation Stage of Healing</li> </ul>
Topic	Adapting Sessions for Clients with Common Pathologies
Sub-Topics	<ul> <li>Sessions for Clients with Arthritis</li> <li>Sessions for Clients with Bursitis</li> <li>Sessions for Clients with Cancer</li> <li>Sessions for Clients with Diabetes</li> <li>Sessions for Clients with Fasciitis</li> <li>Sessions for Clients with Fibromyalgia</li> <li>Sessions for Clients with Headaches</li> <li>Sessions for Clients with Nerve Compression Syndromes</li> <li>Sessions for Clients with Osteoporosis</li> <li>Sessions for Clients with Skin Cancer</li> <li>Sessions for Clients with Sprains</li> <li>Sessions for Clients with Stress</li> <li>Sessions for Clients with Strains</li> <li>Sessions for Clients with Tendinopathies</li> </ul>
Topic	Adapting Sessions for Special Populations
Sub-Topics	<ul> <li>Sessions for Clients Who Are Over 55</li> <li>Sessions for Clients Who Are Obese</li> <li>Sessions for Clients Who Are Children</li> <li>Sessions for Clients Who Are Pregnant</li> <li>Sessions for Clients Who Are Athletes or Fitness Oriented</li> <li>Sessions for Clients Who Are at the End of Life</li> <li>Sessions for Clients with Disabilities</li> </ul>

# **Topic: Adapting Sessions for the Stages of Healing**

# Learning Outcomes

**Conditions:** Having completed 11 hours of instruction on adapting sessions for the stages of healing, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to the acute stage, subacute stage, and maturation stage of healing, on a written examination.
- Plan and conduct 1-hour sessions for clients with different injuries in the acute stage, subacute stage, and maturation stage of healing, demonstrating the ability to adapt sessions appropriately, choose effective application methods, and address compensating structures, on graded activities or practical evaluations.

### **Key Terminology and Concepts**

- Acute stage
- Autoimmune activity
- Client self-care
- Collagen
- Collagen remodeling
- Granulation
- Heat
- Hormonal changes
- Inflammatory response
- Invasion of foreign bodies
- Loss of function
- Maturation stage
- Muscle spasm
- Pain
- Physical injury
- Proliferation
- Range of motion
- Redness
- Re-injury
- RICES
- Scar tissue
- Subacute stage
- Swelling
- Tissue injury
- Vascular changes
- Vasodilation

### **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

# Sub-Topics

- An Overview of the Inflammatory Response and Healing Cycle
- The Acute Stage of Healing
- The Subacute (Proliferative) Stage of Healing
- The Maturation (Remodeling) Stage of Healing

## Sub-Topic: An Overview of the Inflammatory Response and Healing Cycle

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

## Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term inflammatory response (e.g., tissue response to damage, or threat of pathogenic invasion).
- List three possible causes of inflammation (e.g., physical injury, invasion of foreign bodies into an area, hormonal changes, autoimmune activity, etc.).
- Describe the purposes of inflammation in the body (e.g., protect the body from pathogenic invasion, limit the range of contamination, prepare damaged tissue for healing, etc.).
- List the four primary signs and symptoms of the inflammatory response (redness, heat, swelling, and pain.)
- List the five primary signs and symptoms of soft-tissue injury (redness, swelling, heat, pain, loss of function).
- Outline the general timeframes for the stages of healing (e.g., acute stage: initial inflammatory response to 72 hours; subacute stage from 3 days to 6 weeks; maturation stage from 6 weeks to 1 year).
- Match the stages of inflammation to written descriptions of the key physiologic processes at each stage (e.g., for acute stage: the body limits blood loss, inundates the injury site with healing chemicals, and removes damaged tissue and debris, etc.).
- List two physiological events that occur during each stage of healing (e.g., for acute stage: damaged cells release chemicals that initiate the inflammatory response causing chemical and vascular changes that lead to the primary signs and symptoms, etc.).

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.
	• Discuss the possible causes of inflammation and its purpose in the body.	
	<ul> <li>Compare and contrast inflammation that is local, such as might occur with a soft-tissue injury, with inflammation that is systemic, as might be caused by an inflammatory disease.</li> </ul>	
	<ul> <li>Discuss the signs, symptoms, and timeframes related to the stages of healing.</li> </ul>	
	<ul> <li>Discuss the physiological events that occur during each stage of healing (e.g., in acute stage: damaged cells release chemicals that initiate the inflammatory response causing chemical and vascular changes that lead to the primary signs and symptoms, etc.).</li> </ul>	
	<ul> <li>Discuss general concepts for understanding inflammation and the healing process (e.g. lots of overlap between stages, rate of progression through cycle is individual, type of tissue damaged and severity of damage are primary factors in determining rate of healing, etc.).</li> </ul>	
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: The Acute Stage of Healing**

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review the general timeframes for the acute stage of healing.
- List the five primary signs and symptoms for the acute stage of inflammation related to soft-tissue injury (redness, swelling, heat, pain, loss of function).
- Review the physiological events that occur during the acute stage of inflammation (e.g., vascular changes such as vasodilation and an increase in the permeability of blood vessels lead to tissue swelling, etc.).
- Match these signs and symptoms to written descriptions of their physiologic processes: swelling, redness, muscle guarding, decreased range of motion (e.g., swelling: when soft tissue is damaged, blood and fluids spill out of the damaged tissue into the surrounding area causing primary edema, etc.).
- List two contraindications or cautions that require adaptations when working with a client with an acute soft-tissue injury (e.g., no massage distal to the injury site, range of motion only if it doesn't cause pain, massage adaptations may be required based on client medications and where the injury site is located, etc.).
- List two ways massage is adapted for clients with acute soft-tissue injury (e.g., positioning for comfort, adaptations based on medications, use of different techniques to address soft-tissue inflammation, etc.).
- Outline massage session goals for the acute stage of healing from soft-tissue injury (e.g., reduce tissue swelling, reduce muscle spasm, decrease pain, maintain available pain-free range of motion, prevent re-injury, encourage client self-care, etc.).

**Conditions:** Having observed an instructor demonstration, the learner will be able to:

- Imitate methods the instructor used to comfortably position clients with localized inflammation of an extremity (e.g., elevate an injured wrist or ankle, etc.).
- Review hydrotherapy methods to reduce localized swelling (e.g., use of ice massage, application of a cold pack, etc.).
- Review methods useful in reducing muscle guarding around an injury site (e.g., identification of and massage to muscles proximal to the injury site that are in spasm, etc.).
- Review methods to reduce sympathetic nervous system activity (e.g., soothing strokes applied for relaxation, encouragement of deep relaxed breathing, etc.).
- Imitate the methods the instructor used to maintain available pain-free range of motion (e.g., encouragement of active ROM as long as movement does not increase pain, passive range of motion techniques, etc.).
- Imitate the language the instructor used to communicate effectively and professionally with clients during the session (e.g., communication about the comfort of strokes or methods, the client's felt sensations during the application of techniques, etc.).
- Imitate the language and behaviors the instructor used to encourage appropriate client self-care (e.g., suggestions to elevate, ice regularly, practice pain-free movement, etc.).

- List three methods a massage therapist might use to achieve session goals in the acute stage of healing from soft-tissue injury (e.g., application of ice, elevation of the injured area, massage areas that are not inflamed to reduce but not eliminate muscle guarding, passive movement provided it doesn't produce pain, address compensating structures, massage to reduce sympathetic nervous system activation, etc.).
- List the words associated with the letters of the RICES mnemonic used for initial management of acute soft tissue injuries (R = rest, I = Ice, C = compression, E = elevation, S = stabilization).

#### Level 2 Knowledge: Use and Connect Skills: Practice and Refine

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss massage contraindications, and cautions that require adaptations when working with a client with an acute softtissue injury.
- Discuss general massage session goals for clients with acute soft-tissue injury.
- Discuss massage session methods and techniques when working with an acute softtissue injury.
- Analyze scenarios that depict clients with different soft-tissue injuries in the acute stage of healing.

**Conditions:** Having completed a practice session, the learner will be able to:

- Demonstrate effective methods to comfortably position clients with localized inflammation of an extremity.
- Demonstrate effective methods to reduce swelling in a localized area.
- Demonstrate effective methods to reduce but not eliminate muscle guarding around an injury site.
- Demonstrate effective methods to reduce sympathetic nervous system activity.
- Demonstrate effective methods to maintain available pain-free range of motion.
- Demonstrate effective communication with the client during the massage session.

Leve	el 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Probl Solve	_	<b>Conditions:</b> Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.
		<ul> <li>Develop a written 1-hour massage session plan for a client with an acute soft-tissue injury, demonstrating the ability to adapt sessions appropriately, choose effective application methods, and address compensating structures, and share plan with peers.</li> </ul>	
		<ul> <li>Provide thoughtful feedback to peers on their session plans.</li> </ul>	

# **Sub-Topic: The Subacute Stage of Healing**

evel 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review the timeframes for the subacute (proliferative) stage of healing.
- Review the signs and symptoms for the subacute (proliferative) stage of healing (e.g., muscle guarding subsides; heat, redness, swelling, and pain diminish; and the area regains some limited function).
- Review the physiological events that occur during the subacute (proliferative) stage of healing (e.g., granulation begins and thicker, stronger collagen strands then begin to take place of initial fragile strands).
- List two contraindications or cautions that require adaptations when working with a client with a soft-tissue injury in the subacute (proliferative) stage of healing (e.g., the tissue may still be delicate in early stages and adaptations are similar to those made in the acute stage, etc.).
- List two ways massage is adapted for clients with a soft-tissue injury in the subacute (proliferative) stage of healing (e.g., positioning for comfort, adaptations based on medications, use of different techniques to address residual soft-tissue inflammation or limited range of motion, etc.).
- Outline massage session goals for soft tissue injury in the subacute stage of healing (e.g., reduce residual tissue swelling, improve tissue health, reduce trigger points in the affected region, promote proper collagen alignment, increase range of motion, encourage client self-care, etc.).
- List three methods a massage therapist might use to achieve session goals for the acute stage of healing of a soft-tissue injury (e.g., application of ice, contrast hot and cold hydrotherapy, cross-fiber friction techniques, increase range of motion with passive and active ROM, trigger point therapy, etc.).

**Conditions:** Having observed an instructor demonstration, the learner will be able to:

- Review methods to apply contrast (hot and cold) hydrotherapy applications.
- Review methods to reduce trigger points in region of soft-tissue injury in a subacute (proliferative) stage of healing.
- Review methods to promote proper collagen alignment of healing tissue (e.g., cross-fiber friction techniques, etc.).
- Review methods used to increase range of motion (e.g., passive and active ROM techniques, etc.).
- Imitate the language the instructor used to communicate effectively and professionally with clients during the session (e.g., communication about the comfort of strokes or methods, the client's felt sensations during the application of techniques, etc.).
- Imitate the language and behaviors the instructor used to encourage appropriate client self-care (e.g., suggestions to continue icing, active ROM, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:         <ul> <li>Discuss general timeframes, signs, and symptoms of subacute inflammation.</li> <li>Discuss the physiological events that occur during the subacute (proliferation) stage of healing.</li> <li>Discuss massage contraindications and cautions that require adaptations when working with a client with subacute inflammation and soft-tissue injury.</li> <li>Discuss general massage session goals for clients in the subacute (proliferation) stage of healing from soft-tissue injury.</li> </ul> </li> <li>Discuss massage session methods and techniques when working with a soft-tissue injury in the subacute (proliferation) stage of healing.</li> <li>Analyze scenarios that depict clients with different soft-tissue injuries in the subacute stage of healing.</li> </ul>	<ul> <li>Conditions: Having observed an instructor demonstration, the learner will be able to:</li> <li>Demonstrate the use of contrast (hot and cold) hydrotherapy applications.</li> <li>Demonstrate the correct use of trigger point therapy to reduce trigger points in a region of soft-tissue injury.</li> <li>Demonstrate the correct use of friction techniques to promote proper collagen alignment of healing tissue.</li> <li>Demonstrate the correct use of range of motion techniques to increase ROM in an area of soft-tissue injury.</li> <li>Demonstrate effective communication with the client during the massage session.</li> <li>Encourage appropriate client self-care activities for a client healing from a soft-tissue injury.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:</li> <li>Develop a written 1-hour massage session plan for a client with a subacute soft-tissue injury, demonstrating the ability to adapt sessions appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.</li> <li>Provide thoughtful feedback to peers on their session plans.</li> </ul>	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Sub-Topic: The Maturation Stage of Healing**

evel 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Review the general timeframes for the maturation stage of healing.
- Review the signs and symptoms for the maturation stage of healing (e.g., evidence of edema is gone, but the area has not regained full range of motion or mechanical strength, etc.).
- Review the physiological events that occur during the maturation stage of healing (e.g., the collagen remodeling process produces scar tissue and continues rapidly in the early maturation stage and then slows; in the healthy formation of scar tissue, the alignment of fibers down the lines of mechanical stress improves and the links between fibers becomes stronger, etc.).
- List one caution that requires consideration when working with clients in the maturation stage of healing from a soft-tissue injury (e.g., overtreatment, overstretching, or aggressive work might cause re-injury or trigger a repeat of the inflammatory process, etc.).
- List one way massage is adapted for clients in the maturation stage of healing from a softtissue injury (e.g., the addition of hydrotherapy to the session or the use of different techniques to address mechanical weakness or loss of range of motion, etc.).
- Outline massage session goals for the maturation stage of healing from a softtissue injury (e.g., reduce trigger points, address muscular imbalances, release restricted tissue, reduce scar tissue, treat compensating structures, etc.).
- List three methods a massage therapist might use to achieve session goals for the maturation stage of healing from a softtissue injury (e.g., friction techniques, myofascial release to address fascial restrictions, use of warm or hot packs, etc.).

**Conditions:** Having observed an instructor demonstration, the learner will be able to:

- Review methods to apply warm and hot hydrotherapy applications.
- Review methods to promote proper collagen alignment of healing tissue using friction techniques.
- Review methods to address myofascial restrictions for soft-tissue injury in the maturation stage of healing.
- Imitate the language the instructor used to communicate effectively and professionally with clients during the session (e.g., communication about the comfort of strokes or methods, the client's felt sensations during the application of techniques, etc.).
- Imitate the language and behaviors the instructor used to encourage appropriate client self-care (e.g., suggestions to use heat, demonstration of gentle and appropriate stretches, referral to physical therapist or fitness trainer to address weakened muscles, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss situations that require session adaptations when working with a client with a soft-tissue injury in the maturation stage of healing.</li> <li>Discuss general massage session goals for clients in the maturation stage of healing from soft-tissue injury.</li> <li>Discuss massage session methods and techniques when working with a soft-tissue injury in the maturation stage of healing.</li> <li>Analyze scenarios that depict clients with different soft-tissue injuries in the maturation stage of healing.</li> </ul>	<ul> <li>Conditions: Having completed one practice session, the learner will be able to:         <ul> <li>Demonstrate the application of warm and hot hydrotherapy.</li> <li>Demonstrate two methods to address fascial restrictions.</li> <li>Demonstrate the correct use of trigger point therapy to reduce trigger points in a region of soft-tissue injury.</li> <li>Demonstrate the correct use of friction techniques to promote proper collagen alignment of healing tissue.</li> </ul> </li> <li>Demonstrate the correct use of range of motion techniques to increase ROM in an area of soft-tissue injury.</li> <li>Demonstrate effective communication with the client during the massage session.</li> <li>Encourage appropriate client self-care activities for a client with a soft-tissue injury in the maturation stage of healing.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:</li> <li>Develop a written 1-hour massage session plan for a client with a subacute soft-tissue injury, demonstrating the ability to adapt sessions appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.</li> <li>Provide thoughtful feedback to peers on their session plans.</li> </ul>	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

# **Topic: Adapting Sessions for Clients with Common Pathologies**

# Learning Outcomes

**Conditions:** Having completed 40 hours of instruction on adapting sessions for clients with common pathologies, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to common pathologies including arthritis, bursitis, cancer, diabetes, fibromyalgia, fasciitis, tendinopathies, headaches, nerve compression syndromes, osteoporosis, skin cancer, stress, sprains, and strains, on graded activities or written examinations.
- Plan and conduct 1-hour sessions for clients with instructor-selected pathologies, demonstrating the ability to adapt sessions appropriately and choose effective application methods, on graded activities or practical evaluations.

## **Key Terminology and Concepts**

- Abnormal nociception
- Achilles tendon
- Actinic keratosis
- Adrenal exhaustion
- Adrenal glands
- Adrenocorticotrophic hormone (ACTH)
- Advanced or poorly treated diabetes
- Anterior pituitary gland
- Anterior talofibular ligament
- Arthritis
- Atrophy
- Basal cell carcinoma
- Benign
- Bicipital tendon
- Blood sugar
- Bone marrow transplant
- Bony adaption
- Bursitis
- Cancer
- Carcinogen
- Carcinoma
- Carpal tunnel syndrome
- Cartilage damage
- Chemical headache
- Chemotherapy
- Chronic infected bursitis
- Chronic nonseptic bursitis
- Chronic stress
- Cluster headache
- Collateral ligaments

- Migraine headache
- Mild, well-managed diabetes
- Morton's toe/foot
- Multiple crush phenomenon
- Muscle-tendon unit
- Musculotendinous junction
- Nerve compression syndromes
- Nerve plexi
- Neuroendocrine disturbance
- Neuropathy
- Olecranon bursitis
- Oncology
- Osteoarthritis (OA)
- Osteoporosis
- Pain
- Patellar tendon
- Pes cavus
- Pes planus
- Piriformis syndrome
- Plantar fasciitis
- Prepatellar bursitis
- Radiation
- Repetitive stress
- Retrocalcaneal bursitis
- Rheumatoid arthritis (RA)
- Rotator cuff tendons
- Sacroiliac ligament
- Sarcoma
- Sciatica
- Serotonin

- Corticotrophin-releasing hormone (CRH)
- Cortisol
- Crepitus
- Cruciate ligament
- Degenerative joint disease
- Diabetes mellitus
- Diabetic emergency
- Edema
- Epinephrine
- Fasciitis
- Fibromyalgia
- Flight-or-fight response
- Forearm extensors
- Forearm flexors
- Gangrene
- Headache
- Heat
- Hormone therapy
- Hyperosmolality
- Iliotibial band syndrome
- Impaired vision
- Insulin
- Insulin shock
- Ketoacidosis
- Kidney disease
- Kyphosis
- Leukemia
- Limbic system
- Lymphoma
- Malignant
- Malignant melanoma
- Melanoma
- Metastasis

- Sinus headache
- Skin cancer
- Spinal nerves
- Sprains
- Squamous cell carcinoma
- Stiffness
- Strains
- Stress
- Stress management
- Stressors
- Subacrominal bursitis
- Substance P
- Surgery
- Swelling
- Sympathetic nervous system
- Synovial joint
- Tendinitis
- Tendinopathies
- Tendinosis
- Teno-periosteal junction
- Tenosynovitis
- Tension headache
- Thoracic outlet syndrome
- Traction and inflammatory headache
- Trigger point
- Trochanteric bursitis
- Tumor
- Type-1 diabetes (insulin dependent)
- Type-2 diabetes (insulin resistant)
- Ulcers
- UV radiation
- Vascular disease

## **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

### **Sub-Topics**

- Sessions for Clients with Arthritis
- Sessions for Clients with Bursitis
- Sessions for Clients with Cancer
- Sessions for Clients with Diabetes
- Sessions for Clients with Fasciitis
- Sessions for Clients with Fibromyalgia
- Sessions for Clients with Headaches
- Sessions for Clients with Nerve Compression Syndromes
- Sessions for Clients with Osteoporosis
- Sessions for Clients with Skin Cancer
- Sessions for Clients with Sprains
- Sessions for Clients with Stress
- Sessions for Clients with Strains
- Sessions for Clients with Tendinopathies

## Sub-Topic: Sessions for Clients with Arthritis

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

### Receive Respond

Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term osteoarthritis (also called degenerative joint disease).
- Review the basic anatomy and physiology of a synovial joint.
- List two causes of osteoarthritis (e.g., chronic ligament laxity, repetitive pounding stress, hormonal imbalances, overweight adding stress to joints, age, etc.).
- Outline the progression of osteoarthritis (e.g., 1: cartilage damage; 2: bony adaption; 3: muscle reactions; 4: atrophy).
- List two signs and symptoms of osteoarthritis (e.g., acute: pain, heat, swelling; chronic: ongoing pain, stiffness, etc.).
- List the three joints commonly affected by osteoarthritis (knee, hip, distal joints of the fingers).
- List two cautions, contraindications, or session adaptations when working with clients with osteoarthritis (e.g., acute stage contraindicates massage, presence of inflammation indicates use of ice, no inflammation indicates use of moist heat, condition worsens late in day from wear, potential for bone spurs, etc.).
- List two benefits or effects of massage for clients with osteoarthritis (e.g., reduced pain, better muscular balance around the joint, improved range of motion, etc.).
- List two session goals for working with clients with osteoarthritis in the acute, subacute, and maturation stages (e.g., reduce fascial restrictions, focus on muscles at affected joints, warm the tissue with moist heat, maintain or improve range of motion, etc.).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods for adapting a massage session to the needs of a client with osteoarthritis.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with rheumatoid arthritis.

- List two methods or techniques for reaching session goals related to osteoarthritis in each stage of healing (e.g., warm, moist hydrotherapy when no inflammation present; myofascial approaches, joint movement, gentle stretching, trigger point work, etc.).
- List two self-care recommendations a therapist might make to a client living with osteoarthritis (e.g., specific stretches, selfmassage around joints, use of hydrotherapy, etc.).
- Define the term *rheumatoid arthritis (RA)*.
- List two causes of rheumatoid arthritis (e.g., several pathologies may initiate rheumatoid arthritis including same bacteria that cause Lyme disease, streptococcus leading to an autoimmune reaction, etc.).
- List two signs and symptoms of rheumatoid arthritis (e.g., feeling of illness, lack of energy, low-grade fever, vague muscle pain that gradually becomes sharp, leading to joint pain, hot, red, stiff, inflamed joints, etc.).
- List the two areas of the body where joints are most frequently affected by rheumatoid arthritis (hands, feet).
- List three tissues other than joints that can be affected in advanced stages of rheumatoid arthritis (e.g., muscles, tendons, blood vessels, serous membranes, etc.).
- List two cautions, contraindications, or session adaptations when working with a client with rheumatoid arthritis (e.g., acute contraindicates massage, condition worse in morning from fluid accumulation, etc.).
- List two benefits or effects of massage for rheumatoid arthritis (e.g., in the subacute or chronic stages massage reduces pain, promotes better muscular balance around the joint, reduces stress, etc.).
- List two self-care recommendations a therapist might make to a client living with rheumatoid arthritis (e.g., gentle stretches, use of cold hydrotherapy, etc.).

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in a classroom discussion, the learner will be able to:</li> <li>Discuss the causes, signs, and symptoms of osteoarthritis.</li> <li>Discuss the cautions, contraindications, and session adaptations for clients with osteoarthritis.</li> <li>Discuss massage benefits and effects for clients living with osteoarthritis.</li> <li>Discuss session goals, methods, and techniques for working with clients with osteoarthritis in the acute, subacute, and chronic stages.</li> <li>Discuss the causes, signs and symptoms of rheumatoid arthritis.</li> <li>Discuss the cautions, contraindications, and session adaptations for clients with rheumatoid arthritis.</li> <li>Discuss massage benefits and effects for clients living with rheumatoid arthritis.</li> <li>Compare and contrast osteoarthritis and rheumatoid arthritis.</li> <li>Discuss self-care recommendations to support clients living with osteoarthritis.</li> <li>Discuss self-care recommendations to support clients living with rheumatoid arthritis.</li> <li>Analyze scenarios that depict clients with osteoarthritis or rheumatoid arthritis in different stages of healing.</li> </ul>	Conditions: Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:  Demonstrate massage methods appropriate for a client with osteoarthritis.  Demonstrate massage methods appropriate for a client with rheumatoid arthritis.  Modify massage methods based on feedback from the client.  Modify massage methods based on felt sensations during the application of strokes.  Demonstrate effective and appropriate communication with clients during practice sessions.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	Conditions: Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:  Develop a written 1-hour massage session plan for a client with osteoarthritis or rheumatoid arthritis, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures and share	Conditions: Having developed a 1-hour massage plan for a client with osteoarthritis or rheumatoid arthritis, the learner will be able to:  Conduct a 1-hour massage session for a client with osteoarthritis or rheumatoid arthritis, as outlined in a written session plan, if directed by an instructor.
	<ul> <li>the plan with peers.</li> <li>Provide useful feedback to peers on their session plans.</li> </ul>	

Subject - Adapting Sessions for Clients, Topic - Adapting Sessions for Clients with Common Pathologies

#### **Sub-Topic: Sessions for Clients with Bursitis** Level 1 Knowledge: Attain and Comprehend Skills: Observe and Imitate Receive Conditions: Having participated in an interactive **Conditions:** Having learned hands-on techniques Respond lecture or classroom activity, the learner will be in other classes, and based on the instruction's able to: decision that hands-on practice for this pathology is necessary, and having watched an Define the term bursitis. instructor demonstration, the learner will be able Match these types of bursitis to their written to: descriptions: acute, chronic nonseptic, Imitate the instructor's methods for chronic infected. adapting a massage session to the needs of a List two causes of bursitis (e.g., acute trauma, client with bursitis. repetitive stress, complication of other softtissue injury or other pathologies like rheumatoid arthritis or gout, etc.). List three signs or symptoms associated with bursitis (e.g., pain with palpation and reproduced when tissue is stretched, redness, localized swelling, crepitus, mechanism of injury, heat, etc.). Describe one assessment method used to identify an inflamed bursa (e.g., pain with active range of motion and passive range of motion, lack of pain with resisted movement, pain reproduced with palpation, etc.).

- List three places where bursitis commonly occurs (e.g., subacromial, olecranon, prepatellar, trochanteric, retrocalcaneal areas, etc.).
- List two cautions, contraindications, or session adaptations when working with clients with bursitis (e.g., acute is contraindication for massage application, ice pack may be too heavy for bursitis so use bag of frozen peas, etc.).
- List two benefits or effects of massage for bursitis (e.g., massage reduces muscular imbalances around the joint, reduces trigger points, reduces restrictions in surrounding myofascia, reduces pain, etc.).
- List two session goals for working with clients with bursitis in each stage of healing.
- List two massage methods to achieve session goals for clients with bursitis in each stage of healing (e.g. reduce stress on bursa by identifying and treating tension in muscles overlying the bursa, etc.).

#### Level 2 Knowledge: Use and Connect

## Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the causes, types, and signs and symptoms of bursitis.
- Discuss assessment methods and findings that indicate bursitis (e.g., tender to palpation, localized pain with activity, history of a direct blow or other irritating factors, improves with rest, etc.).
- Discuss cautions, contraindications, and session adaptations when working with clients with bursitis (e.g., use of lightweight ice packs like frozen peas to avoid compression, repositioning the joint to treat muscles and tendons without compressing the bursa, etc.).
- Discuss session goals for working with clients with bursitis in the acute, subacute, and maturation stages.

#### **Skills: Practice and Refine**

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:

- Demonstrate massage methods appropriate for a client with bursitis.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

- Discuss massage methods for working with clients with bursitis (e.g., ice, treatment methods aimed at reducing tension in overlying muscle and tendon units, stretching overlying muscles, etc.).
- Compare and contrast session methods and techniques for clients with subacromial bursitis and retrocalcaneal bursitis.
- Discuss self-care recommendations to support clients living with bursitis.
- Analyze scenarios that depict clients with bursitis in different locations and different stages of inflammation.

#### Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

#### Problem Solve

**Conditions:** Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:

- Develop a written 1-hour massage session plan for a client with bursitis, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.
- Provide useful feedback to peers on their session plans.

**Conditions:** Having developed a 1-hour written massage plan for a client with bursitis, the learner will be able to:

 Conduct a 1-hour massage session for a client with bursitis, as outlined in a written session plan, if directed by an instructor.

## Sub-Topic: Sessions for Clients with Cancer

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term cancer.
- Match these terms to their written descriptions: carcinoma, melanoma, sarcoma, leukemia, lymphoma, benign, carcinogen, malignant, metastasis, oncology, tumor.
- List two body areas that are commonly affected by cancer (e.g., lungs, breasts, colon, prostate, etc.).
- List three causes of cancer (e.g., exposure to carcinogens such as cigarette tar, radon gas, and UV radiation, viruses, inherited gene, environmental factors, hormonal imbalances, immune system dysfunction, etc.).
- Describe simply in one's own words how cancer cells travel and spread in the body (e.g., spread through the bloodstream or lymphatic system).
- List three signs and symptoms of cancer (e.g., change in bowel or bladder habits, sore that does not heal, unusual bleeding, painless lump or swelling, difficulty swallowing, changes in skin lesions, persistent cough, unexplained weight loss, fatigue, fever, etc.).
- Match these cancer treatments to their written descriptions: surgery, chemotherapy, radiation, bone marrow transplant, hormone therapy.
- List two ways massage benefits people living with cancer (e.g., reduces pain, decreases stress, lowers blood pressure, improves appetite, provides nurturing, etc.).
- List two cautions, session adaptations, or contraindications for clients with cancer (e.g., scars from surgery, risk of infection, nerve damage and lymphedema, decreased immunity, nausea, fatigue, burns on the skin from radiation, etc.).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:

Imitate the instructor's methods for adapting a massage session to the needs of a client with cancer.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss cancer, its causes, and signs and symptoms.</li> <li>Discuss the benefits and effects of massage for people living with cancer.</li> <li>Discuss massage cautions, session adaptations, or contraindications related to cancer.</li> <li>Analyze one research article that concludes massage has positive effects for people living with cancer.</li> <li>Discuss massage methods, session enhancers, and session plans to benefit clients living with cancer.</li> <li>Discuss self-care recommendations to support clients living with cancer.</li> <li>Analyze scenarios that depict clients with different types of cancer receiving different types of cancer treatment (e.g., the client has undergone recent surgery to remove a tumor, client has recently undergone or is undergoing chemotherapy, client has recently undergone radiation therapy, etc.).</li> </ul>	Conditions: Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:  Demonstrate massage methods appropriate for a client with cancer.  Modify massage methods based on feedback from the client.  Modify massage methods based on felt sensations during the application of strokes.  Demonstrate effective and appropriate communication with clients during practice sessions.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:</li> <li>Develop a written 1-hour massage session plan for a client with cancer, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.</li> <li>Provide useful feedback to peers on their session plans.</li> </ul>	Conditions: Having developed a 1-hour massage plan for a client with cancer, the learner will be able to:  Conduct a 1-hour massage session for a client with cancer as outlined in a written session plan, if directed by the instructor.

## Sub-Topic: Sessions for Clients with Diabetes

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

#### Receive Respond

Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term diabetes.
- Match these primary types of diabetes mellitus to their written descriptions: type 1 (insulin dependent): insulin production absent; type 2 (insulin resistant): insulin secretion is inadequate to normalize blood sugar levels.
- List two signs and symptoms associated with diabetes mellitus (e.g., frequent urination, excessive thirst, increased appetite, fatigue, weight loss, nausea, etc.).
- List two signs and symptoms associated with insulin shock (e.g., dizziness, confusion, weakness, tremors, etc.).
- List two complications of diabetes mellitus (e.g., peripheral vascular disease, edema, ulcers, infection, gangrene, kidney disease, impaired vision, neuropathy, etc.).
- List three diabetes-related conditions that contraindicate massage (advanced or poorly managed diabetes, kidney failure, atherosclerosis).
- List two cautions or session adaptations when working with clients with diabetes (e.g., adapt for neuropathy in the extremities, adapt for poor quality of tissue in the extremities, etc.).
- List two benefits or effects of massage for clients with diabetes (e.g., effective for stress reduction, decreased muscle pain and soreness, etc.).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods for adapting a massage session to the needs of a client with well-managed diabetes.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with poorly managed or advanced diabetes who has been cleared by a physician to receive massage.

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the role of insulin in the body.
- Outline the etiology of type 1 diabetes (e.g., an autoimmune disorder causing lifelong deficiency in insulin, etc.).
- Outline the etiology of type 2 diabetes (e.g., most often related to diet where a habit of high-carbohydrate foods wears out the pancreas and makes the insulin-producing cells less efficient, etc.).
- Outline proactive steps a massage therapist can take to ensure massage is safe for a client with diabetes (e.g., advise the client to measure blood sugar before the session, suggest a small meal before the session if glucose levels are low, identify recent injection sites, verify the client has any needed medication, etc.).
- Discuss the three types of emergencies that may occur in people with diabetes (ketoacidosis, hyperosmolality, insulin shock).
- Outline response steps a therapist should take in the event of a diabetic emergency (e.g., have high sugar snacks such as juice, candy, or soda on hand for insulin shock, etc.).
- Discuss the possible contraindications, massage cautions, and session adaptations for each of these complications of diabetes: cardiovascular disease, unhealthy tissue in the extremities, edema, ulcers, gangrene, amputations, kidney disease, impaired vision, neuropathy.
- Compare and contrast massage for people with mild, well-managed diabetes with massage for people with advanced or poorly treated diabetes.
- Analyze three mock health forms of people with diabetes and determine if they are contraindicated or can receive massage with session adaptations.

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:

- Demonstrate massage methods appropriate for a client with well-managed diabetes.
- Demonstrate massage methods appropriate for a client with poorly managed or advanced diabetes who has been cleared by a physician to receive massage.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

 Analyze a health form from a client with diabetes and brainstorm five questions to ask to find out more about his or her condition.

#### Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

#### Problem Solve

**Conditions:** Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:

- Develop a written 1-hour massage session plan for a client with a subacute soft-tissue injury, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.
- Provide useful feedback to peers on their session plans.

**Conditions:** Having developed a 1-hour massage plan, the learner will be able to:

 Conduct a 1-hour massage session for a client with poorly managed or advanced diabetes, as outlined in a written session plan, if directed by an instructor.

## **Sub-Topic: Sessions for Clients with Fasciitis**

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define these terms: fasciitis, plantar fasciitis, iliotibial band syndrome.
- Match these related conditions to their written descriptions: Morton's toe/foot, pes planus, pes cavus, plantar fasciitis, iliotibial band syndrome.
- List one cause of fasciitis (e.g., overuse, repetitive stressful motion, etc.).
- List two factors that contribute to the development of plantar fasciitis (e.g., excessive pronation or supination, athletic overtraining, hypertonic gastrocnemius and soleus muscles, improper footwear, weight gain, etc.)
- List two factors that contribute to the development of iliotibial band syndrome (e.g. hypertonic tensor fasciae latae, quadriceps, or hamstring muscles, over-pronation, poor biomechanics during activities, etc.).
- Describe one key assessment finding that helps identify plantar fasciitis (e.g., postural assessment notes excessive pronation or pes planus, palpation of the plantar fascia elicits point tenderness at the medial attachment to the calcaneus, etc.).
- List two signs and symptoms that help distinguish plantar fasciitis from other musculoskeletal conditions in the foot (e.g., pain that occurs with the first few steps after non-weight-bearing rest, increased pain when climbing stairs, pain decreases with warm-up but increases with prolonged activity, etc.).

**Conditions:** Having learned hands-on techniques in other classes and watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods for adapting a massage session to the needs of a client with plantar fasciitis.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with iliotibial band syndrome.

- List two signs and symptoms that help distinguish iliotibial band syndrome from other musculoskeletal conditions around the knee or thigh (e.g., location of pain along the lateral thigh or attachments of the iliotibial band, increased pain when descending stairs, hypertonic tensor fasciae latae and other lateral thigh muscles, etc.).
- List two cautions, contraindications, or session adaptations for fasciitis (e.g., treat according to stages of inflammation, position the client for best access to affected structures, etc.).
- List two massage benefits or effects for fasciitis (e.g., reduce edema, improve muscular balance, reduce pain in compensating structures, reduce tension in the plantar fascia, etc.).
- Outline two session goals for fasciitis in the acute, subacute, and maturation stages.
- List two massage session methods to meet session goals for fasciitis (e.g., treat according to stages of inflammation, neuromuscular techniques to address hypertonic muscles, ice in the acute stage, heat before stretching the fascia in the maturation stage, etc.).

#### Skills: Practice and Refine

#### Apply

Level 2

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

**Knowledge: Use and Connect** 

- Discuss the causes, factors, common locations, and signs and symptoms of plantar fasciitis.
- Discuss the causes, factors, common locations, and signs and symptoms of iliotibial band syndrome.
- Discuss cautions, contraindications, or session adaptations when working with clients with plantar fasciitis.
- Discuss cautions, contraindications, or session adaptations when working with clients with iliotibial band syndrome.

**Conditions:** Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods appropriate for a client with plantar fasciitis.
- Demonstrate massage methods appropriate for a client with iliotibial band syndrome.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

- Discuss the benefits and effects of massage for clients with plantar fasciitis and iliotibial band syndrome.
- Discuss treatment methods and techniques for working with clients with plantar fasciitis in the acute, subacute, or chronic stages.
- Discuss treatment methods and techniques for working with clients with iliotibial band syndrome in the acute, subacute, or chronic stages.
- Discuss self-care recommendations to support clients living with plantar fasciitis.
- Discuss self-care recommendations to support clients living with iliotibial band syndrome.
- Analyze scenarios that depict clients with plantar fasciitis or iliotibial band syndrome in different stages of inflammation.

#### Level 3 Knowledge: Choose and Plan

activity, the learner will be able to:

#### Problem Solve

**Conditions:** Having analyzed client scenarios during an interactive lecture or classroom

- Develop a written 1-hour massage session plan for a client with plantar fasciitis or iliotibial band syndrome, demonstrating the ability to adapt a session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.
- Provide useful feedback to peers on their session plans.

#### **Skills: Naturalize and Adapt**

**Conditions:** Having developed a 1-hour massage plan for a client with plantar fasciitis or iliotibial band syndrome, the learner will be able to:

 Conduct a 1-hour massage session for a client with plantar fasciitis or iliotibial band syndrome as outlined in a written session plan.

## Sub-Topic: Sessions for Clients with Fibromyalgia

Level 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

#### Receive Respond

Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *fibromyalqia*.
- Identify the body systems associated with fibromyalgia (e.g., nervous system, endocrine system).
- List three possible causes of fibromyalgia (e.g., soft tissue trauma, neuroendocrine disturbances, abnormal nociception, elevated levels of substance P, sleep disorders, low serotonin levels, emotional trauma, etc.).
- List three signs and symptoms of fibromyalgia (e.g., pain, burning, tingling, joint stiffness, presence of tender points, fatigue, sleep disturbances, trigger points, stiffness after rest, etc.).
- List two contraindications, cautions, and session adaptations for working with clients with fibromyalgia (e.g., easy to overtreat, medications may impact ability to give feedback on comfort of strokes, etc.).
- List two ways massage benefits people living with fibromyalgia (e.g., research shows that massage reduces pain levels, reduces the anxiety and depression that often accompany massage, may aid sleep, etc.).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:

Imitate the instructor's methods for adapting a massage session to the needs of a client with fibromyalgia.

#### Level 2

Apply

#### **Knowledge: Use and Connect**

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss fibromyalgia, its causes, signs and symptoms, and related conditions (e.g., chronic fatigue syndrome, irritable bowel syndrome, sleep disorders, etc.).
- Discuss the benefits and effects of massage for people living with fibromyalgia.

#### **Skills: Practice and Refine**

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:

- Demonstrate massage methods appropriate for a client with fibromyalgia.
- Modify massage methods based on feedback from the client.

- Discuss massage cautions, session adaptations, and contraindications related to fibromyalgia.
- Analyze one research article that concludes massage has positive effects for fibromyalgia.
- Discuss massage strokes, session enhancers, and session plans to benefit clients living with fibromyalgia.
- Discuss self-care recommendations to support clients living with fibromyalgia.
- Analyze scenarios that depict clients with different symptoms related to fibromyalgia.

- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

#### Level 3 Knowledge: Choose and Plan

#### Skills: Naturalize and Adapt

#### Problem Solve

**Conditions:** Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:

- Develop a written 1-hour massage session plan for a client with a subacute soft-tissue injury, demonstrating the ability to adapt a session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.
- Provide useful feedback to peers on their session plans.

**Conditions:** Having developed a 1-hour massage plan for a client with fibromyalgia, the learner will be able to:

 Conduct a 1-hour massage session for a client with fibromyalgia as outlined in a written session plan, if directed by the instructor.

## **Sub-Topic: Sessions for Clients with Headaches**

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term headache
- Match these types of headaches to their written descriptions: tension headache, sinus headache, migraine headache, cluster headache, chemical headache, traction, and inflammatory headaches.
- List two causes for each of these headache types: tension headache, sinus headache, migraine headache, cluster headache, chemical headache (e.g., possible causes of tension headaches include hypertonic muscles of the neck, face, and scalp, stress, changes in brain chemicals including lower than normal serotonin levels, etc.; possible causes of sinus headache include sinus pressure, etc.).
- List two factors that contribute to the
  occurrence of these headache types: tension
  headache, sinus headache, migraine
  headache, cluster headache, chemical
  headache (e.g., for chemical headaches,
  contributing factors include dehydration, low
  blood sugar, alcohol consumption, hormonal
  changes, etc.; for migraine headaches
  contributing factors include sensitivities to
  beer, wine, cheese, chocolate, aspartame,
  caffeine, salt, and chemicals in foods, etc.).
- List two distinguishing signs and symptoms of these headache types: tension headache, sinus headache, migraine headache, cluster headache, chemical headache (e.g., signs and symptoms of cluster headaches include debilitating pain located around one eye, the eye is red and swollen, runny nose on one side of the face, lying down increases the pain, etc.).
- Label a diagram depicting pain patterns associated with different types of these headaches: sinus, tension, migraine, cluster.

**Conditions:** Having learned hands-on techniques in other classes and watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods for adapting a massage session to the needs of a client with a tension headache.
- Imitate the instructor's methods for adapting a massage session to the needs of a client living with chronic migraine headaches.

- List two cautions, contraindications, and session adaptations for these headache types: tension headache, sinus headache, migraine headache, cluster headache, chemical headache, traction headache, inflammatory headache (e.g., sinus headache: massage contraindicated for acute, with chronic the prone position may cause pain when the client's face is in a face cradle, etc.; with traction and inflammatory headaches, the client is contraindicated and should be referred for immediate medical attention, etc.).
- List two massage benefits or effects for all types of headache (e.g., for tension headaches massage decreases general stress, reduces shortness and tightness in associated muscles, reduces trigger points in associated soft-tissue, etc.).
- List two massage methods or techniques effective for the treatment of tension headaches (e.g., Swedish massage, warm packs to associated muscles, trigger point therapy, gentle passive stretches to the cervical region, etc.).

#### **Skills: Practice and Refine**

## Apply

Level 2

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

**Knowledge: Use and Connect** 

- Discuss the causes, locations, signs and symptoms of these headache types: tension headache, sinus headache, migraine headache, cluster headache, chemical headache, traction and inflammatory.
- Discuss cautions, contraindications, and session adaptations when working with these headache types: tension headache, sinus headache, migraine headache, cluster headache, chemical headache, traction and inflammatory.
- Discuss the benefits and effects of massage for these headache types: tension, chronic sinusitis, chronic migraine, and chronic cluster.
- Discuss session goals for working with clients with these headache types: tension, chronic sinusitis, chronic migraine, chronic cluster.

**Conditions:** Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods appropriate for a client with a tension headache.
- Demonstrate massage methods appropriate for a client living with chronic migraine headaches.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

- Discuss treatment methods for working with clients with these headache types: tension, chronic sinusitis, chronic migraine, chronic cluster.
- Discuss self-care recommendations to support clients living with these headache types: tension, chronic sinusitis, chronic migraine, chronic cluster.
- Analyze scenarios that depict clients with different types of headaches.

# Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

#### Problem Solve

**Conditions:** Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:

- Develop a written 1-hour massage session plan for a client with a tension headache, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.
- Provide useful feedback to peers on their session plans.

**Conditions:** Having developed a 1-hour massage plan for a client with a headache, the learner will be able to:

 Conduct a 1-hour massage session for a client with a headache as outlined in a written session plan, if directed by an instructor.

## **Sub-Topic: Sessions for Clients with Nerve Compression Syndromes**

Level 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term nerve compression syndromes.
- Review the location and muscle innervations of major spinal nerves and nerve plexi.
- Match these types of nerve compression syndromes to their written descriptions: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- Identify the possible locations where nerve compressions occur for these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- List two causes of these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- List two factors that contribute to the occurrence of these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- List two signs and symptoms of each of these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- List two cautions, contraindications, and session adaptations for these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.

**Conditions:** Having learned hands-on techniques in other classes and watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods for adapting a massage session to the needs of a client with thoracic outlet syndrome.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with carpal tunnel syndrome.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with piriformis syndrome.

- List two massage benefits or effects for clients with these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- List two session goals for massage sessions aimed at treating clients with these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- List two massage methods or techniques effective for meeting session goals of these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.

#### Level 2

#### **Knowledge: Use and Connect**

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the causes, locations, signs and symptoms of these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- Discuss methods to assess tissue and identify that these nerve compression syndromes are occurring: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- Discuss cautions, contraindications, and session adaptations when working with clients with these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- Discuss the benefits and effects of massage for clients with these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- Discuss session goals for working with clients with these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.

#### **Skills: Practice and Refine**

**Conditions:** Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods appropriate for a client with thoracic outlet syndrome.
- Demonstrate massage methods appropriate for a client with carpal tunnel syndrome.
- Demonstrate massage methods appropriate for a client with piriformis syndrome.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

- Discuss application methods for working with clients with these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- Discuss self-care recommendations to support clients living with these nerve compression syndromes: thoracic outlet syndrome, carpal tunnel syndrome, piriformis syndrome, sciatica, multiple crush phenomenon.
- Analyze scenarios that depict clients with different nerve compression syndromes.

#### Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

#### Problem Solve

**Conditions:** Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:

- Develop a written 1-hour massage session plan for a client with a nerve compression syndrome, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.
- Provide useful feedback to peers on their session plans.

**Conditions:** Having developed a 1-hour massage plan for a client with a nerve compression syndrome, the learner will be able to:

 Conduct a 1-hour massage session for a client with a nerve compression syndrome, as outlined in a written session plan.

to:

## **Sub-Topic: Sessions for Clients with Osteoporosis**

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term osteoporosis.
- List one cause of osteoporosis (e.g., endocrine disease, lack of bone stress, poor nutrition, etc.).
- List two signs and symptoms of osteoporosis (e.g., considerable pain, kyphosis, history of fractures, etc.).
- List two places where fractures from osteoporosis commonly occur (e.g., vertebrae, wrists, hips, etc.).
- List two cautions, session adaptations, and contraindications for osteoporosis (e.g., avoid compression techniques on the back especially with chair massage, which can cause rib fracture, etc.).
- List two benefits and effects of massage for clients with osteoporosis (e.g., reduced pain, general stress reduction, etc.).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able

Imitate the instructor's methods for adapting a massage session to the needs of a client with osteoporosis.

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

#### Apply

Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the causes, signs, and symptoms of osteoporosis.
- Discuss cautions, session adaptations, and contraindications when working with clients with osteoporosis (e.g., avoid undue pressure over bones, limit joint mobilizations, extra caution for client comfort and safety, no invasive work, no compression techniques, especially with seated massage etc.).
- Discuss the benefits and effects of massage for clients with osteoporosis.

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:

- Demonstrate massage methods appropriate for a client with osteoporosis.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Subject - Adapting Sessions for Clients, Topic - Adapting Sessions for Clients with Common Pathologies

able to:

## **Sub-Topic: Sessions for Clients with Skin Cancer**

**Knowledge: Attain and Comprehend** 

Receive Conditions: Having participated in an interactive Respond lecture or classroom activity, the learner will be

(MM).

- Define these terms cancer, actinic keratosis (AK), basal cell carcinoma (BCC), squamous cell carcinoma (SCC), malignant melanoma
- List the three basic types of skin cancer (BCC, SCC, MM).
- Match signs of pre-cancerous AK, BCC, SCC and MM to their written descriptions (e.g., signs of AK are brown or red scaly lesions, crust repeatedly forms and falls off; sign of BCC is small, hard, pearl-colored lump with round edges and soft sunken middle; sign of SCC is hard, firm wart-like lump; sign of MM is mole-like lesion over 6 mm, multicolored, asymmetrical shape, appears after puberty etc.).
- List two areas of high sun exposure where skin cancer commonly develops (e.g., forehead, face, tops of ears, bridge of nose, hands, etc.).
- Explain in one's own words how massage benefits clients with skin cancer (e.g., beneficial even though it is not a treatment for cancer, can be used to treat symptoms of the cancer and side effects of the treatments, etc.).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be

Skills: Observe and Imitate

 Imitate the instructor's methods for adapting a massage session to the needs of a client with skin cancer.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss the ways that massage therapists are in a unique position to provide early detection of skin cancers (e.g., therapists often see areas of the skin the client cannot view easily, etc.)</li> <li>Compare and contrast the signs and symptoms for AK, BCC, and SCC (note that all have one sign in common: an open sore that never heals).</li> <li>Compare and contrast a mole and a melanoma (e.g., mole: under 6 mm, unicolored, symmetrical shape, appears before puberty; melanoma: over 6 mm, multicolored, asymmetrical shape, appears after puberty, etc.).</li> <li>Use ABCDE mnemonic to recognize a MM (e.g., A = asymmetrical shape, B = borders irregular, C = multi-colored, D = diameter larger than 6 mm, E = elevated, etc.).</li> <li>Use skin cancer scenarios and a clinical reasoning model to determine appropriate treatment approaches (e.g., recognize local contraindications, refer when appropriate, recommend clients consult physician for undiagnosed skin lesions, etc.).</li> <li>Discuss the benefits of massage for a client undergoing cancer treatment (lowers stress and fatigue, reduces edema, boosts immune</li> </ul>	Conditions: Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this pathology is necessary, and having watched an instructor demonstration, the learner will be able to:  Demonstrate massage methods appropriate for a client with skin cancer.  Modify massage methods based on feedback from the client.  Modify massage methods based on felt sensations during the application of strokes.  Demonstrate effective and appropriate communication with clients during practice sessions.
Level 3	function, improves sleep, reduces pain, etc.)  Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Sub-Topic: Sessions for Clients with Sprains**

Level 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term sprain.
- Describe the types of traumatic events that cause joint sprains.
- Describe the assessment results that help identify joint sprains (palpation shows point tenderness over a ligament, pain and limitation in active range of motion, pain with passive stretch of ligament before or at end of that motion, etc.).
- Match these signs and symptoms related to severity for mild, moderate, and severe sprains to their written descriptions, (e.g., mechanism of injury, amount of loss of function, joint instability, etc.).
- Identify two commonly sprained ligaments (e.g., anterior talofibular in ankle, cruciates in the knee, collateral ligaments in fingers and knee, sacroiliac ligaments, etc.).
- List two session goals for working with clients with sprains in the acute, subacute, and maturation stages.
- List two application methods to achieve session goals for clients with sprains in these stages: acute stage, subacute stage, and maturation stage.

**Conditions:** Having learned hands-on techniques in other classes and watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods for adapting a massage session to the needs of a client with an acute sprain.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with a subacute sprain.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with a sprain in the maturation stage of healing.

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

#### Apply

Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the signs and symptoms for mild, moderate, and severe sprains.
- Discuss the changes in signs and symptoms of sprains as healing progresses through the acute, subacute, and maturation stages.
- Discuss the benefits and effects of massage for sprains in each stage of healing.

Conditions: Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods appropriate for a client with an acute sprain.
- Demonstrate massage methods appropriate for a client with a subacute sprain.
- Demonstrate massage methods appropriate for a client with a sprain in the maturation stage of healing.

- Discuss massage cautions and contraindications for sprains (e.g. avoid direct massage into the edema until late subacute stage, avoid sharp pain during ROM, etc.).
- Discuss treatment methods and techniques for working with sprains in the acute, subacute, and maturation stages of healing (e.g., RICES and manual lymphatic drainage techniques plus pain-free passive and active ROM; in the acute stage, mobilization of scar tissue with friction, ROM and proprioceptive work in subacute; direct transverse friction massage for healthy scar tissue formation in the maturation stage, etc.).
- Discuss self-care recommendations to support clients healing from sprains.

- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

#### Level 3

### **Knowledge: Choose and Plan**

## Problem Solve

**Conditions:** Having participated in a classroom activity, the learner will use a clinical reasoning model to:

- Develop a written 1-hour treatment plan for a client with a sprain by outlining all massage application methods, their sequence, the body regions and/or specific structures to be addressed, plus massage for related and compensating structures.
- Present one's session plan to peers and instructors.
- Provide thoughtful feedback to peers on their session plans.

#### **Skills: Naturalize and Adapt**

**Conditions:** Having developed a 1-hour massage plan for a client with a sprain, the learner will be able to:

Conduct a 1-hour massage session for a client with a sprain as outlined in a written session plan.

## **Sub-Topic: Sessions for Clients with Stress**

Level 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term stress.
- Review stress-related anatomy and physiology from other classes (e.g., sympathetic and parasympathetic nervous system, etc.).
- Match these terms to written descriptions of their role in the body's response to stress: sympathetic nervous system, flight-or-fight response, limbic system, corticotrophinreleasing hormone (CRH), anterior pituitary gland, adrenocorticotrophic hormone (ACTH), adrenal glands, epinephrine, cortisol.
- List five physiological changes that occur rapidly in response to stress to ensure the body can respond to a threat (e.g., pupils dilate, heart rate increases, blood vessels in the skin and viscera constrict, breathing speeds up, blood sugar levels increase, muscle tone increases, gastrointestinal tract slows, perspiration increases, etc.).
- List two implications of chronic stress (e.g., prolonged elevation of cortisol and epinephrine in the blood stream, increased substance P, adrenal exhaustion, increase likelihood of other conditions like high blood pressure, etc.).
- List five potential stressors that can produce the emotions of anxiety, fear, anger, or grief (e.g., death in family, divorce, imprisonment, injury or illness, marriage, dismissal from work, retirement, pregnancy, sexual difficulties, changed in finances, change in work responsibilities, etc.).
- List five possible symptoms of stress (e.g., chest pain, headache, high blood pressure, muscle aches, perspiration, grinding teeth, anger, forgetfulness, guilt, mental confusion, mood swings, alcohol/drug abuse, emotional outbursts, social withdrawal, etc.).

**Conditions:** Having learned hands-on techniques in other classes and watched an instructor demonstration, the learner will be able to:

 Imitate the instructor's methods for adapting a massage session to the needs of a client with high stress.

- List five illnesses that can be caused or aggravated by stress (skin disorders, muscle tension, panic disorder, depression, nausea, gastritis, gastrointestinal ulcers, colitis, irritable bowel syndrome, interstitial cystitis, sexual disorders, jitteriness, menstrual problems, sleep disturbances, fibromyalgia, thyroid disorders, heart disease, etc.).
- Identify three steps clients can take to help manage their stress (e.g., massage, eliminate or minimize stressors, control emotions, healthy diet, exercise, avoid stimulants, sufficient sleep, meditate, etc.).
- Explain in one's own words two reasons why massage is a useful stress management tool.

#### Level 2 Knowledge: Use and Connect

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Outline the physiological events that occur in the flight-or-fight response (e.g., stressor signals "threat!" to the limbic system, hypothalamus releases CRH, CRH reaches anterior pituitary gland and secretes ACTH, ACTH reaches adrenal glands, adrenal glands release epinephrine and cortisol, these chemicals mediate physiological changes associated with stress, etc.).
- Compare and contrast the physiological effects of the sympathetic nervous system with parasympathetic nervous system effects (e.g., sympathetic causes pupils to dilate, increases heart rate, dilation of bronchi of the lungs, increased respiration, etc.; parasympathetic causes pupils to constrict, decreases heart rate, constriction of bronchi, relaxed deep breathing, etc.).

#### **Skills: Practice and Refine**

**Conditions:** Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods appropriate for a client with high stress levels.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

- Compare and contrast the effects of cortisol and epinephrine (e.g., cortisol: promotes breakdown of proteins to form glucose, enhances vascular reactivity, decreases white blood cells and fibroblasts to reduce inflammation, powerful anti-allergic action, reduces lymphocytes in bloodstream, decreases antibody and T-cell production; epinephrine: sharpens senses, increases reflex speed, boosts muscular strength, increases heart rate and force of contractions, rapid breathing, increase blood sugar levels, etc.).
- Discuss the negative effects of excess cortisol that stays in the bloodstream (e.g., can cause the body to digest its own proteins leading to decreased immunity, sleep disturbances, increase of substance P, etc.).
- Discuss negative effects of excess epinephrine that stays in the bloodstream (e.g., produces shaky, nauseous, pumped-up after-feeling, causes overstimulation of autonomic nervous system and adrenal exhaustion associated with fatigue/mental weariness, etc.).
- Analyze one's own stressors and determine personal life events that lead to higher stress levels.
- Analyze two viable research articles that conclude that massage has a positive effect on stress.
- Discuss massage strokes and session enhancers like soothing music or the use of warm packs that are likely to promote deep relaxation for clients.
- Discuss self-care recommendations to support clients living with stress.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	<b>Conditions:</b> Having developed a 1-hour massage plan for a client with high stress levels, the learner will be able to:
	<ul> <li>Develop a written 1-hour session plan for a client with high stress levels by outlining massage application methods, their sequence, and enhancing elements that make the session more relaxing and enjoyable.</li> </ul>	Conduct a 1-hour massage session for a client with high stress levels as outlined in a written session plan.
	<ul> <li>Present one's session plan to peers and instructors.</li> </ul>	
	Provide thoughtful feedback to peers on their session plans.	

## **Sub-Topic: Sessions for Clients with Strains**

Level 1 Knowledge: Attain and Comprehend

#### **Skills: Observe and Imitate**

### Receive Respond

Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term strain.
- Name the two anatomic zones in a muscle where strain is most likely to occur (e.g. musculotendinous junction, tenoperiosteal junction).
- Match these levels of severity for acute and chronic strain to their written descriptions: mild, moderate, severe.
- Identify two of the most common muscle/ tendon strains massage therapists are likely to address (e.g., hamstring, rotator cuff, Achilles tendon, patellar tendon etc.).
- List two causes of acute strains (e.g., when the muscle-tendon unit is suddenly overstretched or because the muscle is asked to perform an extreme contraction against a heavy load, etc.).
- List two predisposing factors that contribute to the occurrence of strains (e.g., overuse, fatigue, muscular imbalances, muscle stiffness, inadequate warm-up before an activity, etc.).
- List two signs and symptoms of strains (e.g., heat, swelling, redness, bruising, pain, loss of function, change in contour, etc.).
- Describe one assessment finding that helps identify a strain (e.g., palpation shows point tenderness over area, pain and limitation in active range of motion, pain with passive stretch of the affected muscle before normal end of that motion, pain and/or weakness with resisted movement, etc.).
- List two cautions, contraindications, or session adaptations for strains (e.g., assess the severity and refer the client for medical diagnosis and attention if strain is beyond mild, etc.).

**Conditions:** Having learned hands-on techniques in other classes and watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods for adapting a massage session to the needs of a client with an acute strain.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with a subacute strain.
- Imitate the instructor's methods for adapting a massage session to the needs of a client with a strain in the maturation stage of healing.

- List two massage benefits or effects for strains (e.g., reduce adhesions, reduce trigger points, ensure healthy formation of scar tissue, reduce muscle spasms, improve painfree ROM etc.).
- List two massage techniques effective for the treatment of strains in each of these stages of healing: acute, subacute, maturation. (e.g., ice and indirect massage in acute stage; cross-fiber and linear friction to strain site, range of motion, and gentle stretching in maturation stage, etc.).

#### Level 2 Knowledge: Use and Connect Skills: Practice and Refine

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the causes, locations, and signs and symptoms of strains.
- Discuss the assessment findings that help identify strain.
- Discuss cautions, contraindications, and session adaptations when working with clients with strains.
- Discuss the benefits and effects of massage for clients with strains at the acute, subacute, and maturation stages.
- Discuss treatment techniques for working with clients with strains at the acute, subacute, or maturation stages.
- Discuss self-care recommendations to support clients healing from strains.

**Conditions:** Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods for adapting a massage session to the needs of a client with an acute strain.
- Demonstrate massage methods for adapting a massage session to the needs of a client with a subacute strain.
- Demonstrate massage methods for adapting a massage session to the needs of a client with a strain in the maturation stage of healing.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<b>Conditions:</b> Having participated in a classroom activity, the learner will use a clinical reasoning model to:	<b>Conditions:</b> Having developed a 1-hour massage plan for a client with a strain, the learner will be able to:
	<ul> <li>Develop a written 1-hour session plan for a client with a strain by outlining all massage application methods, their sequence, the body regions and specific structures to be addressed, plus massage for related and compensating structures.</li> </ul>	<ul> <li>Conduct a 1-hour massage session for a client with a strain as outlined in a written session plan.</li> </ul>
	<ul> <li>Present one's session plan to peers and instructors.</li> </ul>	
	Provide thoughtful feedback to peers on their session plans.	

## **Sub-Topic: Sessions for Clients with Tendinopathies**

Level 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

#### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term tendinopathy.
- Match these types of tendinopathies to their written descriptions: tendinitis, tenosynovitis, tendinosis.
- Match these grades of severity for tendinopathies to their written descriptions: grade 1, grade 2, grade 3, grade 4.
- Identify two of the common tendinopathies a massage therapist is likely to address (e.g., rotator cuff tendons, Achilles, patellar, bicipital, forearm flexors and extensors, etc.).
- Identify two areas where tenosynovitis occurs (e.g. wrist, ankle, biceps tendon, etc.).
- List two causes of tendinopathies (e.g., when a load is placed on a tendon that exceeds its mechanical ability to lengthen the tissue fails, or because of overuse, etc.).
- List two factors that contribute to the occurrence of tendinopathies (e.g., muscle imbalances, poor posture, chronic degeneration of the tendon from repetitive stressful motion, poor circulation to the tendon, lack of flexibility, etc.).
- Describe the assessment findings that help identify tendinopathies (e.g., palpation shows point tenderness over the tendon, crepitus with active range of motion, pain and/or limitation in active range of motion, pain with passive stretching of the affected tendon, pain and/or weakness with resisted movement, etc.).
- List two cautions, contraindications, or session adaptations for tendinopathies (e.g., ice and gentle work with acute stage, massage indicated in subacute and chronic stages, etc.).

**Conditions:** Having learned hands-on techniques in other classes and watched an instructor demonstration, the learner will be able to:

 Imitate the instructor's methods for adapting a massage session to the needs of a client with a tendinopathy.

- List two massage benefits or effects for clients with tendinopathies (e.g., reduce trigger points in related tissue, improve muscular balance, reduce fascial restrictions to improve tissue health, etc.).
- List two massage techniques effective for the treatment of clients with tendinopathies (e.g., methods and techniques are used according to stages of inflammation including ice, rest, Swedish massage, range of motion techniques, cross-fiber and linear friction, etc.).

### evel 2 Knowledge: Use and Connect Skills: Practice and Refine

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the causes, locations, and signs and symptoms of tendinopathies.
- Discuss methods to assess tissue and identify that a tendinopathy is present (e.g. palpate tendon during active range of motion, etc.).
- Discuss cautions, contraindications, and session adaptations when working with clients with different tendinopathies.
- Discuss the benefits and effects of massage for clients with tendinopathies.
- Discuss techniques for working with clients with tendinopathies at the acute, subacute, and maturation stages of healing.
- Discuss self-care recommendations to support clients living with tendinopathies.
- Analyze scenarios that depict clients with different tendinopathies in different stages of healing.

**Conditions:** Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods appropriate for a client with a tendinopathy.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<ul> <li>Conditions: Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:</li> <li>Develop a written 1-hour massage session plan for a client with a tendinopathy, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.</li> </ul>	Conditions: Having developed a 1-hour massage plan for a client with a tendinopathy the learner will be able to:  Conduct a 1-hour massage session for a client with a tendinopathy as outlined in a written session plan.
	<ul> <li>Provide useful feedback to peers on their session plans.</li> </ul>	

## **Topic: Adapting Sessions for Special Populations**

# Learning Outcomes

**Conditions:** Having completed 29 hours of instruction on adapting sessions for special populations, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to special populations including clients over 55 years of age, clients who are obese, clients who are children, clients who are pregnant, clients who are athletes or fitness oriented, clients who are at the end of life, and clients with disabilities, on graded activities or written examinations.
- Plan and conduct 1-hour sessions for instructor-selected special populations, demonstrating the ability to adapt sessions appropriately and choose effective application methods, on graded activities or practical evaluations.

### **Key Terminology and Concepts**

- Access challenges
- Adipose tissue
- Adults over the age of 55
- Alzheimer's disease
- Assistive technology
- Athlete
- Autism
- Autonomy
- Blind
- Brain injury
- Child
- Decreased fetal movement
- Dementia
- Diabetes
- Disability
- Dying process
- End-of-life care
- Environmental conditions
- Event logistics
- Event massage
- Fitness-oriented
- Guardian
- Healthy pregnancy
- Hearing aid
- Hearing impairment
- Heart disease
- High-risk pregnancy
- Hypertension
- Hyperthermia

- Hypothermia
- Impairment
- Intellectual disability
- Intra-event massage
- Learning disabilities
- Legally blind
- Low vision
- Maintenance massage
- Mental health disability
- Mental retardation
- Metabolic syndrome
- Mobility devices
- Obesity
- Partially sighted
- People-first language
- Physical disability
- Post-event massage
- Pre-event massage
- Pregnancy
- Sensory disability
- Service dog
- Speech impairments
- Stroke
- Terminal illness
- Treatment massage
- Trimesters
- Visual impairment
- Vitality

# Use of Terms

The terms used in this topic appear to be consistent and widely accepted.

### **Sub-Topics**

- Sessions for Who Are Over 55
- Sessions for Clients Who Are Obese
- Sessions for Clients Who Are Children
- Sessions for Clients Who Are Pregnant
- Sessions for Clients Who Are Athletes or Fitness Oriented
- Sessions for Clients Who Are at the End of Life
- Sessions for Clients with Disabilities

### Sub-Topic: Sessions for Clients Who Are Over 55

.evel 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having read assigned material and/or participated in a lecture, the learner will be able to:

- Described reasons for using the term adult over the age of 55 (e.g., the terms geriatric, senior citizen, and even older adult are being replaced in health care with the term adult over the age of 55 to reduce negative connotations related to aging).
- List two health concerns of people over the age of 55 (varies widely based on actual age and physical vitality, etc.).
- List two primary mental health concerns of people over the age of 55 (e.g., Alzheimer's disease, dementia).
- List three factors to consider when working with adults over the age of 55 (e.g., level of vitality of the individual client, communication if hearing aids are in use, in some cases physical assistance may be needed, mental health issues like Alzheimer's or dementia, in some cases the therapist might be working with a client who has a guardian, etc.).
- List two cautions or contraindications when working with adults over the age of 55 (cautions and contraindications vary widely with this special population based on actual age, physical vitality, mental health concerns, and physical health concerns, etc.).
- List two benefits or effects of massage for adults over the age of 55 (varies widely with this special population based on actual age, physical vitality, and health concerns, but research notes improved appetite, improved digestion and elimination, improved flexibility, etc.).
- List three appropriate massage application methods for adults over the age of 55 (these will vary widely based on the client's actual age and physical vitality and other health concerns).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

 Try different methods for adapting a massage session to the needs of a client over the age of 55 based on the client's particular mental or physical health concern and level of vitality.  List two self-care recommendations a therapist might make to clients over the age of 55 (varies with actual age and physical vitality levels).

#### level 2

### **Knowledge: Use and Connect**

### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss relevant factors when working with clients who are over the age of 55.
- Discuss the common health concerns of clients who are over the age of 55.
- Discuss the common mental health concerns of clients who are over the age of 55.
- Discuss the benefits and effects of massage for clients over the age of 55.
- Discuss the contraindications and cautions of massage for clients over the age of 55.
- Compare and contrast the massage needs of a client who is over 55 and robust and healthy with those of a client who is over 55 but physically frail.
- Discuss massage session adaptations for a client with Alzheimer's disease or dementia.
- Discuss appropriate massage methods for clients over the age of 55.
- Brainstorm effective client interview questions to ask a client over the age of 55 to get a better understanding of the client's health picture.
- Discuss self-care recommendations to support clients over the age of 55.
- Analyze scenarios that depict clients with different mental health and physical health issues who are over the age of 55.

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

- Demonstrate methods for adapting a massage session to the needs of a client over the age of 55 based on the client's particular mental or physical health concerns and level of vitality, and modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	Conditions: Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:	Conditions: Having developed a written 1-hour massage plan for a client over the age of 55, the learner will be able to:
	<ul> <li>Develop a written 1-hour massage session plan for a client over the age of 55 with a mental health or physical health concern, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.</li> </ul>	Conduct a 1-hour massage session for a client over the age of 55, as outlined in a written session plan, if directed by the instructor.
	<ul> <li>Provide useful feedback to peers on their session plans.</li> </ul>	

to:

## Sub-Topic: Massage for Clients Who Are Obese

Level 1

Knowledge: Attain and Comprehend

### Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term obesity.
- List two common health concerns of clients who are obese (e.g., diabetes, heart disease, hypertension, metabolic syndrome, stroke, etc.).
- List three factors to consider when working with clients who are obese (e.g., level of dress, draping, positioning, table size and strength, etc.).
- List two cautions or contraindications when working with clients who are obese (e.g., obesity is often a contributing factor in other health conditions, easier to bruise areas where adipose tissue is more excessive, etc.).
- List two benefits or effects of massage for clients who are obese (e.g., helpful in overcoming psychological challenges, reduces pain from stress placed on structures due to weight, promotes increased relaxation, etc.).
- List three appropriate massage forms or styles for clients who are obese (e.g., deep work to push through adipose layers to muscles or over skin folds is not appropriate, etc.).
- List two self-care recommendations a therapist might make to client who is obese (e.g., gentle stretches, self-massage, etc.).

Conditions: Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able

 Try different methods for adapting a massage session to the needs of a client with specific health care needs related to obesity.

### Level 2

### **Knowledge: Use and Connect**

### Skills: Practice and Refine

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss relevant factors when working with clients who are obese.
- Discuss the common health concerns of clients who are obese.

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

- Discuss the benefits and effects of massage for clients who are obese.
- Discuss the contraindications and cautions of massage when working with clients who are obese.
- Discuss appropriate massage methods for clients who are obese.
- Discuss self-care recommendations to support clients who are obese.
- Analyze scenarios that depict clients with different health care needs related to obesity.

- Demonstrate different methods for adapting a massage session to the needs of a client with specific health care needs related to obesity.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

### Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

### Problem Solve

**Conditions:** Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:

- Develop a written 1-hour massage session plan for a client with specific health care needs related to obesity, demonstrating the ability to adapt the session appropriately, choose effective application methods, and address compensating structures, and share the plan with peers.
- Provide useful feedback to peers on their session plans.

**Conditions:** Having developed a written 1-hour massage plan for a client who is obese, the learner will be able to:

 Conduct a 1-hour massage session for a client who is obese, as outlined in a written session plan, if directed by an instructor.

## **Sub-Topic: Sessions for Clients Who Are Children**

Level 1

**Knowledge: Attain and Comprehend** 

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term child.
- List two factors to consider when working with children (e.g., issues of autonomy, children less likely to speak up if something makes them uncomfortable, the child's guardian should always be present, etc.).
- List two cautions or contraindications when working with children (e.g., children with special needs may have contraindications related to their condition or medications, etc.).
- List two benefits or effects of massage for children (e.g., stress reduction, reduction of symptoms related to childhood conditions, benefits for child athletes, etc.).
- List three appropriate massage forms or styles for children (a wide variety are appropriate depending on the child, etc.).
- List two self-care recommendations a therapist might make to a child (e.g., selfcare in alignment with the child's interests or needs, such as recommendations to stretch for child athletes, etc.).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

 Try different methods for adapting a massage session to the needs of a child.

### Level 2

### **Knowledge: Use and Connect**

### Skills: Practice and Refine

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss relevant factors when working with children.
- Discuss the benefits and effects of massage for children.
- Discuss the contraindications and cautions for massage when working with children.
- Discuss appropriate massage methods when working with children.

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

- Demonstrate massage methods appropriate for use in a massage for a child.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.

	<ul> <li>Discuss self-care recommendations to support children.</li> <li>Analyze scenarios that depict children in different massage situations and brainstorm appropriate next actions or responses with peers.</li> </ul>	Demonstrate effective and appropriate communication with clients during practice sessions.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

Subject – Adapting Sessions for Clients, Topic – Adapting Sessions for Special Populations

Subject – Adapting Sessions for Clients, Topic – Adapting Sessions for Special Populatio		
Sub-To	opic: Sessions for Clients Who Ar	e Pregnant
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Level 1  Receive Respond	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Define these terms: pregnancy, healthy normal pregnancy, high-risk pregnancy.</li> <li>List three changes a woman's body undergoes during pregnancy (e.g., body temperature increases, hormonal changes, uterus size increases, etc.).</li> <li>List three common discomforts of pregnancy (e.g., headache, indigestion, low back pain, neck and shoulder pain, etc.).</li> <li>List three factors to consider when working with clients who are pregnant (e.g., may need assistance getting on and off the massage table, positioning during different trimesters, restroom use, etc.).</li> <li>List two cautions or contraindications when working with pregnant clients (e.g., range of motion techniques should be applied gently, high-risk pregnancy contraindicates massage, etc.).</li> </ul>	Conditions: Having learned hands-on techniques in other classes, and viewed an instructor demonstration, the learner will be able to:  Imitate the methods an instructor used to adapt a massage session to the needs of a pregnant client in the first trimester.  Imitate the methods an instructor used to adapt a massage session to the needs of a pregnant client in the second trimester.  Imitate the methods an instructor used to adapt a massage session to the needs of a pregnant client in the third trimester.

- List three signs or symptoms that contraindicate massage (e.g., abdominal cramping, abdominal pain, back pain with vaginal bleeding, decreased fetal movement over a 24-hour period, etc.).
- List two benefits or effects of massage for clients who are pregnant (e.g., decreased anxiety, decreased depression, reduced occurrence of headache pain, reduced low back pain, etc.).
- List three appropriate massage forms or styles for clients who are pregnant (e.g., Swedish massage is appropriate but aromatherapy avoided, myofascial release avoided, only gentle range of motion, etc.).
- List two self-care recommendations a therapist might make to pregnant client (e.g., use of a tennis ball to reduce tension in shoulder muscles, etc.).

#### Level 2 **Knowledge: Use and Connect**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Contrast a healthy, normal pregnancy with a high-risk pregnancy.
- Discuss relevant factors when working with pregnant clients.
- Discuss the benefits and effects of massage for pregnant clients.
- Discuss the contraindications and cautions of massage for pregnant clients.
- Discuss the signs and symptoms that indicate massage is contraindicated for a pregnant client.
- Discuss appropriate massage methods for working with pregnant clients.
- Discuss self-care recommendations to support pregnant clients.
- Analyze mock client scenarios and health forms depicting clients at various stages of pregnancy.

### **Skills: Practice and Refine**

**Conditions:** Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods and session adaptations for a pregnant client in the first trimester.
- Demonstrate massage methods and session adaptations for a pregnant client in the second trimester.
- Demonstrate massage methods and session adaptations for a pregnant client in the third trimester.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<b>Conditions:</b> Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:	<b>Conditions:</b> Having developed a written 1-hour massage plan for a pregnant client, the learner will be able to:
	<ul> <li>Develop a written 1-hour massage session plan for a client in a specific stage of pregnancy with specific health care needs, demonstrating the ability to adapt the session appropriately, position the client correctly, choose effective application methods, and address compensating structures, and share the plan with peers.</li> </ul>	Conduct a 1-hour massage session for a pregnant client as outlined in a written session plan.
	<ul> <li>Provide useful feedback to peers on their session plans.</li> </ul>	

## **Sub-Topic: Sessions for Clients Who Are Athletes or Fitness Oriented**

evel 1 Knowledge: Attain and Comprehend

Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term athlete.
- Name the three categories of sports massage (event massage, maintenance massage, treatment massage).
- Match these types of event massage to their written descriptions: pre-event massage, intra-event massage, post-event massage, promotional event massage.
- List three factors to consider when providing massage to clients at sports events (e.g., environmental conditions leading to hyperthermia, hypothermia, or other conditions, logistics of being at an event, etc.).
- Name two muscles a massage therapist might focus on for each of these types of sporting activities: baseball, basketball, cycling, equestrian sports, football, golf, racquet sports, rowing or paddling, running, skiing, soccer, swimming, volleyball.
- List two benefits or effects of massage for athletes or clients focused on fitness.
- List two cautions or contraindications for massage for athletes or fitness-oriented clients (e.g., at events the client is exposed to environmental conditions that may contraindicate massage if the client becomes overheated or cold, intense fatigue may contraindicate massage, etc.).
- List two appropriate massage forms or styles for each of these types of sports massages: pre-event, intra-event, post-event, (e.g., for pre-event massage, brisk strokes, rhythmic compression, tapotement, etc.).

**Conditions:** Having learned hands-on techniques in other classes, the learner will be able to:

- Imitate the instructor's techniques for applying massage to an athlete receiving massage before a sporting event.
- Imitate the instructor's techniques for applying massage to an athlete receiving massage between sporting events.
- Imitate the instructor's techniques for applying massage to an athlete receiving massage after a sporting event.

- List two inappropriate massage forms or styles for each of these types of sports massages: pre-event, intra-event, post-event (e.g., for post-event massage, no tapotement, no brisk strokes, the strokes are now slower, etc.).
- List two self-care recommendations a therapist might make to clients who are athletes or fitness oriented (e.g., gentle stretching, use of a tennis ball to reduce tension in muscles, etc.).

### Level 2

### **Knowledge: Use and Connect**

### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the three categories of sports massage (e.g., event massage, maintenance massage, treatment massage).
- Compare and contrast event massage with maintenance massage.
- Discuss these types of event massage: preevent massage, intra-event massage, postevent massage, promotional event massage.
- Compare and contrast pre-event, intra-event, and post-event massage.
- Discuss factors to consider when providing massage to clients at sports events (e.g., environmental conditions leading to hyperthermia, hypothermia, or other conditions, logistics of being at an event, etc.).
- Discuss the muscles a massage therapist might focus on for each of these types of sporting activities: baseball, basketball, cycling, equestrian sports, football, golf, racquet sports, rowing or paddling, running, skiing, soccer, swimming, volleyball.
- Discuss the benefits or effects of massage for athletes or clients focused on fitness.
- Discuss the cautions or contraindications for massage for athletes or fitness-oriented clients.

**Conditions:** Having practiced hands-on techniques in other classes, the learner will be able to:

- Demonstrate massage methods appropriate for an athlete receiving massage before an event.
- Demonstrate massage methods appropriate for an athlete receiving massage in between events.
- Demonstrate massage methods appropriate for an athlete receiving massage after an event.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

- Discuss appropriate massage forms or styles for each of these types of sports massages: pre-event, intra-event, post-event.
- Discuss inappropriate massage forms or styles for each of these types of sports massages: pre-event, intra-event, post-event.
- Discuss self-care recommendations a therapist might make to clients who are athletes or fitness oriented.
- Analyze six scenarios depicting athletes or people focused on fitness, their sporting event, their situation, their physical condition, and their stated wants and needs from massage.

# Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

### Problem Solve

**Conditions:** Having analyzed client scenarios during an interactive lecture or classroom activity, the learner will be able to:

- Outline a session for an athlete or person
  who is fitness oriented based on the type of
  massage (pre-event, intra-event, post-event,
  maintenance massage), the sporting event,
  the client's physical condition, and wants and
  needs, and share the plan with peers.
- Provide useful feedback to peers on their session plans.

**Conditions:** Having developed a written session plan for an athlete, the learner will be able to:

Conduct a massage session for an athlete as outlined in a written session plan.

## Sub-Topic: Sessions for Clients Who Are at the End of Life

Level 1

**Knowledge: Attain and Comprehend** 

Skills: Observe and Imitate

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define these terms: *end-of-life care, terminal illness*.
- List three signs and symptoms of approaching death (e.g., reduced food or liquid intake, long periods of sleep, breathing pauses, edema in the extremities, etc.).
- List three factors to consider when working with clients at the end of life (e.g., personal response to the dying process, environment where massage is provided such as a family members home requires some adaptations, therapist will likely be working with the client's guardian, etc.).
- List two cautions or contraindications when working with clients at the end of life (e.g., no deep work, no painful work, etc.).
- List two benefits or effects of massage for clients at the end of life (e.g., increased relaxation, reduced pain, improved mood, reduced anxiety, improved sleep patterns, etc.).
- List three appropriate massage forms or styles for clients at the end of life (e.g., gentle Swedish strokes, use of aromatherapy, holding strokes, etc.).

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

 Try different methods for adapting a massage session to the needs of a client at the end of life.

### Level 2

### **Knowledge: Use and Connect**

### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the signs and symptoms of approaching death.
- Discuss one's own response to the dying process and its potential impact on work with clients at the end of life.
- Discuss relevant factors when working with clients at the end of life.

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

- Demonstrate massage methods appropriate for a client at the end of life.
- Modify massage methods based on feedback from the client.

	<ul> <li>Discuss the benefits and effects of massage for clients at the end of life.</li> <li>Discuss the contraindications and cautions of massage for clients at the end of life.</li> <li>Discuss appropriate massage methods for clients at the end of life.</li> </ul>	<ul> <li>Modify massage methods based on felt sensations during the application of strokes.</li> <li>Demonstrate effective and appropriate communication with clients during practice sessions.</li> </ul>
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

### Sub-Topic: Sessions for Clients with Disabilities

Level 1 Knowledge: Attain and Comprehend

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term disability (e.g., used in the medical sense for a functional impairment caused by an accident, trauma, genetics, or disease, etc.).
- Define the term impairment (e.g., used in the medical sense to mean a problem in body structure or function that impacts a person's ability to execute a task or an action, etc.).
- Define the term people-first language (e.g., a form of disability etiquette that aims to diminish subconscious dehumanization that can occur with phrases like "disabled person" instead saying "person with a disability", etc.).
- Define the term assistive technology, also commonly referred to as adaptive technology (e.g., the accepted term for devices and societal or personal modifications that help people with disabilities overcome impairments and broaden the accessibility of places, including and things like wheelchairs, prosthetics, speech recognition software, etc.).
- Match these terms to their written descriptions: physical disabilities, sensory disabilities, intellectual disabilities, mental health disabilities.
- Match these factors to consider when working with clients with physical disabilities to their written descriptions: personal responses to disability, the correct use of people-first language, access challenges, balance issues, body space issues (wheelchairs and other mobility devices are part of a person's personal body space), eye level, medical equipment, paralysis, prosthesis, handling requests for assistance appropriately, speech impairments, getting on and off the massage table.

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's methods, communication, and behaviors during a health intake interview with a client with a disability (e.g., sit at eye level, use of peoplefirst language, use of appropriate intake questions, etc.).
- Imitate the instructor's methods, communication, and behaviors for transferring a client from a wheelchair to a massage table.
- Try different methods for adapting a massage session to the needs of a client with a disability.

- Define these terms: visual impairment, hearing impairment.
- Name the two most common disabilities related to the five senses (hearing and visual impairments).
- Match these terms related to degrees of visual impairment to their written descriptions: blind, legally blind, low vision, partially sighted.
- Match these factors to consider when working with clients with visual impairments to their written descriptions: access issues, assumptions about degree of visual impairment, use of physical guidance, communication issues (e.g., use the name of a visually impaired person when addressing him or her), placement of personal items at the massage business, and interaction with service dogs.
- Match these factors to consider when working with clients with hearing impairments to their written descriptions: background noise, communication issues, working with hearing aids.
- List two cautions or contraindications when working with clients with sensory impairments (e.g., based on overall health picture as with all clients, cautions often relate to access issues, etc.).
- Match these types of intellectual disabilities to their written descriptions: autism, mental retardation, learning disabilities, brain injury.
- List two factors related to working with clients with intellectual disabilities (e.g., communication challenges, interpreting the client's response to massage, etc.).
- List two benefits of massage for clients with these intellectual disabilities: autism, mental retardation, learning disabilities, brain injury (e.g., studies indicate the children with autism exhibit less stereotypic autism behavior, fewer sleep problems, and demonstrate more on-task and positive social relating when they receive regular massage, etc.).

- List two cautions, contraindications, or session adaptations for clients with these intellectual disabilities: autism, mental retardation, learning disabilities, brain injury (e.g., firm strokes produce less restlessness in children with autism than light strokes, medications may contraindicate massage, etc.).
- Review definitions, session adaptations, benefits of massage, and cautions and contraindication for clients with mental health disabilities learned in other sub-topics.

### Level 2 Knowledge: Use and Connect Skills: Practice and Refine

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the medical meanings of the terms disability and impairment.
- Compare and contrast preferred people-first expressions with avoided expressions (e.g., "person with cerebral palsy" versus "palsied or spastic person," or "a person using a wheelchair" versus "a person confined to a wheelchair," etc.).
- Discuss one's own responses to disability including fears, assumptions, etc.
- Discuss the access challenges faced by clients with disabilities and how to reduce those challenges in a massage practice.
- Discuss considerations when working with clients with disabilities and conducting health intake interviews or collection of the fee (e.g., sit at eye level, manage balance disorders or speech impairments effectively, etc.).
- Discuss the benefits and effects of massage for clients with a disability.
- Discuss the contraindications and cautions of massage for clients with a disability.

**Conditions:** Having learned hands-on techniques in other classes, and based on the instruction's decision that hands-on practice for this special population is necessary, and having watched an instructor demonstration, the learner will be able to:

- Demonstrate appropriate communication, and behaviors during a health intake interview with a client with a disability.
- Demonstrate appropriate methods, communication, and behaviors for transferring a client from a wheelchair to a massage table.
- Demonstrate appropriate massage methods adapted to the needs of a client with a disability.
- Modify massage methods based on feedback from the client.
- Modify massage methods based on felt sensations during the application of strokes.
- Demonstrate effective and appropriate communication with clients during practice sessions.

### Level 3 Knowledge: Choose and Plan Skills: Naturalize and Adapt

### Problem Solve

There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.

There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

	Entry-Level Massage Therapy Curriculum Map  Subject: Career Development	
Topic	Interpersonal Skills	
Sub-Topics	<ul><li>Communication</li><li>Conflict Resolution</li></ul>	
Topic	Student Clinic	
Sub-Topics	<ul> <li>Professionalism</li> <li>Session Management</li> <li>Clinic Management</li> <li>Sessions with Clients</li> </ul>	
Topic	Career Planning	
Sub-Topics	<ul> <li>Envisioning a Massage and Bodywork Career</li> <li>Employment</li> <li>Private Practice</li> </ul>	

## **Topic: Interpersonal Skills**

# Learning Outcomes

**Conditions:** Having completed 7 hours of instruction on interpersonal skills, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to interpersonal skills, including assertive communication and conflict resolution, on a written examination.
- Demonstrate effective assertive communication skills during a role-playing activity in response to client-therapist scenarios assigned by the instructor, on a graded activity.
- Demonstrate the steps in a conflict resolution process using assertive communication skills and appropriate therapist behaviors during a role-playing activity in response to a client-therapist scenario assigned by the instructor, on a graded activity.

### **Key Terminology and Concepts**

- Active communication
- Active listening
- Aggressive
- Assertive communication
- Body language
- Communication blockers
- Conflict resolution
- Conflict resolution process
- Emotional intelligence
- Equitable solution
- Filters
- I-statements
- Passive
- Personal space
- Reflecting
- Relating styles
- Self-awareness
- You-statements

### **Use of Terms**

The terms used in this topic appear to be consistent and widely accepted.

### **Sub-Topics**

- Communication
- Conflict Resolution

## **Sub-Topic: Communication**

Level 1

**Knowledge: Attain and Comprehend** 

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *personal space*.
- List two ways people maintain their personal space in social relationships.
- Define the term *relating styles*.
- Match these relating styles to their written descriptions: passive, assertive, aggressive, passive-aggressive.
- List two benefits of an assertive relating style.
- List two drawbacks of a passive relating style.
- List two drawbacks of an aggressive relating style.
- Define the term communication blocker.
- Identify common communication blockers based on their written descriptions.
- Define the term body language.
- List three body language cues people use to communicate nonverbally (e.g., eye contact, body position, gestures, etc.).
- Define the term *active communication*.
- Describe three skills associated with active communication (e.g., self-awareness, active listening, ability to communicate a message, etc.).
- Identify three situations in which communication with clients occurs.
- Outline the steps in an assertive communication model (e.g., state your expectations, provide a rationale, describe consequences, identify obstacles, clarify expectations for the future).
- List two guidelines for communicating with other health care providers.

**Conditions:** Having viewed an instructor demonstration of assertive communication skills, the learner will be able to:

- Imitate the instructor's assertive communication skills in these roleplaying situations:
  - A client shares with the therapist that he or she doesn't feel that massage has been effective for his or her condition.
  - A client shares his or her feelings of sadness about the impact of a condition on activities of daily life.
  - A client calls into the massage clinic to book an appointment and wants to hear about the therapist's training and credentials.
  - A client shows up late for a massage appointment during a busy and hectic day at the clinic.
  - A client comes in to book an appointment after not showing up for a previous appointment and not contacting the therapist.
  - A client shares very specific directions for exactly the type of massage desired, but many of the techniques the client wants are dangerous for the client to receive based on medications being taken by the client.
  - A client resists signing the massage clinic's required forms.
  - A client complains that he or she did not get the massage requested in the intake interview.

 List three types of written communication that might be used by massage therapists (e.g., emails, inter-clinic memos, business letters, reports to physicians or insurance companies, follow-up with clients, etc.).

#### Level 2

### **Knowledge: Use and Connect**

### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Compare and contrast a passive relating style with an assertive relating style and with an aggressive relating style.
- Discuss four ways that communication can break down during interactions between therapists and clients (e.g., filters are too strong, judging occurs, there is inappropriate problem solving on the part of the therapist, the therapist attempts to psychoanalyze the client, the therapist uses sympathy instead of empathy with working with a client, etc.).
- Discuss skills related to active communication (e.g., awareness, active listening, ability to communicate a message, etc.).
- Discuss the roles environment, attunement to body language, body motion, and eye contact play in a therapist's ability to be fully aware of a client's experience during massage interactions.
- Discuss ways to use reflecting and verbal encouragement to enhance client and therapist communication during an intake interview.
- Discuss three methods for communicating a message effectively (e.g., speak the truth, use I-statements, state expectations, identify obstacles, etc.).
- Discuss the role that emotional intelligence plays in assertive communication.
- Compare and contrast an open body position with a closed body position.
- Compare and contrast active listening with passive listening.
- Compare and contrast the use of I-statements with the use of You-statements.

**Conditions**: Having viewed an instructor demonstration of assertive communication skills and having developed two role-playing scenarios with a peer, the learner will be able to:

- Practice using assertive communication skills with a client in a prepared roleplaying scenario.
- Practice using assertive communication skills in role-playing situations assigned by the instructor.
- Modify one's communication practices based on feedback from instructors and peers.

- Analyze massage session scenarios in which therapists demonstrate different communication blockers and label each communication blocker.
- Discuss assertive communication methods to address client behaviors that are challenging for therapists (e.g., lateness for appointments, no shows, resistance to filling out paperwork, etc.).
- Discuss guidelines for communicating effectively with clients.
- Discuss guidelines for written communication with clients and other health care providers.

### Level 3

### Problem Solve

### **Knowledge: Choose and Plan**

**Conditions:** Having completed a self-evaluation exercise and participated in a classroom activity, the learner will be able to:

- Complete a self-evaluation to identify one's own style of relating and recognize passive, assertive, and aggressive tendencies, and set goals for self-improvement.
- Complete a self-evaluation to identify tendencies to use communication blockers, and set goals for self-improvement.
- Complete a self-evaluation to identify one's own assertive communication skills, and set two goals for self-improvement.
- Work with a peer to develop two scenarios in which therapists and clients interact. In the first, the therapist demonstrates poor communication skills in handling the client's request/issue/complaint. In the second, the therapist demonstrates good communication skills while handling the client's request/issue/complaint.
- Evaluate the scenarios of peers and identify good and bad communication behaviors.
- Evaluate the communication skills used by peers during various role-playing activities, and provide useful feedback.

### **Skills: Naturalize and Adapt**

Conditions: Having participated in practice sessions, the learner will be able to:

Demonstrate ongoing efforts to improve assertive communication skills during classroom and student clinic interactions.

Cub Topic	•	eer Development, Topic – Interpersonal Skills
	: Conflict Resolution	Skiller Observe and Instate
Level 1	Knowledge: Attain and Comprehend	Skills: Observe and Imitate
Receive Respond	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Define the term conflict resolution.</li> <li>List three reasons people experience conflicts in their interpersonal interactions.</li> <li>List three reasons a massage therapist and client might experience conflicts during a therapeutic relationship.</li> <li>List three reasons a massage therapist and a colleague might experience conflicts in a work environment.</li> <li>Define the term equitable solution.</li> <li>Define the term conflict resolution process.</li> <li>Outline the steps in the school-selected</li> </ul>	Conditions: Having viewed an instructor demonstration of assertive communication skills and conflict resolution, the learner will be able to:  Imitate the instructor's language and behaviors to reduce conflict while following a conflict resolution process in a client-therapist scenario.  Imitate the instructor's language and behaviors to reduce conflict while following a conflict resolution process in a therapist-colleague scenario.
	conflict resolution process.	
Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: Having participated in an interactive lecture or classroom activity, the learner will be able to:</li> <li>Discuss conflict, equitable solutions, and conflict resolution.</li> <li>Discuss each step in a conflict resolution process.</li> <li>Compare and contrast therapist language and behaviors that lead to resolution of conflicts with therapist language and behaviors that escalate conflicts.</li> <li>Write five questions to ask oneself to gain clarity and perspective on a conflict.</li> <li>Analyze four written scenarios in which participants in a conflict did not reach an equitable solution, and identify an equitable solution for each.</li> </ul>	<ul> <li>Conditions: Having viewed an instructor demonstration of conflict resolution and having developed two role-playing scenarios with a peer, the learner will be able to:         <ul> <li>Practice assertive communication and appropriate therapist behaviors to resolve two mock conflicts between a therapist and a client and between two therapists using a conflict resolution process.</li> <li>Modify one's communication and behaviors when using a conflict resolution process based on feedback from peers and instructors.</li> </ul> </li> </ul>

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	There are no relevant learning objectives for this sub-topic in level 3 of the cognitive domain.	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.

## **Topic: Student Clinic**

# Learning Outcomes

**Conditions:** Having completed 50 hours of instruction in the student clinic, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to working in the school's student clinic, including professionalism, session management, and clinic management, on a written examination.
- Demonstrate effective and professional therapist language and behaviors to interact with student clinic clients, peers, and instructors during participation in the school's student clinic, as evidenced by client, peer, and instructor feedback forms.
- Follow student clinic policies and procedures and represent the school in a professional manner during participation in the school's student clinic, as evidenced by a graded student client evaluation conducted by a supervisor.
- Plan sessions in accordance with clients' goals, wants, and needs while integrating session adaptations based on cautions or contraindications, as evidenced by client feedback forms.
- Integrate skills including draping, bolstering, use of equipment and sanitation practices, application of strokes and methods, professionalism, and communication into a safe, effective, and enjoyable session, as evidenced by client feedback forms.

### **Key Terminology and Concepts**

- Accountability
- Client feedback
- Client greeting
- Client interview
- Clinic management
- Clinic policies
- Clinic procedures
- Collecting the fee for the session
- Competency
- Courtesy
- Customization of the massage\*
- Good manners
- Honesty
- Integrity
- Policies and procedures
- Professional image
- Professionalism
- Rebooking

- Saying goodbye
- Self-regulation\*
- Session goals
- Session management
- Specialized knowledge
- Time management
- Work ethic

### **Use of Terms**

\*These terms are not consistently used or consistently defined in the massage therapy profession at this time. Curriculum designers are encouraged to use the terminology specific with their school's philosophy or the definitions of similar terms used in their textbooks. For the purposes of this document, these terms are defined as:

**Customization of the massage:** Therapists customize a massage when they plan a session based on the client's goals, needs, and wants while adapting for cautions and contraindications and staying within the boundaries of a therapeutic relationship and massage scope of practice. For example, if a client asks for a 1-hour massage and requests 30 minutes of the massage be spent on her back and 30 minutes of the massage be spent on her feet, the therapist can adapt his or her personal style, knowledge of techniques, and timing to meet the client's request.

**Self-regulation:** Control of oneself in response to stresses or pressures exerted by an outside force. For example, a therapist with good self-regulation can remain calm, composed, and rational even while dealing with a complaint from a client or dealing with an angry colleague.

### **Sub-Topics**

- Professionalism
- Session Management
- Clinic Management
- Sessions with Clients

## **Sub-Topic: Professionalism**

#### Level 1

### **Knowledge: Attain and Comprehend**

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term *professionalism*.
- Match these aspects of professionalism to their written descriptions: specialized knowledge, competency, work ethic, honesty, integrity, accountability, selfregulation, professional image, courtesy and good manners, time management.
- Describe three attributes of a person with a good professional image.
- List two examples of good time-management skills related to therapist-client interactions.
- List three examples of behaviors that exemplify professionalism during interactions with work colleagues.

**Conditions:** Having viewed an instructor demonstration, the learner will be able to:

- Imitate the instructor's language and behaviors in these areas:
  - Self-regulation in a situation involving conflict with a massage client.
  - Professional image including professional dress and hygiene in the student clinic.
  - Courtesy and good manners during interactions with others in the student clinic.
  - Honesty and integrity during interaction with others in the student clinic.

### Level 2

### **Knowledge: Use and Connect**

### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the types of specialized knowledge massage therapists must master to achieve success in their field.
- Discuss the relationship between emotional intelligence, self-regulation, client-centered work, and professionalism.
- Compare and contrast a massage therapist who is competent with a massage therapist who is lacking in competence.
- Compare and contrast a massage therapist who demonstrates accountability with a massage therapist who does not demonstrate accountability.
- Discuss the attributes of a person who exhibits the qualities of honesty and integrity.

**Conditions:** Having participated in a practice session, the learner will be able to:

- Practice professional language and behaviors in these areas:
  - Self-regulation in situations involving conflicts with massage clients.
  - Professional image including professional dress and hygiene in the student clinic.
  - Courtesy and good manners during interactions with others in the student clinic.
  - Honesty and integrity during interactions with others in the student clinic.

- Identify behaviors associated with professional self-regulation in scenarios depicting therapist-client interactions.
- Identify behaviors associated with courtesy and good manners in scenarios depicting therapist-client interactions.

### Level 3 **Knowledge: Choose and Plan Skills: Naturalize and Adapt** Problem **Conditions:** Having participated in a classroom Conditions: During ongoing interactions with Solve activity, the learner will be able to: colleagues, supervisors, and clients in the student clinic, the learner will be able to: Conduct a self-evaluation analyzing aspects of professionalism, and identify one's own Demonstrate consistent professional strengths and weaknesses. language and behaviors in these areas: Evaluate a peer on aspects of professionalism Self-regulation in situations involving and provide courteous and useful feedback. conflict with massage clients. Develop a professionalism self-improvement Professional image including plan based on self-evaluation findings and professional dress and hygiene in the feedback from instructors and peers. student clinic. Courtesy and good manners during interactions with others in the student Honesty and integrity during interactions with others in the student clinic.

## **Sub-Topic: Session Management**

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### **Knowledge: Attain and Comprehend**

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having participated in a student clinic orientation, the learner will be able to:

- Review these terms: client greeting, client interview, clinic policies and procedures, session goals, customization of the massage, rebooking, professionalism.
- Outline the events of a massage session from the moment a client enters the student clinic until the moment the client leaves the student clinic.
- Describe one student clinic policy to explain to clients during an informed consent process.
- List two items to be accomplished as part of the client interview (e.g., review of a health form to rule out contraindications, determination of session goals, agree to a plan for the massage, etc.).
- Write three questions to ask a client to be better able to customize the massage to the client's wants and needs.
- Identify student clinic resources for researching unknown conditions or medications (e.g., drug reference, pathology reference, etc.).

**Conditions:** Having participated in a student clinic orientation and watched an instructor demonstration, the learner will be able to:

- Imitate the instructor's professional language and behaviors in these areas:
  - Greet a client warmly and professionally.
  - Inform a client of clinic policies, procedures, and fees.
  - Obtain the necessary signed forms from the client.
  - Conduct a client interview and determine session goals with the client's input.
  - Plan a 1-hour massage and check the plan with the client.
  - Obtain client feedback following student clinic procedures and using student clinic forms.
  - Write a summary of the client session using SOAP notes
  - Collect the client's payment for the massage and ask the client to book additional sessions.
  - Say goodbye to the client warmly and professionally.

### Level 2

### **Knowledge: Use and Connect**

### **Skills: Practice and Refine**

### Apply

**Conditions:** Having participated in a student clinic activity, the learner will be able to:

- Discuss processes, policies, and procedures for working at the school's student clinic.
- Inform a mock client of the student clinic's policies and procedures during a mock client interview.
- Ask effective questions during a mock client interview to determine the client's goals for the session.

**Conditions:** Having participated in a practice session, the learner will be able to:

- Practice professional language and behaviors in these areas:
  - Greet clients warmly and professionally.
  - Inform clients of clinic policies, procedures, and fees.
  - Obtain the necessary signed forms from clients.
  - Conduct client interviews and determine session goals with clients' input.

- Plan the sequence and timing of a 1-hour and 90-minute massage to customize a massage for a mock client based on an interview.
- Plan massage sessions and check the plans with clients.
- Obtain client feedback following student clinic procedures and using student clinic forms.
- Collect clients' payment of fees for massages and ask clients to book additional sessions.
- Say goodbye to clients warmly and professionally.

### Level 3 Knowled

### **Knowledge: Choose and Plan**

### **Skills: Naturalize and Adapt**

### Problem Solve

**Conditions:** Having participated in a student clinic activity, the learner will be able to:

Effectively manage a mock client's
 experience in the student clinic including
 greeting the client, obtaining necessary
 forms and signatures, informing the client of
 student clinic policies and procedures,
 conducting a client interview, ruling out
 cautions and contraindications, customizing
 the massage to the client's goals, performing
 a massage that follows the agreed treatment
 plan, collecting the client's fee for the
 session, rebooking the client, and saying
 goodbye.

**Conditions:** While participating in the school student clinic, the learner will be able to:

- Perfect professional language and behaviors in these areas:
  - Greet clients warmly and professionally.
  - Inform clients of clinic policies, procedures, and fees.
  - Obtain the necessary signed forms from clients.
  - Conduct client interviews and determine session goals with clients' input.
  - Plan massage sessions and check the plans with clients.
  - Obtain client feedback following student clinic procedures and using student clinic forms.
  - Collect clients' payment of fees for massages and ask clients to book additional sessions.
  - Say goodbye to clients warmly and professionally.
- Integrate a variety of skills including body mechanics and self-care to maintain personal health and wellness during student clinic participation.

## **Sub-Topic: Clinic Management**

Level 1

**Knowledge: Attain and Comprehend** 

### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having read student clinic materials or with guidance from the student clinic supervisor, the learner will be able to:

- List three key policies and procedures of the student clinic.
- Outline the process to complete a client booking on the phone.
- Outline the process to complete a client booking on the Internet (when applicable).
- Recall the services and fees of the student clinic.
- Recall the hours of operation of the student clinic.
- List the forms student clinic clients must complete to receive a massage.
- Outline the steps for collecting payment from a client at the end of a session.

**Conditions:** Having watched a student clinic supervisor demonstration, the learner will be able to:

- Imitate the supervisor's professional language and behaviors in these areas:
  - Greet clients warmly and professionally.
  - Inform clients of clinic policies, procedures, and fees.
  - Obtain the necessary signed forms from clients.
  - Introduce clients to therapists.
  - Respond to clients' questions or requests on the phone.
  - Respond to clients' questions or requests in person.
  - Utilize the clinic's online booking software, if applicable
  - Book appointments for clients on the phone.
  - Book appointments for clients in person.
  - Answer the phone in a warm, friendly, and professional manner.
  - Respond to clients' complaints professionally.
  - Collect clients' payments for massages.
  - Say goodbye to clients warmly and professionally.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<ul> <li>Conditions: With guidance from the student clinic supervisor, the learner will be able to:</li> <li>Discuss the methods and procedures used by the student clinic to collect payment from clients (e.g., check, credit card, cash, etc.)</li> <li>Discuss the methods and procedures used by the student clinic to keep financial records.</li> <li>Discuss the methods and procedures used by the student clinic to keep and protect client records.</li> </ul>	Conditions: With guidance from the student clinic supervisor, the learner will be able to:  Practice using professional language and behaviors in these areas while fulfilling the duties of a student clinic receptionist or shift manager:  Greet clients warmly and professionally.  Inform clients of clinic policies, procedures, and fees.  Obtain the necessary signed forms from clients.  Introduce clients to therapists.  Respond to clients' questions or requests on the phone.  Respond to clients' questions or requests in person.  Book appointments for clients on the phone.  Book appointments for clients in person.  Answer the phone in a warm, friendly, and professional manner.  Respond to clients' complaints professionally.  Collect clients' payments for massages.  Say goodbye to clients warmly and professionally.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	Conditions: With guidance from the student clinic supervisor, the learner will be able to:  • Perform the duties of the student clinic receptionist or student clinic shift manager during one of more shifts.	Conditions: With guidance from the student clinic supervisor, the learner will be able to:  Perfect professional language and behaviors in these areas while fulfilling the duties of a student clinic receptionist or shift manager:  Greet clients warmly and professionally.  Inform clients of clinic policies, procedures, and fees.  Obtain the necessary signed forms from clients.

- Respond to clients' questions or requests on the phone.
- Respond to clients' questions or requests in person.
- Book appointments for clients on the phone.
- Book appointments for clients in person.
- Answer the phone in a warm, friendly, and professional manner.
- Respond to clients' complaints professionally.
- Collect clients' payments for massages.
- Say goodbye to clients warmly and professionally.

## **Sub-Topic: Sessions with Clients**

level 1

**Knowledge: Attain and Comprehend** 

#### **Skills: Observe and Imitate**

### Receive Respond

**Conditions:** Having completed a student clinic orientation and during ongoing shifts at the student client, the learner will be able to:

- Review information related to student clinic policies and procedures and managing client sessions, if necessary.
- Ask questions of student clinic supervisors when faced with unknowns.

**Conditions:** Having participated in a student clinic orientation and during ongoing shifts at the student clinic, the learner will be able to:

- Imitate the supervisor's professional language and behaviors if weaknesses in these skill sets are identified by the supervisor during student clinic shifts:
  - Greet a client warmly and professionally.
  - Inform a client of clinic policies, procedures, and fees.
  - Obtain the necessary signed forms from the client.
  - Conduct a client interview and determine session goals with the client's input.
  - Plan a 1-hour massage and check the plan with the client.
  - Obtain client feedback following student clinic procedures and using student clinic forms.
  - Write a summary of the client session using SOAP notes
  - Collect the client's payment for the massage and ask the client to book additional sessions.
  - Say goodbye to the client warmly and professionally.
  - Interact with colleagues at the student client is a friendly and professional manner.
  - Others as determined by the student clinic supervisor.

Level 2	Knowledge: Use and Connect	Skills: Practice and Refine
Apply	<b>Conditions:</b> Having completed a student clinic orientation and during ongoing shifts at the student client, the learner will be able to:	Conditions: Having been alerted to a weakness in skills identified by the student clinic supervisor, the learner will be able to:
	<ul> <li>Discuss knowledge related to managing a client's experience at the clinic, and adapt</li> </ul>	Practice professional language and behaviors in areas noted as weak:
	knowledge appropriately when areas of weakness are identified.	Greet clients warmly and professionally.
	weakiness are identified.	<ul> <li>Inform clients of clinic policies, procedures, and fees.</li> </ul>
		Obtain the necessary signed forms from clients.
		<ul> <li>Conduct client interviews and determine session goals with clients' input.</li> </ul>
		<ul> <li>Plan massage sessions and check the plans with clients.</li> </ul>
		<ul> <li>Obtain client feedback following student clinic procedures and using student clinic forms.</li> </ul>
		<ul> <li>Collect clients' payment of fees for massages and ask clients to book additional sessions.</li> </ul>
		<ul> <li>Say goodbye to clients warmly and professionally.</li> </ul>
		<ul> <li>Interact with colleagues at the student client is a friendly and professional manner.</li> </ul>
		Others as determined by the student clinic supervisor.
Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<b>Conditions:</b> Having completed a student clinic orientation and during ongoing shifts at the student client, the learner will be able to:	Conditions: Having participated in student clinic and completed all student clinic shifts, the learner will be able to:
	Effectively manage massage sessions and client experiences at the student clinic.	Demonstrate consistent professional language and behaviors in all interactions with clients, colleagues, and supervisors at the student clinic.

## **Topic: Career Planning**

# Learning Outcomes

**Conditions:** Having completed 25 hours of instruction on career planning, the learner is expected to:

- Demonstrate knowledge of the key terms and concepts related to career planning, including envisioning a massage career, working as an employee, and the basics of starting a private practice, on a written examination.
- Write a personal one-year career plan, in a graded assignment.
- Demonstrate principles of good interviewing skills and effectively answer sample interview questions, in on a graded activity.

### **Key Terminology and Concepts**

- Blended career
- Business name
- Business plan
- Career plan
- Career vision
- Client education
- Cover letter
- Employee
- Employer expectations
- Employment
- General liability insurance
- Income goals
- Independent contractor
- Interview
- Job shadowing
- Licenses and permits
- Limited liability company
- Marketing
- Marketing plan

- Needs
- Operating costs
- Partnership
- Personality traits
- Product liability insurance
- Professional liability insurance
- Promotion
- Publicity
- Record keeping
- Referral programs
- Resume
- Self-employed
- Sole proprietorship
- Special offers
- Specialization
- Startup costs
- Values
- Wants

### Use of Terms

The terms used in this topic appear to be consistent and widely accepted.

#### **Sub-Topics**

- Envisioning a Massage Career
- Employment
- Private Practice

## **Sub-Topic: Envisioning a Massage and Bodywork Career**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

### Receive Respond

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Define the term career vision.
- Identify five important values of one's own that might influence career planning.
- Identify five key personality traits of one's own that might influence career planning.
- List types of massage environments of particular personal interest.
- List three client types of particular personal interest.
- Describe three employment options (e.g., employee, self-employed, independent contractor, blended career, etc.).
- Describe two ways to get "real life" information about career options (e.g., job shadowing, internships, online forums, volunteer opportunities, mentors, etc.).

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

#### Level 2

#### **Knowledge: Use and Connect**

#### Skills: Practice and Refine

### Apply

**Conditions:** Having participated in an interactive lecture or class activity, the learner will be able to:

- Discuss one's personal values and how they relate to massage career choices.
- Discuss one's own personality traits and their suitability for different massage career paths.
- Discuss the benefits and drawbacks of developing specialized skills to work with specific client types (e.g., pregnant women, athletes, etc.).
- Analyze four massage work environments and their skill requirements (e.g., spas require good wellness massage skills; health care settings require strong assessment and treatment planning skills, etc.).
- Compare one's own skills to the skill requirements in four different work environments.

There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.

- Compare and contrast the benefits and drawbacks of a career as an employee, a business owner in private practice, an independent contractor, and a practitioner in a blended career (someone who has a parttime private practice and also works part time as an employee).
- Determine one's yearly, monthly, and weekly income goals.
- Estimate how one's own income goals can be achieved through these career paths: employee in a franchise clinic, employee in a local day spa, business owner of a private practice, blended career (e.g., how many clients per week in a private practice to achieve one's income goal after expenses and taxes, etc.).

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<b>Conditions:</b> Having participated in a classroom activity, the learner will be able to:	There are no relevant learning objectives for this sub-topic in level 3 of the psychomotor domain.
	<ul> <li>Write a career plan for the first year after graduation including the primary goal for the year, chosen employment status (e.g., employee, business owner, etc.), chosen work environment, chosen client types (optional), and tasks and activities to achieve the primary goal.</li> </ul>	

Conditions: Having read assigned material and/or participated in a lecture, the learner will be able to:  Define the term <i>employment</i> .	Skills: Observe and Imitate  Conditions: Having viewed an instructor demonstration of interviewing skills, the learner will be able to:
participated in a lecture, the learner will be able to:	demonstration of interviewing skills, the learner
<ul> <li>List three places where a massage therapist looking for a job can identify potential employers (e.g., Internet, association websites, school job board, etc.).</li> <li>Write five questions to ask potential employers when gathering basic information about a position (e.g., Are you currently hiring? What is the pay rate for entry-level massage therapists? etc.).</li> <li>Describe the purpose of a resume.</li> <li>Describe the purpose of a cover letter.</li> <li>Describe the purpose of an interview.</li> <li>List three attributes of well-written resumes (e.g., concise, honest, pertinent to the specific position, etc.).</li> <li>Outline the sections of a basic chronological resume (e.g., contact information, job objective, education, work experience, etc.).</li> <li>Outline the sections of a cover letter (e.g., opening, body, conclusion).</li> </ul>	<ul> <li>Imitate instructor interviewing behavior including:</li> <li>Speaking at a good pace and volume.</li> <li>Making good eye contact with the interviewer.</li> <li>Smiling and expressing warmth and friendliness appropriately.</li> <li>Using an open and receptive body position (e.g., sit up straight, arms uncrossed, sit forward slightly to demonstrate energy and interest, etc.).</li> <li>Answering questions directly and concisely (e.g., get to the point, avoid rambling, demonstrate honesty, etc.).</li> <li>Answer using good grammar and vocabulary (e.g., avoid slang words, use health care terminology correctly, etc.).</li> </ul>
Knowledge: Use and Connect	Skills: Practice and Refine
<ul> <li>Conditions: Having participated in an interactive lecture or class activity, the learner will be able to:</li> <li>Share one's own views about career options (e.g., working as an employee while starting a private practice, etc.).</li> <li>Discuss the sections of a chronological resume.</li> <li>Discuss the type of information to include in a cover letter.</li> </ul>	<ul> <li>Conditions: Having participated in a practice session, the learner will be able to:</li> <li>Answer ten sample interview questions in front of instructors and peers: <ul> <li>Speak at a good pace and volume.</li> <li>Make good eye contact.</li> <li>Smile and express warmth and friendliness appropriately.</li> <li>Use an open and receptive body position.</li> </ul> </li> </ul>
	<ul> <li>Write five questions to ask potential employers when gathering basic information about a position (e.g., Are you currently hiring? What is the pay rate for entry-level massage therapists? etc.).</li> <li>Describe the purpose of a resume.</li> <li>Describe the purpose of a cover letter.</li> <li>Describe the purpose of an interview.</li> <li>List three attributes of well-written resumes (e.g., concise, honest, pertinent to the specific position, etc.).</li> <li>Outline the sections of a basic chronological resume (e.g., contact information, job objective, education, work experience, etc.).</li> <li>Outline the sections of a cover letter (e.g., opening, body, conclusion).</li> <li>Knowledge: Use and Connect</li> <li>Conditions: Having participated in an interactive lecture or class activity, the learner will be able to:</li> <li>Share one's own views about career options (e.g., working as an employee while starting a private practice, etc.).</li> <li>Discuss the sections of a chronological resume.</li> <li>Discuss the type of information to include in</li> </ul>

interview.

Answer questions directly and concisely.

- Discuss employers' expectations of employees.
- Discuss employment packages and employee benefits (e.g., health plan or not, payment of liability insurance or not, payment for continuing education or not, etc.).
- Analyze three sample resumes and cover letters.
- Compare and contrast professional, wellwritten resumes and cover letters with unprofessional, poorly written resumes and cover letters.
- Discuss the types of questions a massage employer might ask during an interview and outline good answers to each question.
- Discuss the types of questions a potential employee might ask a potential employer (e.g., Why is this position open? Are there opportunities for advancement? What are the company's challenges and current goals? etc.).

- Demonstrate good grammar and vocabulary.
- Gather feedback to identify one's areas of strength and weakness.
- Refine one's interviewing skills based on feedback.

Level 3	Knowledge: Choose and Plan	Skills: Naturalize and Adapt
Problem Solve	<b>Conditions:</b> Having participated in an interactive lecture or classroom activity, the learner will be able to:	<b>Conditions:</b> Having participated in a practice session and refined interviewing skills based on feedback, the learner will be able to:
	<ul> <li>Plan a job hunt including methods to identify potential employers, goals for the development of a professional resume and cover letter, timelines, and resources.</li> </ul>	Effectively answer ten sample interview questions in front of instructors and peers, demonstrating good interviewing skills.

## **Sub-Topic: Private Practice**

Level 1

**Knowledge: Attain and Comprehend** 

**Skills: Observe and Imitate** 

Receive Respond Note: This sub-topic should be viewed as an introduction to starting a private practice. Feedback from the profession on the first draft of the ELAP Blueprint indicated that skills like writing a business plan, some business activities, and some marketing and promotional activities are beyond the scope of entry-level education. These learning objectives provide a foundation for longer programs wishing to teach more advanced business skills.

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Match these types of business structures to their written descriptions: sole proprietorship, independent contractor, partnership, limited liability company.
- Match these important licenses and permits to their written descriptions: business license, sales tax permit, zoning permit, home occupation permit, registration of a business name, employer identification number.
- Match these insurance types to their written descriptions: professional liability, general liability, product liability, business personal property insurance, health insurance, disability insurance.
- List two factors to consider when choosing a business name (e.g., client should be able to pronounce and spell it easily, web domain name availability, etc.).
- Recall four factors to consider when choosing a location for a massage business (e.g., zoning and signage restrictions, proximity to clients and foot traffic, etc.).
- Match these types of financial statements that might be used by a massage business to their written descriptions: balance sheet, cash flow statement, profit and loss statement.

There are no relevant learning objectives for this sub-topic in level 1 of the psychomotor domain.

- Match these terms related to financial record keeping to their written descriptions: startup costs, operating costs, business checking account, school-selected method for record keeping of business transactions.
- List one method for keeping basic business records (e.g., a standard ledger, a digital system, etc.).
- Explain the items included in a basic business ledger for a massage business (e.g., date of the transaction, description of the transaction, income or expense, balance, etc.).
- Match these terms to their written descriptions: taxes, income tax, selfemployment tax, employment tax, sales tax.
- List six examples of business expenses that can be deducted when paying taxes.
- Define the term *marketing*.
- List three items that help a massage business build its identify with potential clients (e.g., business name, logo, signage, business cards, website, brochures, etc.).
- List three items to be included on a menu of services (e.g., contact details and location of the business, services, fees, hours of operation, etc.).
- List the elements that should be included on a website.
- List three forms of promotion commonly used by massage therapists (e.g., client education activities, client referral programs, special offers, publicity opportunities, etc.).
- Describe in one's words how a basic referral program works.
- List three special offers a therapist might use to attract new clients (e.g., prepaid cards, punch cards, coupons, season promotions, etc.).
- List two web-based methods for filling sessions (e.g., social media, weekly e-blasts, etc.).

- List two methods for building client loyalty in a massage practice (e.g., client birthday cards with discounts, providing massage that meets the clients wants and needs, etc.).
- Identify five resources for learning more about business practices.

#### Level 2

#### **Knowledge: Use and Connect**

#### **Skills: Practice and Refine**

#### Apply

**Conditions:** Having participated in an interactive lecture or classroom activity, the learner will be able to:

- Discuss the types of business structures often adopted by massage business owners.
- Discuss important licenses and permits needed by massage business owners in the state, city, or town where the school is located.
- Discuss the types of insurance massage therapists should carry to protect their practice and life.
- Discuss the factors to consider when choosing a business name and location.
- Discuss basic financial record keeping including financial statements, startup costs, operating costs, and methods for keeping business records.
- Discuss taxes for small businesses and the types of taxes one might pay in a massage business.
- Discuss basic methods for keeping good tax records and getting tax advice.
- Discuss marketing and methods for building a business identify with potential clients.
- Discuss the items that belong in a menu of services including services, fees, hours of operation, directions to the business, contact details, etc.
- Discuss the importance of a business website and resources for website development.
- Discuss common promotional methods used by massage businesses.
- Discuss referral programs, their benefits, and how they work.

There are no relevant learning objectives for this sub-topic in level 2 of the psychomotor domain.

- Discuss special offers and how they are used by massage business owners to attract potential clients.
- Discuss web-based marketing efforts.
- Discuss methods for building client loyalty in a massage practice.
- Discuss useful resources for learning more about how to build, manage, and operate a thriving massage business.

#### Level 3 **Knowledge: Choose and Plan Skills: Naturalize and Adapt** Problem Conditions: Have completed a classroom activity, There are no relevant learning objectives for this Solve the learner will be able to: sub-topic in level 3 of the psychomotor domain. Complete a marketing planning form provided by the school including activities to create a business identity, client education activities, special offers, methods for using web-based marketing, seasonal promotions, and client loyalty building activities; place defined activities on a yearly calendar for one year.

	Entry-Level Massage Education Blueprint	
	Massage Learning in the Affective Domain	
Topic	Value Learning	
Topic	Value Clients	
Topic	Value Oneself	
Topic	Value Other Professionals	
Topic	Value the Profession	

### INTRODUCTION

Learning objectives in the affective (feeling) domain refer to the attitudes and values developed through self-awareness, self-exploration, effective role modeling, and learning experiences. Attitudes are manifest in an individual's manner, disposition, position, and orientation towards something (positive, negative, or neutral). Values are the importance, significance, or worth individuals or groups place on something. Attitudes and values are closely related; we tend to demonstrate a positive attitude towards those things we value.

Sometimes attitudes and values are the primary focus of education, such as with diversity awareness training and ethics education, but most often, they are learned implicitly. Although they may not always be aware of it, most educators are involved in some form of attitude and value teaching in all of their classes. In every word and action, including nonverbal communication, massage therapy educators are role modeling their own attitudes and values toward the profession, clients, and other dimensions of massage. Learners' own attitudes and values evolve in part as a result of learning implicit in the observation of instructors and other learners, as well as through explicit teaching.

To date, there is no one accepted statement of the attitudes and values held by the massage and bodywork profession as a whole, although there would appear to be some consensus in many areas such as ethical behavior, the importance of focusing on the client, and other aspects of professionalism. This blueprint for the affective domain focuses on objectives in areas that we generally view as true of the profession and noncontroversial: the importance of learning, values related to working with clients and with other professionals, and valuing the profession itself as well as one's own role within it. When integrated with the other ELAP blueprints, this affective domain blueprint reminds us to pay attention to ways in which learners become true massage professionals, rather than merely possessing knowledge and skills.

# **Topic: Value Learning**

Level 1	Receive and Respond	
Receive Respond	<ul> <li>Show enthusiasm for becoming a massage professional and obtaining massage credentials.</li> <li>Describe the value of massage education.</li> <li>Attend classes regularly and be prepared to work.</li> <li>Listen respectfully to instructors and peers.</li> <li>Use note-taking procedures during lectures and demonstrations.</li> <li>Show interest in learning new information.</li> <li>Ask questions and follow-up questions to clarify information.</li> <li>Accept responsibility for personal behavior.</li> <li>Cooperate with instructors and peers to ensure a safe and productive classroom environment.</li> <li>Examine personal thoughts, beliefs, words, feelings, and actions in response to classroom content.</li> <li>Recognize that others may hold different viewpoints.</li> <li>Respond empathetically to the feelings of others.</li> <li>Comply with the school dress code, policies, and procedures.</li> <li>Identify how one can learn from other professionals and choose appropriate role models.</li> <li>Locate professional resources in addition to those provided by the school.</li> <li>Recognize the potential for contributing to the professional body of knowledge.</li> </ul>	
Level 2	Value	
Apply	<ul> <li>Modify one's own beliefs and behaviors as a result of learning.</li> <li>Complete assignments and coursework in a timely manner.</li> <li>Invite feedback from instructors and peers during classroom activities.</li> <li>Calmly defend personal choices and opinions when appropriate.</li> <li>Differentiate personal emotions and other's emotional responses to classroom content.</li> <li>Challenge personal assumptions in light of new information.</li> <li>Meet commitments to peers on team projects.</li> <li>Share views willingly and respectfully during classroom discussions.</li> <li>Seek opportunities for self-development and new learning.</li> <li>Set challenging goals and work to achieve them.</li> <li>Value diversity and the rights of all people in learning.</li> <li>Seek to establish connections with other professionals in massage education and practice.</li> <li>Identify ways in which one can contribute to the professional body of knowledge.</li> </ul>	

Level 3	Integrate and Internalize	
Problem Solve	<ul> <li>Display self-reliance when working independently.</li> <li>Verify information by seeking additional resources.</li> <li>Weigh cause-and-effect outcomes to determine personal actions in classroom situations.</li> <li>Influence peers positively by modeling professionalism regularly.</li> <li>Resolve conflicts with peers and instructors in an equitable manner.</li> <li>Internalize the ethical standards of the massage and bodywork profession.</li> <li>Act in accordance with standards of professionalism as outlined by the school.</li> <li>Integrate new knowledge and skills into one's own approach to practice.</li> <li>Commit to ongoing learning and maintaining credentials.</li> <li>Fully participate in all educational and training activities.</li> <li>Integrate external professional resources into one's own practice.</li> <li>Foster professional relationships.</li> <li>Commit to contributing to the massage profession.</li> </ul>	

# **Topic: Value Clients**

Level 1	Receive and Respond
Receive Respond	<ul> <li>Recognize components of dignity and respect.</li> <li>Recognize differences among people (e.g., cultural, lifestyle, health status, age).</li> <li>Observe, listen to, and identify the client's needs and requests.</li> <li>Observe, listen to, and identify the client's physical and emotional state.</li> <li>Recognize the limits of one's professional ability to meet some client needs and requests.</li> <li>Accept professional responsibility to control the events and outcomes of massage sessions.</li> <li>Identify ethical principles for client interaction (e.g., professional boundaries, confidentiality).</li> <li>Describe the elements of trust in relationships.</li> <li>Recognize the value of compassion for others.</li> </ul>
Level 2	Value
Apply	<ul> <li>Demonstrate respect for all clients and their human dignity.</li> <li>Validate and appreciate the differences among people.</li> <li>Identify ways to address the client's well-being.</li> <li>Defend the case-specific need to limit one's practice as necessary.</li> <li>Adapt sessions based on the client's physical and emotional state.</li> <li>Value one's responsibility to professionally control the events and outcomes of massage sessions.</li> <li>Share ways to address clients' needs.</li> <li>Demonstrate commitment to following ethical principles in practice.</li> <li>Initiate trust-building activities in the client-therapist relationship.</li> <li>Demonstrate compassion for others.</li> <li>Demonstrate an appropriate focus on the client throughout the session.</li> </ul>
Level 3	Integrate and Internalize
Problem Solve	<ul> <li>Respect all individuals and the inherent worth of all clients.</li> <li>Practice with intention for the client's benefit.</li> <li>Modify one's approach to honor and accommodate individual differences.</li> <li>Commit to enhancing the client's well-being.</li> <li>Practice only within one's scope and abilities.</li> <li>Modify one's approach to respect and accommodate the client's physical and emotional state and establish respectful control of the session.</li> <li>Integrate communication of the therapist's intention within practice.</li> <li>Consistently adhere to ethical principles in all interactions with clients.</li> <li>Display trustworthiness in the client-therapist relationship.</li> <li>Practice with compassion.</li> </ul>

# **Topic: Value Oneself**

Level 1	Receive and Respond
Receive Respond	<ul> <li>Describe three reasons self-respect is important for a professional massage therapist.</li> <li>Recognize the value of being honest about oneself to oneself.</li> <li>Examine feelings about oneself to develop a healthy awareness of one's personal limits.</li> <li>Describe why a professional therapist needs self-confidence for effective practice.</li> <li>Examine the value of self-awareness and self-assessment.</li> <li>Explain three reasons why education in massage practice never ends.</li> <li>Describe one's personal views on the value of continuing professional and personal growth.</li> </ul>
Level 2	Value
Apply	<ul> <li>Demonstrate self-respect as a massage professional through interactions with clients, peers, instructors, other professionals, and the public.</li> <li>Demonstrate self-honesty when encountering ethical, professional, or personal dilemmas.</li> <li>Consistently self-evaluate to identify areas in which further education and training are needed.</li> <li>Compare and contrast oneself to established ethical and professional codes to identify areas of strength and weakness.</li> <li>Set challenging professional and personal goals and work to achieve them.</li> <li>Seek new ways to grow both professionally and personally.</li> </ul>
Level 3	Integrate and Internalize
Problem Solve	<ul> <li>Maintain self-respect as a professional therapist even in challenging circumstances.</li> <li>Take full responsibility for the practice of massage within one's personal limits.</li> <li>Practice massage with self-confidence while taking full advantage of personal strengths.</li> <li>Continually self-evaluate as part of striving for excellence as a professional therapist.</li> <li>Commit to ongoing improvement of one's knowledge and skills.</li> <li>Commit to ongoing professional and personal growth.</li> </ul>

# **Topic: Value Other Professionals**

Level 1	Receive and Respond
Receive	<ul> <li>Describe three benefits of massage therapists working with other health care professionals.</li> <li>Examine the advantages of working closely with other massage colleagues.</li> <li>Consider the work of other massage professionals using diverse or unknown forms and styles of massage and bodywork.</li> <li>Describe one benefit for clients from three diverse forms of massage and bodywork that are different from the benefits provided by one's own practiced forms.</li> <li>List three benefits other health care professionals bring to clients that are different from the benefits of massage and bodywork.</li> <li>Explain three reasons why massage therapists and other health care professionals can work as a team for a client's benefit.</li> <li>Identify three situations in which it is appropriate to refer a client to another massage or bodywork therapist.</li> <li>Identify three situations in which it is appropriate to refer a client to another health care provider who does not practice massage or bodywork.</li> <li>List two ways one might develop professional connections with other health care providers.</li> </ul>
Level 2	Value
Apply	<ul> <li>Value the benefits of working with other health care professionals.</li> <li>Develop close working relationships with massage colleagues.</li> <li>Demonstrate openness to the ideas of other massage professionals using diverse or unknown forms and styles of massage and bodywork.</li> <li>Discuss the role of a massage therapist when working on a team with other health care professionals to benefit a client.</li> <li>Share, with the client's consent, the challenges of meeting session goals, and seek input from other massage professionals to benefit the client.</li> <li>Value opportunities to refer a client to other health care providers.</li> <li>Seek opportunities to develop professional connections with other health care providers.</li> </ul>
Level 3	Integrate and Internalize
Problem Solve	<ul> <li>Honor and respect the knowledge and skills of other health care professionals.</li> <li>Honor and respect the knowledge and skills of other massage colleagues.</li> <li>Balance openness to the ideas of other professionals using diverse or unknown forms and styles of massage and bodywork with a logical appraisal of the benefits for clients.</li> <li>Pursue professional connections with other health care providers to work as part of a health care team to benefit clients.</li> <li>Pursue professional connections with massage colleagues in order to share best practices and develop professionally.</li> <li>Refer clients to other massage or bodywork professionals when appropriate.</li> <li>Refer clients to other health care professionals when appropriate.</li> </ul>

# **Topic: Value the Profession**

Level 1	Receive and Respond
Receive Respond	<ul> <li>List three benefits of structured, professional touch for humans.</li> <li>Recognize, accurately and without exaggeration, the benefits of massage therapy.</li> <li>Recognize guidelines for professional attire and standards of personal hygiene in accordance with expectations of health care providers.</li> <li>Accept the limits of massage therapy to meet all of a client's health care needs.</li> <li>Describe the methods and behaviors allowed by the scope of practice in the state where one will provide massage therapy.</li> <li>List three methods or behaviors that are restricted by the scope of practice in the state where one will provide massage therapy.</li> <li>Identify four behaviors or actions that violate professional and ethical standards and may harm a client.</li> <li>Examine the laws in the state where one will practice massage.</li> <li>Describe four components of professionalism (e.g., honesty, integrity, accountability, etc.).</li> <li>Recognize the negative impact of unprofessional or unethical behavior on the entire profession.</li> <li>Identify opportunities to become involved in the professional community and society at large.</li> </ul>
Level 2	Value
Apply	<ul> <li>Value the benefits of structured, professional touch for humans.</li> <li>Share with others, accurately and without exaggeration, the benefits of massage therapy.</li> <li>Practice professional attire and standards of personal hygiene in accordance with expectations of health care providers.</li> <li>Share honestly with others the limits of massage therapy to meet all of a client's health care needs.</li> <li>Practice only the methods and behaviors allowed by the scope of practice in the state where one will provide massage.</li> <li>Avoid behaviors or actions that violate professional and ethical standards and may harm a client.</li> <li>Comply with the laws in the state where one will practice massage.</li> <li>Cultivate professional attitudes, values, language, and behaviors (e.g., honesty, integrity, accountability, etc.) during interactions with clients, peers, instructors, and the public.</li> <li>Hold high expectations for oneself and other massage therapists in regards to professional attire, standards of personal hygiene, ethics and professionalism, and compliance with laws.</li> <li>Seek opportunities to become involved in the professional community and serve the community through the practice of massage therapy.</li> </ul>

Level 3	Integrate and Internalize
Problem Solve	<ul> <li>Represent the massage profession accurately, ethically, and professionally.</li> <li>Adhere to the highest standards of professional attire and personal hygiene.</li> <li>Provide massage therapy in accordance with the state scope of practice.</li> <li>Adhere to the laws in the state where one provides massage therapy.</li> <li>Internalize and consistently cultivate the highest ethical and professional standards.</li> <li>Report observed violations of professional and ethical standards, scope of practice, or laws to the state board of massage and/or state or local authorities.</li> <li>Influence others positively through participation in the professional community and society.</li> </ul>

## **Massage Learning in the Interpersonal Domain**

## **INTRODUCTION**

Learning objectives in the interpersonal (relating) domain refer to skills that are necessary to initiate, maintain, and manage positive relationships with a range of people in a range of contexts.

Communication skills, including therapeutic communication with clients, are developed or enhanced from Interpersonal skills. Students learn interpersonal skills through modeling behaviors of effective peers and instructors, learning core concepts (e.g., personal space, filters, emotional intelligence, and relating differences), practicing the skills in various contexts (e.g., group projects, student clinic), and getting feedback through instructor coaching.

**Conditions:** Throughout the massage and bodywork training program, by developing, practicing, and personalizing the following interpersonal skills, the learner will be able to:

Level 1	Seek and Support
Receive Respond	<ul> <li>Observe one's own emotional responses during interactions with peers, instructors, and clients.</li> <li>Identify others' body language cues related to the expression of emotion.</li> <li>Recognize one's own personal moods and their influence on interactions with others.</li> <li>Be attentive to the emotions of other people and the emotional moods of a group.</li> <li>Greet others with warmth and friendliness.</li> <li>Recognize differences in relating styles, learning styles, and life preferences.</li> <li>Be willing to share thoughts and feelings with peers and instructors willingly, openly, and honestly.</li> <li>Accept responsibility for one's own communications (what and how) with others, including clients.</li> <li>Demonstrate presence while others are speaking by practicing open body language.</li> <li>Listen carefully to others and ask follow on questions in order to understand their point of view.</li> <li>Encourage others to share their views.</li> <li>List four behaviors that encourage trusting relationships (e.g., accountability, responsibility, caring, empathy, honesty, etc.).</li> <li>Seek trusting relationships with peers, instructors, and clients.</li> </ul>

### Level 2 **Communicate and Negotiate** Apply Communicate ideas assertively (but not aggressively) and honestly. Seek feedback from peers and instructors when working through problems. Empathize with others during communication by using phrases such as "I understand why you would feel that" or "That makes sense to me - go on." Summarize information learned from another during communication by repeating it back to the communicator (reflecting). Disagree respectfully and openly when one's views differ from those held by peers and instructors. Agree openly with others when views are similar to those held by peers and instructors. Dialogue with others to understand where views differ or are similar. Negotiate an outcome by using effective (persuasive but honest and logical) arguments. Practice the language and behaviors that build trusting relationships with peers, instructors, and clients. Level 3 **Compromise and Resolve** Problem Consistently communicate assertively in interactions with peers, instructors, and clients. Encourage clients to communicate fully and honestly in matters related to safe, effective massage. Solve Propose solutions to problems observed or described by others, including clients. Work through differences with others to arrive at an agreement. Compromise when appropriate to ensure equitable outcomes following negotiation. Facilitate the accomplishment of client or team goals. Join in a group process as an engaged member of a team. Assist others when help is needed. Initiate, establish, and maintain trusting relationships with peers, instructors, and clients.