



INSTRUCTIONAL PACKAGE

MTH 113

Essential Human Anatomy and
Physiology for *Massage Therapy*

Effective Term

Fall 2023/Spring 2024/Summer 2024

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: Fall 2023/Spring 2024/Summer 2024

COURSE PREFIX: MTH 113

COURSE TITLE: Essential Human Anatomy and Physiology
for Massage Therapy

CONTACT HOURS: 2.3.3

CREDIT HOURS: 3

RATIONALE FOR THE COURSE:

This course will focus on the pre-massage assessment of each body region including signs and symptoms relating to pathological conditions. Specific emphasis will be given to the skeletal, muscular, cardiovascular and nervous systems. This course provides the student with a solid foundation in anatomy and physiology that the student can use in the pursuit of a career in massage therapy. A working knowledge and understanding of the structure and function of the human body is critical to the competent practice of massage therapy.

COURSE DESCRIPTION:

This course will focus on the pre-massage assessment of each body region including signs and symptoms relating to pathological conditions. Specific emphasis will be given to the skeletal, muscular, cardiovascular and nervous systems.

PREREQUISITES/CO-REQUISITES:

(Credit level MTH 136 Minimum Grade of C or Credit level MTH 136 Minimum Grade of TC) and
(Credit level MTH 120 Minimum Grade of C or Credit level MTH 120 Minimum Grade of TC) and
(Credit level MTH 121 Minimum Grade of C or Credit level MTH 121 Minimum Grade of TC) and
(Credit level MTH 122 Minimum Grade of C or Credit level MTH 122 Minimum Grade of TC) and
(Credit level MTH 128 Minimum Grade of C or Credit level MTH 128 Minimum Grade of TC) and
(Credit level MTH 132 Minimum Grade of C or Credit level MTH 132 Minimum Grade of TC) and
(Credit level MTH 135 Minimum Grade of C or Credit level MTH 135 Minimum Grade of TC)

***Online/Hybrid** courses require students to complete the [DLi Orientation Video](#) prior to enrolling in an online course.

REQUIRED MATERIALS:

Please visit the [BOOKSTORE](#) online site for most current textbook information.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

- Washable Bottle Holster Single - Black W/ Bottle and Pump
- Scrubs will be worn throughout the program from day 1 of week 2 until the end of the Massage Therapy Program. Jewelry will not be worn while working on the massage tables during any lab time. Nails must be kept short and clean.
- Massage table for home practice – recommended for first semester

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials.
Access to myHGTC portal for student self-service.
College email access – this is the college's primary official form of communication.

STUDENT IDENTIFICATION VERIFICATION:

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit [Online Netiquette](#).

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

1. Explain why a massage therapist should have a good understanding of anatomy and physiology.
2. Gain a basic understanding of the structure and function of the human body in order to knowledgeably apply the skills of a massage therapist.
3. Understand how massage affects the body on various levels by using their knowledge of the structure and function of the body.
4. Promote a client's well-being by demonstrating knowledge of muscle structure, location, and action.
5. Explain why a massage therapist should have a good understanding of the basic pathophysiology of the body systems studied in this course.
6. Gain a basic understanding of the pathophysiology of the body systems studied in this course in order to knowledgeably apply the skills of a massage therapist.

7. Understand how massage affects the body as it relates to pathological injuries, syndromes, diseases, and conditions of the body systems studied in this course.
8. Promote a client's well-being by demonstrating knowledge of precautions and contraindications to massage directly related to pathological injuries, syndromes, diseases, and conditions of the body systems studied in this course.
9. Explain why a massage therapist should have a basic understanding of pharmacological interventions and their effects as it relates to the application of massage therapy techniques.
10. Identify medications by accessing reputable sources to understand side effects, precautions, and contraindications to the application of massage therapy techniques.
11. Identify the action of medications on specific body systems studied in this course to assess whether the medication will affect how the body reacts to massage.
12. Promote a client's well-being by demonstrating knowledge of medications and their side effects and interaction with other medications.
13. Identify when it is appropriate to consult with the client's physician regarding massage therapy and medications.

STUDENT UNIT LEARNING OUTCOMES PER MODULE

Lecture & Lab Objectives: After successful completion of the classroom activity, the student will be able to meet the following instructional objectives:

*Modules can change per discretion of the instructor

*Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

Topic to be Reviewed.

Assignments: Reading, Discussion Board, and Review Guide Workbook pages to be completed
Syllabus and Course Review

Module 1 Unit 1

Instructor Lab and Lecture on Chapter 1

Read pages in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 1 pgs. 3-16.

*Assessment(s): Discussion 1

Homework: TBA

Learning Outcomes:

1. Define anatomy, physiology, kinesiology, and pathology.
2. Differentiate between a sign and a symptom of a disease.
3. Explain the physiologic and psychological effects of stress and pain on the body.
4. Explain the role of massage therapy in the management of stress and pain.
5. Describe the healing functions of the body related to inflammation and tissue repair.

Video: Introduction to Human Anatomy and Physiology

Video: Basic Medical Terminology

Video: Differentiating between Signs and Symptoms of Disease

Instructor Lab and Lecture:

Discuss meanings and applications of anatomy, physiology, kinesiology, and pathology; how they apply to the massage profession; the application of anatomical terms to body systems, disease signs and symptoms, effects of stress and pain on the human body, how these are addressed with massage therapy, the cycle of tissue repair, role of inflammation in the body's disease process.

*Guest speakers may be scheduled in relation to the class topics of the day.

Student Activity 1: In small groups, have students give examples of signs versus symptoms, and the effects of stress and pain on the human body.

Students Activity 2: Have the students discuss functions of inflammation in healing.

Discussion: Describe inflammation and the repair of tissue in healing

Assign workbook pages to be completed and uploaded to D2L

Topic to be Reviewed.

Assignments: Reading, Discussion Board, and Review Guide Workbook pages to be completed

Syllabus and Course Review

Module 1 Unit 2

Instructor Lab and Lecture on Chapter 1

Read pages in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 1 pgs. 3-16.

Learning Outcomes:

1. Describe the wellness model and how massage can be a part of that model.
2. Understand and derive the meaning of medical terms by breaking the terms into their parts and defining those parts.
3. Name two (2) reputable sources a massage therapist could use to gain an understanding of side effects, precautions, and contraindications to the application of massage therapy techniques.
4. Define pharmacology and drug.
5. Differentiate between how drugs are named (prescription, OTC, generic, Trade or Brand name, chemical name, legal versus illegal, etc.)
6. Describe how drugs are classified and understand the importance of knowing that a drug may be classified in more than one (1) way

Video: Massage for Health Improvement

Video: Classifications of Pharmaceuticals

Instructor Lab and Lecture:

Discuss meanings and applications of massage as part of total health, medical terms and common suffixes/prefixes, finding and using reputable resources for side effects, precautions, and contraindications of massage therapy in relation to common conditions and diseases; pharmacology and drug naming protocols, drug classifications.

*Guest speakers may be scheduled in relation to the class topics of the day.

Student Activity 1: Students identify two reputable sources to gain understanding of side-effects, precautions, and contraindications of massage treatment

Students Activity 2: Students in small groups will break down medical terms and create flashcards for study materials.

Workbook pages to be completed and uploaded to D2L by this date.

Module 2 Unit 1

The Body and its Terminology

Instructor Lab and Lecture on Chapter 2

Read pages in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 2 pgs. 19-33.

*Assessment(s): Discussion 2

Homework: TBA

Learning Outcomes:

1. Name the anatomical planes of the body.
2. List the subdivisions of the ventral and dorsal cavities of the body.
3. Name the major organs found in each body cavity.
4. Locate each region of the body.
5. Name the ten most important body systems for a massage therapist.
6. Explain the structure and function of these ten body systems.

Video: Introduction on the planes of the body.

Video: Identify the organs in each body cavity.

Video: Identify what the systems are in the body.

Instructor Lab and Lecture:

Discuss the structure and function of the body systems and explain why it is important for massage therapists to know this for the field.

*Guest speakers may be scheduled in relation to the class topics of the day.

Student Activity 1: In small groups, view the anatomy models with the organs.

Student activity 2: In small groups, label a model with the organs by identifying the cavity it will be in.

Discussion: Will be on D2L refer to the discussion rubrics

Assign workbook pages to be completed and uploaded to D2L.

*Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.

Topic to be Reviewed.

Assignments: Reading, Discussion Board, and Review Guide Workbook pages to be completed

Syllabus and Course Review

Module 2 Unit 2

Instructor Lab and Lecture on Chapter 1 and Chapter 2

Read pages in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 2 pgs. 19-

33.

Learning Outcomes:

7. Define disease.
8. Describe the path of infection for common pathogens.
9. Differentiate between pathogenic and nonpathogenic bacteria.
10. Explain the importance of cleanliness both personally and environmentally to prevent the spread of disease.

Video: Basic path of infection for common pathogens.

Video: Identify what defines disease.

Video: How disease gets spread.

Instructor Lab and Lecture:

Discuss the path of infection for common pathogens and why it is important for a massage therapist to know when it is safe to massage the client.

Workbook pages to be completed and uploaded to D2L.

Module 3 Unit 1

Chemistry, Cells, and Tissues

Instructor Lab and Lecture on Chapter 3

Read pages in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 3 pgs. 37-57.

*Assessment(s): Discussion 3

Homework: TBA

Learning Outcomes:

1. Explain the level of complexity of the human body beginning with the atom.
2. Identify and name the three principal parts of a cell.
3. Identify, name, and label the major organelles of a cell (cell membrane, centriole, endoplasmic reticulum, Golgi apparatus, lysosome, mitochondria, nucleus, nucleolus, and ribosome).
4. Name and explain the five phases of mitosis.
5. Describe enzymes and their function.
6. Describe the four main categories of body tissue.

Video: Introduction of the cell.

Video: Identify the parts of the cell.

Due lab Quiz 1 on D2L

Instructor Lab and Lecture:

Discuss the structure and function of the body cells.

*Guest speakers may be scheduled in relation to the class topics of the day.

Module 3 Unit 2

Instructor Lab and Lecture on Chapter 2 and 3

Read pages in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 3 pgs. 37-57.

Learning Outcomes:

7. Differentiate between epithelial and fibrous connective tissue membranes.
8. Name the three types of muscle tissue.
9. Name and describe the three classifications of connective tissue.
10. Name and identify the two types of dense connective tissue and provide examples of each type.
11. Define fascia and describe its function in the body.
12. Name the three types of cartilage in the body.

Video: Fibrous connective tissue.

Video: Identify 3 types of muscle tissue.

Video: Identify the function of fascia in the body.

Instructor Lab and Lecture:

Palpate a peer on the massage table and identify the tissue types.

Workbook pages to be completed and uploaded to D2L.

Module 4 Unit 1

Body Membranes and the Integumentary System

Instructor Lab and Lecture on Chapter 4

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition,
Read Chapters 4 pgs. 59-77.

*Assessment(s): Discussion 4

Homework; TBA

Learning Outcomes:

1. Understand the basic function of the skin and integumentary system.
2. Understand and describe the layered structure of the skin.
3. Identify the appendages of the skin (hair, nails, and glands).
4. List the sensory receptors in the skin.
5. Understand that the nerve supply to the skin follows specific dermatomal patterns.
6. Recognize medications used to treat the Integumentary System and understand their effects, side effects, and interaction with other medications to effectively provide massage therapy services.
7. Explain why compromised skin contraindicates massage.
8. Differentiate between primary and secondary lesions of the skin.

Video: Basic function of the skin and understand the layers of the system.

Video: Identify the appendages of the skin (hair, nails, and glands).

*Guest speakers may be scheduled in relation to the class topics of the day.

Student Activity 1: In small groups, view the anatomy models of the skin layers.

Student activity 2: In small groups, label a model to identify the hair, nails, and glands.

Student activity 3: Make flash cards.

Complete Test 1 for module 1 and 2 in D2L by instructed date.

Complete Quiz 2 in D2L by the instructed date.

Module 4 Unit 2

Instructor Lab and Lecture on Chapter 4

Read in Read in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 4 pgs. 59-77.

Learning Outcomes:

9. List three (3) types of warts
10. Define decubitus ulcer and identify indications and contraindications to massage therapy.
11. Define MRSA
12. Define cellulitis.
13. List three (3) types of skin cancer
14. Identify the ABCDE's of malignant melanoma.
15. List the three (3) types of Herpes viruses and describe the causative agent(s)
16. List two (2) fungal infections of the skin
17. Differentiate between Contact Dermatitis, Eczema, and Psoriasis
18. Identify contagious skin conditions and understand the implications for massage therapy.

Video: Identify 3 types of contagious skin conditions.

Discuss How it is important to screen the client for contagious skin conditions, when it is safe to return massaging the client, and when to refer the client to other healthcare professionals.

Workbook pages to be completed and uploaded to D2L.

Module 5 Unit 1

Skeletal System

Instructor Lab and Lecture on Chapter 5

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition, Read Chapters 5 pgs. 81-117.

*Assessment(s): Discussion 5

Homework: TBA

Learning Outcomes:

1. Understand the basic structure of a bone.
2. Describe the functions of the skeletal system.
3. Differentiate between the axial skeleton and the appendicular skeleton.
4. Recognize and identify the various types of bones and bony landmarks that exist inside the body.
5. Describe the functional and structural classifications of joints.
6. Identify the components of a synovial joint.
7. Describe five types of movable joints.
8. Recognize medications used to treat the Musculoskeletal System and understand their effects, side effects, and interaction with other medications in order to effectively provide massage therapy services.

9. Explain why knees and hips are vulnerable to osteoarthritis.
10. Differentiate between Osteoarthritis (OA) and Rheumatoid Arthritis (RA)

Student activity 1: Small groups identify the types of joints, types of bones, and bony landmarks on the skeleton.

Student activity 2: Small groups palpate a peer to locate the bones.

Complete Lab Practical 1 in class

Video: Bony landmarks for muscle attachments.

Video: Types of joints.

Discuss the medications, understand side effects, and how the massage may affect the bones with the types of bone disorders.

Complete Test 2 on Module 3 in D2L

Complete Quiz 3 in D2L

*Guest speakers may be scheduled in relation to the class topics of the day.

Module 5 Unit 2

Instructor Lab and Lecture on Chapter 5

Read in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 5 pgs. 81-117.

Learning Outcomes:

11. Differentiate between Spondylosis and Ankylosing Spondylitis
12. Identify three (3) abnormal curvatures of the spine.
13. Identify the substance that causes damage with gout and name the most common site for gout.
14. Define fracture.
15. Identify four (4) types of fractures.
16. Define dislocation.
17. Define herniated disk and understand the cautions and implications for massage therapy.
18. Define sprains and identify the three (3) classes of sprains.
19. Define bursitis and identify the most common site. Understand the cautions and implications for massage therapy.
20. Describe osteoporosis and identify its signs and symptoms. Understand the cautions and implications for massage therapy.

Video: Identify types of fractures.

Workbook pages to be completed and uploaded to D2L.

Module 6 Unit 1

The Skeletal Muscular System

Neuromuscular and Myofascial Connections

Instructor Lab and Lecture on Chapter 6 & 8

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition,
Read in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 6 & 8 pgs. 119-164,215-240.

*Assessment(s): Discussion 6

Homework: TBA

Learning Outcomes:

1. List the functions of the muscular system.
2. Identify the structure of skeletal muscle fiber at the microscopic level.
3. Describe the differences between the three types of muscle tissue: skeletal, cardiac, and smooth.
4. Understand the anatomy of a skeletal muscle.
5. Identify the various organizations of muscle fibers in skeletal muscles.
6. Describe seven shapes of muscles and give an example of each.
7. Describe the function of muscle spindle cells and the Golgi tendon organ.
8. Understand the difference between aerobic and anaerobic cellular respiration.
9. Differentiate between postural and phasic muscles.
10. Locate and name the major skeletal muscles of the human body.

Review of Kinesiology muscles for MBLEX.

Video: Types of muscles.

Video: Function of muscle spindle.

Student activity 1: Palpate muscles on massage table to locate the insertion and origins of the muscles.

Student activity 2: Label anatomy models.

Read in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 6 & 8 pgs. 119-164,215-240.

Test 3 Module 4 in D2L

Lab Quiz 4 and 5 in D2L

*Guest speakers may be scheduled in relation to the class topics of the day.

Module 6 Unit 2

Instructor Lab and Lecture on Chapter 6 & 8

Read in Read in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 6 & 8 pgs. 119-164,215-240.

Learning Outcomes:

11. Identify the origin, insertion, and action of the major skeletal muscles of the human body.
12. Recognize medications used to treat the Musculoskeletal System and understand their effects, side effects, and interaction with other medications to effectively provide massage therapy services.
13. Differentiate between fibromyalgia syndrome tender points and myofascial pain trigger points.
14. Describe Muscular Dystrophy
15. Describe the difference between strains and sprains.

16. Define muscle contracture.
17. Differentiate between muscle atrophy and muscle hypertrophy.
18. Describe the difference between tendonitis, tenosynovitis, and tendinosis.
19. Define muscle spasm and list three causes of muscle spasms.

Review the muscles Kinesiology origins, insertions, actions.

Video: muscle atrophy, and spasms.

Video: muscle contracture.

Workbook pages to be completed and uploaded in D2L.

Module 7 Unit 1

The Nervous System

Instructor Lab and Lecture on Chapter 7

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition,
Read Chapters 7 pgs. 167-213.

*Assessment(s): Discussion 7

Homework: TBA

Learning Outcomes:

1. List the functions of the nervous system.
2. Identify the parts of a neuron.
3. Differentiate between the various divisions of the nervous system: central nervous system from peripheral nervous system, autonomic from somatic, and sympathetic from parasympathetic.
4. Identify the location of structures within the central nervous system and label them on a diagram.
5. Describe the function of each part of the central nervous system (CNS)
6. Identify the parts of the peripheral nervous system (PNS)
7. Describe afferent, efferent, motor, sensory, cranial, spinal, and mixed nerves.
8. Identify the location of the largest nerve plexi and branches within the peripheral nervous system.
9. Recognize the various types of receptors in the body.
10. Understand reflexes within the body.
11. Recognize medications used to treat the Nervous System and understand their effects, side effects, and interaction with other medications in order to effectively provide massage therapy services.
12. Name three major cautions for massage in the context of nervous system disorders.
13. Define peripheral neuropathy and name a caution for massage due to peripheral neuropathy.

Video: Basic Function of the nervous system

Video: Benefits of massage for the nervous system.

Video: Parts of the nervous system.

Test 4 Modules 5 and 6

Lab Quiz 6

Discuss in class the nervous system and how effects massage.

Module 7 Unit 2

Instructor Lab and Lecture on Chapter 7

Read in in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 7 pgs.167-213.

Learning Outcomes:

14. Differentiate between depression and anxiety.
15. Name two types of strokes and explain how they differ.
16. Describe Epilepsy
17. Name two nerve compression syndromes of the upper quarter
18. Define SCI (spinal cord injury) and name three complications of spinal cord injury.
19. Differentiate between Multiple Sclerosis (MS) and Amyotrophic Lateral Sclerosis (ALS)
20. Describe Parkinson's Disease
21. Recognize the signs and symptoms of Dementia/Alzheimer's Disease

Video: on stroke and massage therapy benefits

Discuss the pathologies for nervous system and how massage can help and when not to do massage for the disease.

Workbook pages uploaded in D2L.

Module 8 Unit 1

Endocrine System

Instructor Lab and Lecture on Chapter 9

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition, Read Chapters 9 pgs. 113-124.

*Assessment(s): Discussion 8

Homework: TBA

Learning Outcomes:

1. Name and identify the location of the endocrine glands.
2. Understand the basic functions of each gland, such as the secretion of insulin in the pancreatic islets or estrogen in the ovaries.
3. Understand the effects of the more commonly discussed hormones such as adrenaline and melatonin.
4. Understand the roles of the hypothalamus and pituitary glands in controlling other glands.
5. Recognize medications used to treat the Endocrine System and understand their effects, side effects, and interaction with other medications in order to effectively provide massage therapy services.

Video: Basic introduction to the Endocrine system.

Discuss the glands and how massage helps the body with this system.

Discuss the effects of medications and interactions when massaged.

Lab Quiz 7

Student activity: small groups identify items with anatomy models.

Module 8 Unit 2

Instructor Lab and Lecture on Chapter 9

Learning Outcomes:

6. Identify the two most common types of diabetes.
7. List two emergencies associated with extremes in blood glucose levels.
8. Describe three possible complications of type 2 diabetes that affect organs outside the endocrine system.
9. Explain why people who are treated for hyperthyroidism often develop hypothyroidism.
10. Name the primary signs or symptoms of hypothyroidism.
11. Name the primary signs and symptoms of hyperthyroidism.

Workbook pages upload in D2L.

Lab Practical 2

Module 9 Unit 1

The Cardiovascular System

Instructor Lab and Lecture on Chapter 10

Read in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 10 pgs. 267-296.

*Assessment(s): Discussion 9

Homework: TBA

Learning Outcomes:

1. Understand the different types of blood vessels (five classifications) and their function in the body.
2. Comprehend what occurs in the larger structures of the heart such as the heart chambers and heart valves.
3. Identify the basic categories of the components of blood and the function of these components.
4. Understand the basic concepts of oxygen and carbon dioxide exchange within the circulatory system including the sites for this exchange: pulmonary circulation versus systemic circulation.
5. Understand the blood's role in healing.
6. Understand the functions of the basic blood cells: erythrocytes, leukocytes, lymphocytes, and thrombocytes.
7. Identify the major pulse points on the body.
8. Identify major blood vessels such as the carotid artery, femoral artery and others of this magnitude.
9. Understand the blood's role in transport within the body.

10. Understand blood pressure, including the basic factors contributing to it.
11. Identify the locations of lymphatic structures inside the body: spleen, lymph nodes, tonsils, etc.
12. Identify the types of immunity that protect the body from infection and disease.
13. Identify the path of lymphatic fluid in the body, its source, and where it drains.
14. Recognize medications used to treat the Circulatory and Lymph-Vascular System and understand their effects, side effects, and interaction with other medications in order to effectively provide massage therapy services.

Discuss blood vessels, functions of the heart, blood flow through the heart, and understand Blood pressure.

Video: Blood flows through the heart.

Video: Basic concept of O₂ and CO₂ exchange.

Complete Quiz 8 in D2L.

Lab Practical 3 in class

Student activity 1: View the models of the heart in small groups.

Student activity 2: Find the pulse on a peer describe what you feel.

*Guest speakers may be scheduled in relation to the class topics of the day.

Module 9 Unit 2

Instructor Lab and Lecture on Chapter 10

Read Chapters 10 pgs. 267-296.

Learning Outcomes:

15. Name the most likely destination for loose blood clots on the venous side of the systemic circuit.
16. Name three possible destinations for loose blood clots or other debris on the arterial side of the systemic circuit
17. Differentiate between phlebitis and thrombophlebitis.
18. Describe varicose veins.
19. Name two signs or symptoms of deep vein thrombosis (DVT).
20. Describe the difference between atherosclerosis and arteriosclerosis.
21. List Myocardial Infarction (MI) signs and symptoms
22. Identify and define the three (3) Blood diseases in Chapter 5 section 4 of your text.
23. Identify the three Immune System cancers in Chapter 5 section 4 of your text.
24. Define hematoma.
25. Differentiate between edema, inflammation, and lymphedema.
26. Describe the difference between an Aneurysm and a Cerebrovascular Accident (CVA)
27. Describe the four phases of HIV infection.

28. Identify 4 different autoimmune diseases.

Module 10 Unit 1

The Respiratory System

Instructor Lab and Lecture on Chapter 13

Read in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 13 pgs. 339-354.

*Assessment(s): Discussion 10

Homework: TBA

Learning Outcomes:

1. List and identify the major organs of the respiratory system and their location.
2. Explain the role of hemoglobin in respiration.
3. Understand the smallest functioning unit of the respiratory system, the alveoli.
4. Understand the difference between aerobic and anaerobic metabolism.
5. Describe the functions of the respiratory system: the exchange of gases, producing speech, and maintaining pH.
6. Describe breathing.
7. Recognize medications used to treat the Respiratory System and understand their effects, side effects, and interaction with other medications to effectively provide massage therapy services.

Video: on the respiratory system of function and location.

Video: On the best way to train you how to breathe correctly.

Student activity: Palpate a peer to feel the ribs cage and feel the breath.

Student activity identify on the modal.

Discuss the respiratory system with gas exchanges.

Test 5 on module 7 and 8 on D2L

Module 10 Unit 2

Instructor Lab and Lecture on Chapter 13

Read in Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 13 pgs. 339-354.

Learning Outcomes:

1. Name the group of conditions to which chronic bronchitis and emphysema belong.
2. Explain why persons with asthma, chronic bronchitis, or emphysema are often encouraged to be vaccinated against the flu.
3. Name three causative agents for pneumonia.
4. Explain why no single vaccine can currently protect against colds or flu.
5. Describe the difference between acute bronchitis and chronic bronchitis.
6. List the symptoms of asthma and describe why asthma can be a life-threatening emergency.

Student Activity: make flash cards on pathologies in small groups.

Video: on symptoms as asthma as related to massage

Discuss pathologies that occur in the respiratory system.

Workbook pages upload to D2L.

Module 11 Unit 1

Digestive System

Instructor Lab and Lecture on Chapter 14

Chapters 14 pgs. 357-375.

*Assessment(s): Discussion 11

Homework: TBA

Learning Outcomes:

1. Identify and locate the structures of the digestive system.
2. Understand the functions of the parts of the gastrointestinal tract and what is processed and absorbed at each portion: example is water and mineral absorption from the large intestine.
3. Understand peristalsis.
4. Identify the basic types of tissue found in the digestive system such as smooth muscle.
5. Understand the autonomic nervous system's impact on the digestive system.
6. Understand the path of consumed foods through the digestive system.
7. Understand how the accessory organs of the digestive system are involved in digestion: liver, gall bladder, and pancreas.

Video: basic structures of the digestive system

Video: understand digestive system with nervous system impact

Student activity: small group identify structures on anatomy model.

Student activity: palpate on a peer to locate the digestive system in the abdominal cavity

Discuss: functions of the digestive system and how massage therapy can help

Lab quiz 9 on D2L

Module 11 Unit 2

Instructor Lab and Lecture on Chapter 14

Read: Applied Anatomy & Physiology for Manual Therapist 2nd edition, Chapters 14 pgs. 357-375.

Learning Outcomes:

1. Recognize medications used to treat the Digestive System and understand their effects, side effects, and interaction with other medications to effectively provide massage therapy services.
2. Name what structures are damaged with celiac disease.
3. Name the most dangerous complication of gastroesophageal reflux disorder (GERD).
4. Identify factors that contribute to peptic ulcers.
5. Identify the precancerous condition associated with colorectal cancer.
6. Describe IBS (irritable bowel syndrome)
7. Name the primary modes of communicability for hepatitis A, hepatitis B, and hepatitis C.

Video: on pathologies in the digestive system

Discuss: pathologies in the digestive system and how massage can help

Workbook pages upload to D2L.

Module 12 Unit 1

Urinary System

Instructor Lab and Lecture on Chapter 15

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition,
Read Chapters 15 pgs. 377-388.

*Assessment(s): Discussion 12

Homework: TBA

Learning Outcomes:

1. Identify and locate the anatomical components of the urinary system.
2. Explain the basic function of the urinary system: elimination of waste, conservation of nutrients, and regulation of pH.
3. Understand the urinary system's effect on blood pressure and other aspects of homeostasis.
4. Identify and label on a diagram the structure of a nephron and describe its function (functional unit of the kidney).

Lab Quiz 10

Module 12 Unit 2

Instructor Lab and Lecture on Chapter 15

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition,
Read Chapters 15 pgs. 377-388.

Learning Outcomes:

1. Recognize medications used to treat the Urinary System and understand their effects, side effects, and interaction with other medications to effectively provide massage therapy services.
2. Explain why women are more prone to urinary tract infections than men.
3. Name the causative agent of most urinary tract infections and uncomplicated pyelonephritis.
4. List the stages of chronic renal failure.
5. Name a hormone secreted by the kidneys.

The test will cover modules 9 and 11.

Module 13 Unit 1

Reproductive System

Instructor Lab and Lecture on Chapter 16

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition,
Read Chapters 16 pgs. 391-406.

*Assessment(s): Discussion 13

Homework: TBA

Learning Outcomes:

1. Identify and locate the structures of the male reproductive system.
2. Identify and locate the structures of the female reproductive system.
3. Understand the changes in the body during puberty, menstruation, and pregnancy.
4. Recognize the major reproductive system hormones and their purpose in the body: testosterone, estrogen, and relaxin.

Video:

Student Activity:

Discuss:

Read:

Module 13 Unit 2

Instructor Lab and Lecture on Chapter 16

Materials Covered: Applied Anatomy & Physiology for Manual Therapist 2nd edition,
Read Chapters 16 pgs. 391-406.

Learning Outcomes:

1. Recognize medications used to treat the Human Reproductive System and understand their effects, side effects, and interaction with other medications to effectively provide massage therapy services.
2. Identify the most common cancers of the female reproductive system.
3. Identify the most common cancers of the male reproductive system.
4. List three bacterial or viral sexually transmitted diseases

Video:

Student Activity:

Discuss:

Read:

Module 14 Cancer Concepts

Materials Covered: A Massage Therapist's Guide to Pathology- Critical Thinking and Practical Application 7th edition.

Read Chapter 12 pgs. 564-579

*Assessment(s): Discussion 14

Homework: TBA

Learning Outcomes:

1. Recognize 10 Common signs that indicate the possibility of cancer.
2. Describe appropriate massage therapy modifications for cancer cases.
3. Identify at least 5 well-supported benefits of massage therapy in the context of cancer and cancer treatment.

Video:

Student Activity:

Discuss:

Read:

Module 15

Lecture Review

Final

**Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.*

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*:

Students' performance will be assessed, and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Lecture Assignments 75% of total

Tests	45%
Discussion	10%
Homework	10%
Comprehensive Final	20%
<u>Quizzes</u>	<u>15%</u>
Total	100%

****Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.***

GRADING SYSTEM:

State the College's or departmental grading system as delineated in the Catalog. Please note the College adheres to a 10-point grading scale A = 100 – 90, B = 89- 80, C = 79 – 70, F = 69 – below.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required

on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, and if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **free** resources:

1. **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2. Online **tutoring** and academic support resources.
3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring, contact the SSTC at sstc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email sstc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following **free** resources:

1. **Getting around HGTC:** General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. Use the [Online Resource Center \(ORC\)](#) including Office 365 support, password resets, and username information.
3. **In-person workshops, online tutorials and more services** are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
4. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the [Tech Central](#) website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.

HGTC LIBRARY:

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries are equipped with computers to support academic

research and related school work; printing is available as well. Visit the Library website for more information or call (843) 349-5268.

STUDENT TESTING:

Testing in an **online/hybrid** course and **in make-up exam** situations may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms (which may have a fee associated in the usage)

Furthermore tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](#). The Accessibility and Disability staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodation may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, Title VII and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX, Section 504, and Title II Coordinator
Building 1100, Room 107A, Conway Campus
PO Box 261966, Conway, SC 29528-6066
843-349-5228

Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources

Affirmation Action/Equal Opportunity Officer and Title IX Coordinator
Building 200, Room 205B, Conway Campus
PO Box 261966, Conway, SC 29528-6066
843-349-5212

Jacquelyne.Snyder@hgtc.edu