PTOT 5501, Clinical Kinesiology & Biomechanics
1. Define and apply the basic terminology used in the study of kinesiology / biomechanics / (CAPTE Standard 7A)
2. Describe posture and movement with respect to reference systems
3. Determine the effect of internal and external forces upon a given joint and relate those forces to movement specifics
4. Break down a specific force into various components and relate those components to motion such as distraction/compression and angular movement at a joint
5. Describe how normal and pathological bone and joint structure can effect movement
6. Identify agonist and antagonist muscles and explain how these muscle relationships can influence total movement outcomes for the various bony segments of the body
7. Perform a standardized gait assessment using biomechanical principles (CAPTE Standard 7D19i)
8. Perform a biomechanical analysis of a common functional task (CAPTE Standard 7D19k)
9. Competently develop physical therapy interventions to achieve patient/client goals and outcomes for gait dysfunction/abnormality (CAPTE Standard 7D27g)

PTOT 5512, Professional Communication
1. Demonstrate the ability to reflect on their values, and the strengths and weaknesses of their communication.
2. Identify and understand the process of applying components of effective interpersonal professional communication.
3. Identify potential barriers to interpersonal communication, particularly in health care, and be familiar with strategies to overcome these barriers.
4. Apply skills needed to put together a patient education presentation and brochure.
5. Understand necessity and components of clinical documentation.

PTOT 5514, Research Methodology
1. Describe the importance of scholarly activities in contributing to the development of a body of knowledge relevant to the practice of occupational and/or physical therapy
2. Demonstrate the benefits and drawbacks of various research designs and the statistical tests used with those designs.
3. Analyze and appraise current literature dealing with an assigned topic to assess if and what further research is needed in that area.
4. Design a feasible and practical research study based on a literature review
5. Evaluate the potential strengths and limitations of a selected design.
6. Complete an effective and efficient literature search for evidence-based practice
7. Analyze and appraise a current article, discussing its strengths and limitations in regard to statistical tests, sample, design, generalizability and clinical relevance
8. Complete a presentation and lead a discussion in a professional manner as if presenting at a conference
9. Educate peers on a current article’s strengths and limitations in regard to statistical tests, sample, design, generalizability and clinical relevance
10. Prepare a presentation using audiovisual aids in a manner consistent with conference presentation
11. Demonstrate the benefits and drawbacks of different research designs and the statistical tests used with those designs including demonstration of knowledge of validity, reliability, generalizability, etc.
12. Utilize strategies to avoid plagiarism
13. Differentiate the levels of evidence on the hierarchy of evidence and discuss the strengths and limitations of each
14. Compare and contrast different sampling techniques and their strengths and limitations
15. Demonstrate an understanding of grant funding

**PTOT 6606, Clinical Therapeutic Exercise**
1. Develop therapeutic exercise programs for improving physical fitness and wellness.
2. Develop, implement and modify exercise programs for physical therapy impairments to improve flexibility.
   a. Differentiate the use of types of flexibility principles.
   b. Analyze and select flexibility methods and techniques.
   c. Demonstrate and instruct flexibility exercises.
   d. Implement and prescribe flexibility exercises.
3. Develop, implement and modify exercise programs for physical therapy impairments to improve muscular strength and endurance.
   a. Differentiate the use of exercise modalities for building strength and endurance.
   b. Analyze and select equipment to build muscular strength and endurance.
   c. Analyze and prescribe exercise principles to build strength.
   d. Demonstrate and instruct individuals in exercise techniques to build strength and endurance.
4. Develop implement and modify exercise programs for physical therapy impairments to improve power.
   a. Differentiate the use of exercise modalities for developing power.
   b. Analyze and select methods of training for developing power.
   c. Analyze and prescribe exercises for developing power.
   d. Demonstrate and instruct individuals in exercise techniques for developing power.
5. Develop and implement and modify aerobic/anaerobic conditioning programs for physical therapy impairments to improve cardiopulmonary endurance.
   a. Differentiate the use of exercise modalities for improving cardiopulmonary endurance.
   b. Analyze and select exercise modalities for improving cardiopulmonary endurance.
   c. Analyze and prescribe cardiopulmonary exercises for improving cardiopulmonary endurance.
   d. Demonstrate and instruct individuals in exercise techniques to improve cardiopulmonary endurance.
6. Develop and implement and modify agility, coordination, and balance programs for physical therapy impairments.
   a. Differentiate the use of exercise modalities for improving agility, coordination and balance.
   b. Analyze and select exercise modalities for improving agility, coordination and balance.
   c. Analyze and prescribe cardiopulmonary exercises for improving agility, coordination and balance.
   d. Demonstrate and instruct individuals in exercise techniques for improving agility, coordination and balance.
7. Develop and implement relaxation exercise programs to promote relaxation.
8. Discuss basic elements of nutrition as related to health and wellness.

**PTOT 6608, Applied Pharmacology for Physical and Occupational Therapists**
1. Become familiar with the general concepts of pharmacology and therapeutics. Understand the principles and mechanisms of drug administration, absorption, distribution, excretion, and metabolism and develop familiarity with principles of enzyme induction, pharmacogenetics, drug effectiveness, and medication safety.
2. Become familiar with available sources of drug information.
3. Study disorders of the central nervous system including dementia, Parkinson’s disease, and seizure disorders and become familiar with medications used to treat these conditions.

4. Develop an understanding of the treatment of muscle spasms, spasticity, inflammation, acute pain, osteoarthritis, and rheumatoid arthritis.


6. Study the treatments for diabetes mellitus including insulin and oral medications.

7. Evaluate and become familiar with the pathophysiology and drug therapies for HIV infection.

8. Become familiar with medications used in the treatment of respiratory diseases including asthma and chronic obstructive pulmonary disease.

PTOT 6613, PT Profession

1. Discuss the components of a profession and apply them to the profession of physical therapy including the need for professional behaviors in all interactions with patients, clients, families, care givers, and other health care providers and if necessary, to provide pro bono service. (7D5)
   a. Orally discuss the components of a profession: requires specialized skills, advanced education, continuous increase of body of knowledge, functions independently in determining policy, high standards for achievement and conduct, service before personal gain, and vitality to human and social welfare. Quiz
   b. Self-assess professional behavior using core values and generic abilities/professional behaviors. Assignment V1

2. Discuss the federal and state legal practice standards related to patient care and the similarities and differences in the scope of practice of physical therapists and other health care professionals. (7D1, 11, 14)
   a. Access reliable information and discuss state and federal practice standards related to the scope of practice of physical therapy. V2, 5, 6 Quiz

3. Discuss how the scope of physical therapy practice includes identifying and assessing the health needs of individuals, groups, and communities, including screening, prevention, and wellness programs using the International Classification of Functioning (ICF) model. (7D5) Student notes

4. Recognize the various practice settings for physical therapy.
   a. Orally discuss practice setting.

5. Discuss the history and development of physical therapy as a profession. D1, 5, 7, 11, 12
   a. Present the historical foundation of the PT profession in class. V5 Presentation assignment

6. Discuss the ethical and legal implications of the practice of physical therapy and demonstrate ethical decision making that is consistent with the APTA’s Code of Ethics. (7D4 and 7D5, 8H) V1, V6 Student notes submitted
   a. Apply a systematic process to resolve a PT related ethical issue. V6
   b. Identify risky situations and steps to reduce liability. V6 Discussion

7. Discuss his/her opinion about the current issues affecting the profession of physical therapy and health care in the United States. (7D5, 11, 12, 14)
   a. Present current issue topic in physical therapy to the class and formulate appropriate rationale for the position. V5 Presentation assignment
   b. Provide respectful and purposeful assessment of peer’s work. V1

8. Discuss the components of the American Physical Therapy Association and describe the individual and group benefits of being involved in professional organizations and activities through membership and service. (7D13)
   a. Give oral presentation regarding components of the professional association, federation, and accreditation body to the class. Presentation
9. Distinguish between the professional organization, accreditation, and the licensing organization and their roles and contributions to the profession.
   a. Present information about the federation, licensing, and accreditation body to the class. Presentation

PTOT 6615, Capstone Project
1. Synthesize the literature and clinical experience to make clinical decisions rooted in the practice evidence. – Phase 1
2. Critically reflect and analyze a patient case with regard to clinical decisions, course of care, and future recommendations. – Phase 2 & Phase 3
3. Analyze self-biases and influence of emotions on actions and behaviors. – Phase 2
4. Identify societal influences and impact on health care and community health status. – Phase 2
5. Create own professional development plan. – Phase 3
6. Professionally report a patient case. – Phase 3
7. Demonstrate comprehensive didactic/cognitive knowledge of aspects of physical therapy practice through the passing of a comprehensive written examination. – Phase 3

PTOT 6618, Clinical Practicum 1
1. Perform a physical therapy examination (patient history, systems review, tests and measures) on a patient.
2. Whether patients are self-referred through direct access, or referred by a physician, screen to determine whether patients have physical therapy problems, or need a referral to a physician or other health care professional.
3. Adhere to legal practice standards, including all federal, state, and institutional regulations to patient/client care and fiscal management
4. Evaluate examination data to make clinical decisions about patients.
5. Determine patients’ diagnoses and prognoses for physical therapy.
6. Collaborate with patients to set meaningful, functional, and objective physical therapy goals and outcomes.
7. Establish a safe and effective plan of care and make appropriate modifications based on patient status and progress.
8. Deliver safe and appropriate interventions to achieve patient goals that are consistent with professional obligations and administrative policies and procedures of the practice environment.
9. Monitor and adjust the plan of care in response to patient/client status
10. Assess patient outcomes including the use of appropriate standardized tests and measures that address impairment, functional status and participation
11. Provide culturally and age appropriate education to patients about their physical therapy diagnosis, plan of care, and specific interventions to help them achieve their goals.
12. Accurately document all elements of the examination, evaluation, diagnosis, prognosis and plan of care using appropriate medical terminology and approved abbreviations.
13. Respond effectively to patient/client and environmental emergencies in the practice setting
14. Participate in the delivery of pro bono clinical services to help meet the health and wellness needs of patients who are uninsured or underinsured.
15. Provide education and instruction in the areas of prevention, wellness, fitness and/or health promotion to patients with or without a physician referral.
16. Provide education, mentoring and feedback to first and second year students when examining, evaluating and treating patients.
17. Meet required level of performance using the Professional Behaviors and the corresponding behavioral criteria:
   1) Safety to Patient and Self
   2) Commitment to Learning
   3) Problem Solving
   4) Critical Thinking
   5) Effective Use of Time and Resources
   6) Interpersonal Skills
   7) Communication Skills
   8) Use of Constructive Feedback
   9) Responsibility and Professionalism
  10) Stress Management

PTOT 6619, Clinical Practicum 2
1. Perform a physical therapy examination (patient history, systems review, tests and measures) on a patient.
2. Whether patients are self-referred through direct access, or referred by a physician, screen to determine whether patients have physical therapy problems, or need a referral to a physician or other health care professional.
3. Adhere to legal practice standards, including all federal, state, and institutional regulations to patient/client care and fiscal management
4. Evaluate examination data to make clinical decisions about patients.
5. Determine patients’ diagnoses and prognoses for physical therapy.
6. Collaborate with patients to set meaningful, functional and objective physical therapy goals and outcomes.
7. Establish a safe and effective plan of care and make appropriate modifications based on patient status and progress.
8. Deliver safe and appropriate interventions to achieve patient goals that is consistent with professional obligations and administrative policies and procedures of the practice environment.
9. Monitor and adjust the plan of care in response to patient/client status
10. Assess patient outcomes including the use of appropriate standardized tests and measures that address impairment, functional status and participation
11. Provide culturally and age appropriate education to patients about their physical therapy diagnosis, plan of care, and specific interventions to help them achieve their goals.
12. Accurately document all elements of the examination, evaluation, diagnosis, prognosis and plan of care using appropriate medical terminology and approved abbreviations.
13. Respond effectively to patient/client and environmental emergencies in one’s practice setting
14. Participate in the delivery of pro bono clinical services to help meet the health and wellness needs of patients who are uninsured or underinsured.
15. Provide education and instruction in the areas of prevention, wellness, fitness and/or health promotion to patients with or without a physician referral.
16. Provide education, mentoring and feedback to first and second year students when examining, evaluating and treating patients.
17. Meet required level of performance using the Professional Behaviors and the corresponding behavioral criteria
   1) Safety to Patient and Self
   2) Commitment to Learning
   3) Problem Solving
4) Critical Thinking
5) Effective Use of Time and Resources
6) Interpersonal Skills
7) Communication Skills
8) Use of Constructive Feedback
9) Responsibility and Professionalism
10) Stress Management

**Ergonomics**
1. Learn basic ergonomic assessment and be able to evaluate a work environment.
2. Focus on posture, excessive forces, repetition, contact stress, vibration, and worker’s fitness. Give recommendations for the worker whether equipment needs, workstation arrangement, exercises, etc., for addressing or preventing of injuries and pain.
3. Document accurately the evaluation and the recommendations for the worker and the company.

**Fit and Fall**
1. Receive training and certification as a Fit and Fall instructor.
2. Lead and supervise Fit and Fall classes.
3. Ensure safety of class participants including closely observing participants for signs of fatigue or difficulties with balance. Respond appropriately to these signs and give appropriate aid for class participants.
4. Encourage participant to continue methods to help to improve balance.
5. Be an example for good help practices and stress prevention of injury.

**Center for Tactical Athlete Performance**
1. Provide training for ISU police academy cadets in order to assist them
   a. Pass the Physical Requirements for the academy
   b. Learn and develop lifelong habits for health in their careers
2. Provide health promotion education
   a. Injury prevention training
   b. Education on health habits and dangers of being sedentary
3. Be able to give supervised evaluations of musculoskeletal complaints the cadets may have during their training and assist them in recovery to complete physical requirements of the academy.
4. Be an example for healthy living and training.
5. Represent that Physical Therapy Profession and ISU DPT Program with dignity and professionalism.

**Pediatric IET**
1. Evaluate and document examination of a pediatric patient
2. Coordinate with interdisciplinary team for appropriate treatment plan for pediatric patients
3. Attend educational sessions for training and education of interdisciplinary procedures
4. Represent the field of physical therapy to provide education and training for students of other health care disciplines

**PTOT 6620, Clinical Procedures**
1. Apply the PT Patient/Client Management Model and the International Classification of Functioning, Disability, and Health (ICF) as part of the physical therapy examination and evaluation process.
2. Perform selected components of the physical therapy examination.
3. Apply selected examination findings in order to select additional, appropriate examination techniques and to identify systems/tissues at fault.
4. Safely and appropriately perform basic patient handling skills (positioning, transfers, gait training, use of selective transfer, assistive, and mobility devices).
PTOT 6621, Musculoskeletal System Management I, Upper Extremity
1. Competently examine and treat a patient with orthopedic upper extremity conditions using appropriate manual techniques
2. Learn, understand, and appropriately apply information learned about orthopedic conditions and examination components that contribute to basic clinical reasoning skills and clinical decision making in forming differential diagnoses and treatment plans for upper extremity regions of the body
3. Use clinical judgment and reflection to enhance clinical reasoning to minimize errors and enhance patient/client safety and outcomes of upper extremity conditions
4. Efficiently collect data in a patient care practical scenario to integrate collected subjective and objective data to treat orthopedic conditions of the upper extremity regions of the body

PTOT 6622, Musculoskeletal System Management 2, Lower Extremity
1. Competently examine and treat a patient with orthopedic lower extremity conditions using appropriate manual techniques
2. Learn, understand, and appropriately apply information learned about orthopedic conditions and examination components that contribute to basic clinical reasoning skills and clinical decision making in forming differential diagnoses and treatment plans for the lower extremity regions of the body
3. Use clinical judgment and reflection to enhance clinical reasoning to minimize errors and enhance patient/client safety and outcomes of lower extremity conditions
4. Efficiently collect data in a patient care practical scenario to integrate collected subjective and objective data to treat orthopedic conditions of the lower extremity regions of the body

PTOT 6623, Physical Agents
1. Understand and appropriately apply the components that contribute to basic clinical reasoning skills and clinical decision making (CDM)
2. Make appropriate clinical decisions regarding the selection and application of physical agents
3. Use clinical judgment and reflection to identify, monitor and enhance clinical reasoning to minimize errors and enhance patient/client safety and outcomes regarding the selection and application of physical agents
4. Recognize the clinical, physical and physiological principles upon which the appropriate administration of physical agents is based.
5. Demonstrate safe and appropriate general patient management and patient handling skills.
6. Competently apply various physical agents with appropriate parameters and techniques.

PTOT 6624, Cardiac and Pulmonary Systems Management
1. Describe cardiovascular and pulmonary anatomy and physiology pertaining to physical therapy examination and interventions for individuals with cardiopulmonary disease/conditions.
2. Apply knowledge of cardiovascular and pulmonary diseases/conditions for clinical reasoning and decision making to case studies of patients with cardiopulmonary disease/conditions.
3. Interpret common cardiopulmonary and vascular diagnostic tests for physical therapy implications.
4. Apply the elements of PT practice as identified in the Guide to Physical Therapist Practice (examination, evaluation, diagnosis, prognosis, intervention, and outcomes) in the PT management of people with cardiovascular, pulmonary, and integumentary systems impairments as primary PT conditions and comorbid conditions across the triage of physical therapy settings.
5. Demonstrate entry-level skills associated with the physical examination, evaluation, diagnosis, prognosis, intervention, and outcomes of people with cardiovascular, pulmonary and integumentary
systems impairments.

6. Apply evidence-based practice into the PT management of patient with cardiovascular and pulmonary disease/conditions.

**PTOT 6626/6646, Neurological System Management & Lab**

1. Demonstrate and explain the rationale for appropriate examination techniques for cranial nerve function, A/PROM, sensation, tone, motor control, balance, coordination, functional mobility, and gait.
2. Demonstrate and explain the rationale for appropriate treatment interventions for impairments in cranial nerve function, A/PROM, sensation, tone, motor control, balance, coordination, functional mobility, and gait.
3. Demonstrate and explain the process for finding valid and reliable outcome measurement tools that are appropriate for examination of impairments, functional limitations and disabilities commonly seen following neurologic injury.
4. Explain the role of each member of the rehabilitation team including the physiatrist, rehabilitation nurse, physical therapist, occupational therapist, speech/language pathologist, social worker, recreational therapist, and pharmacist.
5. Demonstrate appropriate documentation of examination and treatment for a person with a neurologic diagnosis.
6. Discuss the similarities and differences between treatment interventions, the motor control model upon which each is based, and theories underlying facilitation, resistance, motor control, motor learning, and recovery of function.
7. State the resources available, and process for finding evidence, to address key issues in neurological pathology, treatment interventions, patient education, and objective examination.

**PTOT 6631, Clinical Affiliation 1**

1. Practices in a safe manner that minimizes risk to patient, self, and others. (CPI skill #1; CAPTE Element 7D; V7)
2. Demonstrates responsible behaviors. (CPI skill #3; CAPTE Code of Ethics, Element 7D; V7)
3. Demonstrates professional behavior during interactions with others. (CPI skill #2; CAPTE Element 7D; V7)
4. Demonstrates ethical practice. (CPI skill #2,6; CAPTE Element 7D, Code of Ethics; V7)
5. Adheres to legal practice standards. (CPI skill #2,3; CAPTE Element 7D; V7)
6. Communicates in ways that are congruent with situational needs. (CPI skill #4; CAPTE Element 7D, Code of Ethics; Element 8; V7)
7. Documents accurately and concisely within facility guidelines. (CPI #15; CAPTE Element 7D, Code of Ethics; V7)
8. Adapts delivery of care to reflect individual patient needs and acknowledgement of differences. (CPI #12; CAPTE Element 7D, Code of Ethics; V7)
9. Applies the principles of logic and the scientific method to the practice of physical therapy. (CPI #7; CAPTE Element 7D, Code of Ethics, Element 6; V7)
10. Performs screens to assess the effectiveness and appropriateness of physical therapy services. (CPI #8; CAPTE Element 7D; V7)
11. Performs physical therapy patient examinations. (CPI #9; CAPTE Element 7D; V7)

*Recognize that depending on the student’s prior clinical experiences, some skills may not have been performed yet in the clinical setting.*

12. **EXAMINATION SKILLS INCLUDE ASSESSMENT OF:**
   a. aerobic capacity and endurance
b. anthropometric measurements
c. arousal, mentation, and cognition
d. assistive and adaptive devices
e. community and work (job, school or play) reintegration
f. cranial nerve integrity
g. environmental, home, and work barriers
h. ergonomics and body mechanics
  i. gait and assisted locomotion
  j. integumentary integrity (skin color, temp, tone/turgor)
  k. joint integrity and mobility
  l. muscle performance (strength, power and endurance)
m. special tests for orthopedic pathology / dysfunction
n. pain
o. posture
p. prosthetic requirements
q. range of motion
r. muscle length
s. reflex integrity
t. self care and home management, IADLs
u. basic ADLS
v. sensory integrity
w. ventilation, respiration and circulation (basic vital signs, breathing quality and patterns, auscultation of heart and lung sounds, observation of signs and symptoms of poor circulation / gas exchange)

13. Performs evaluation to establish a diagnosis and prognosis. (CPI #10,11; CAPTE Element 7D; V7)
14. Designs a physical therapy plan of care that integrates goals, treatment, outcomes and discharge plan. (CPI #12; CAPTE Element 7D; V7)
15. Performs physical therapy interventions in a competent manner. (CPI skill #13; CAPTE Element 7D; V7)

16. SKILLS/INTERVENTIONS INCLUDE:
   a. airway clearance techniques
   b. debridement and wound care (assessed only in a mock lab situation)
   c. electrical modalities
d. basic manual therapy techniques
   i. connective tissue and therapeutic massage
   ii. joint mobilization
   iii. manual traction
   iv. passive ROM
   v. soft tissue mobilization
e. communication and coordination of care
f. consultation
g. functional training in community and work, reintegration, IADLs, home management
h. patient – related instruction
   i. thermal modalities (hot, cold, ultrasound, etc.)
j. mechanical modalities (tilt table, traction, compression, CPM)
k. therapeutic exercise
   i. aerobic endurance
   ii. aquatics exercises
iii. breathing exercises / strategies
iv. stretching,
v. strengthening,
vi. home exercise,
vii. body mechanics, ergonomics,
viii. proprioception, balance and coordination training,
ix. neuromuscular education / relaxation, inhibition, and facilitation techniques
tax. developmental activities training
xi. posture awareness training

l. vital monitoring

m. gait and transfer training

n. prescription and application of gait assistive devices

o. prescription, application and as appropriate fabrication of adaptive, assistive, orthotics, protective and supportive devices and equipment

17. Educates others using relevant and effective teaching methods. (CPI #14; CAPTE Element 7D; V7)
18. Participates in quality assessment activities. (CPI #16; CAPTE Element 7D; V7)
19. Provides consultation to various organizations and individuals. (CPI #17; CAPTE Element 7D; V7)
20. Addresses patient needs for services other than physical therapy as needed. (CPI #18; CAPTE Element 7D; V7)
21. Manages resources to achieve patient and facility goals. (CPI #18; CAPTE Element 7D; V7)
22. Incorporates an understanding of economic factors in the delivery of physical therapy services. (CPI #17; CAPTE Element 7D; V7)
23. Uses support personnel according to legal standards and ethical and facility guidelines. (CPI #18; CAPTE Element 7D; V7)
24. Recognizes and participates in additional professional and social responsibilities. (CPI #2; CAPTE Element 7D; V7)
25. Implements a self-directed plan for professional development and lifelong learning. (CPI #6; CAPTE Element 7D; V7)

a. * Please reference the www.capteonline.org for a complete listing of the educational standards established by the Commission on Accreditation in Physical Therapy Education (CAPTE).

b. ^Validation Legend: 1 = assignment, 2 = lab / skills test, 3 = objective test, 4 = essay test, 5 = project/presentation, 6 = other-class discussion, 7= patient simulations/care.

PTOT 6632, Clinical Affiliation II

1. Practices in a safe manner that minimizes risk to patient, self, and others. (CPI skill #1; CAPTE Element 7D; V7)
2. Demonstrates responsible behaviors. (CPI skill #3; CAPTE Code of Ethics, Element 7D; V7)
3. Demonstrates professional behavior during interactions with others. (CPI skill #2; CAPTE Element 7D; V7)
4. Demonstrates ethical practice. (CPI skill #2,6; CAPTE Element 7D, Code of Ethics; V7)
5. Adheres to legal practice standards. (CPI skill #2,3; CAPTE Element 7D; V7)
6. Communicates in ways that are congruent with situational needs. (CPI skill #4; CAPTE Element 7D, Code of Ethics; Element 8; V7)
7. Documents accurately and concisely within facility guidelines. (CPI #15; CAPTE Element 7D, Code of Ethics; V7)
8. Adapts delivery of care to reflect individual patient needs and acknowledgement of differences. (CPI #12; CAPTE Element 7D, Code of Ethics; V7)
9. Applies the principles of logic and the scientific method to the practice of physical therapy. (CPI #7; CAPTE Element 7D, Code of Ethics, Element 6; V7)

10. Performs screens to assess the effectiveness and appropriateness of physical therapy services. (CPI #8; CAPTE Element 7D; V7)

11. Performs physical therapy patient examinations. (CPI #9; CAPTE Element 7D; V7)

   Recognize that depending on the student’s prior clinical experiences, some skills may not have been performed yet in the clinical setting.

12. **EXAMINATION SKILLS INCLUDE ASSESSMENT OF:**
   a. aerobic capacity and endurance
   b. anthropometric measurements
   c. *arousal, mentation, and cognition*
   d. assistive and adaptive devices
   e. community and work (job, school or play) reintegration
   f. cranial nerve integrity
   g. *environmental, home, and work barriers*
   h. ergonomics and body mechanics
   i. gait and assisted locomotion
   j. integumentary integrity (skin color, temp, tone/turgor)
   k. joint integrity and mobility
   l. muscle performance (strength, power and endurance)
   m. special tests for orthopedic pathology / dysfunction
   n. pain
   o. posture
   p. *prosthetic requirements*
   q. range of motion
   r. muscle length
   s. reflex integrity
   t. *self care and home management, IADLs*
   u. basic ADLS
   v. sensory integrity
   w. ventilation, respiration and circulation (basic vital signs, breathing quality and patterns, auscultation of heart and lung sounds, observation of signs and symptoms of poor circulation / gas exchange)

13. Performs evaluation to establish a diagnosis and prognosis. (CPI #10,11; CAPTE Element 7D; V7)

14. Designs a physical therapy plan of care that integrates goals, treatment, outcomes and discharge plan. (CPI #12; CAPTE Element 7D; V7)

15. Performs physical therapy interventions in a competent manner. (CPI skill #13; CAPTE Element 7D; V7)

16. **SKILLS/INTERVENTIONS INCLUDE:**
   a. airway clearance techniques
   b. debridement and wound care (assessed only in a mock lab situation)
   c. electrical modalities
   d. basic manual therapy techniques
      i. connective tissue and therapeutic massage
      ii. joint mobilization
      iii. manual traction
      iv. passive ROM
      v. soft tissue mobilization
e. communication and coordination of care  
f. consultation  
g. functional training in community and work, reintegration, IADLs, home management  
h. patient – related instruction  
i. thermal modalities (hot, cold, ultrasound, etc.)  
j. mechanical modalities (tilt table, traction, compression, CPM)  
k. therapeutic exercise  
   i. aerobic endurance  
   ii. aquatics exercises  
   iii. breathing exercises / strategies  
   iv. stretching,  
   v. strengthening,  
   vi. home exercise,  
   vii. body mechanics, ergonomics,  
   viii. proprioception, balance and coordination training,  
   ix. neuromuscular education / relaxation, inhibition, and facilitation techniques  
   x. developmental activities training  
   xi. posture awareness training  
l. vital monitoring  
m. gait and transfer training  
n. prescription and application of gait assistive devices  
o. prescription, application and as appropriate fabrication of adaptive, assistive, orthotics, protective and supportive devices and equipment  

17. Educates others using relevant and effective teaching methods. (CPI #14; CAPTE Element 7D; V7)  
18. Participates in quality assessment activities. (CPI #16; CAPTE Element 7D; V7)  
19. Provides consultation to various organizations and individuals. (CPI #17; CAPTE Element 7D; V7)  
20. Addresses patient needs for services other than physical therapy as needed. (CPI #18; CAPTE Element 7D; V7)  
21. Manages resources to achieve patient and facility goals. (CPI #18; CAPTE Element 7D; V7)  
22. Incorporates an understanding of economic factors in the delivery of physical therapy services. (CPI #17; CAPTE Element 7D; V7)  
23. Uses support personnel according to legal standards and ethical and facility guidelines. (CPI #18; CAPTE Element 7D; V7)  
24. Recognizes and participates in additional professional and social responsibilities. (CPI #2; CAPTE Element 7D; V7)  
25. Implements a self-directed plan for professional development and lifelong learning. (CPI #6; CAPTE Element 7D; V7)  
   a. * Please reference the www.capteonline.org for a complete listing of the educational standards established by the Commission on Accreditation in Physical Therapy Education (CAPTE).  
   b. ^Validation Legend: 1 = assignment, 2 = lab / skills test, 3 = objective test, 4 = essay test, 5 = project/presentation, 6 = other-class discussion, 7= patient simulations/care.

**PTOT 6642, Musculoskeletal System Management 1 Spine**  
1. Make appropriate clinical decisions regarding the selection and application of manual treatments  
2. Competently examine and treat a patient with orthopedic spinal conditions using appropriate manual techniques  
3. Use clinical judgment and reflection to enhance clinical reasoning to minimize errors and enhance
patient/client safety and outcomes in manual therapy evaluation and treatment
4. Learn, understand, and appropriately apply information learned about orthopedic conditions and examination components that contribute to basic clinical reasoning skills and clinical decision making in forming differential diagnoses and treatment plans for the spinal regions of the body
5. Efficiently collect data in a patient care practical scenario to integrate collected subjective and objective data to treat orthopedic conditions of the spinal regions of the body

PTOT 6648, Graduate Special Topics: Wellness & Prevention for Physical Therapists
1. Participants will understand foundational principles of wellness and prevention as presented within a lifestyle medicine framework.
2. Participants will demonstrate a working knowledge of chronic health conditions that are influenced by lifestyle choices.
3. Participants will understand basic principles of behavior change.
4. Participants will understand how fundamental lifestyle behaviors contribute to increased morbidity and mortality from lifestyle-related chronic diseases.
5. Participants will acquire a knowledge of key lifestyle changes that can minimize their risk of developing lifestyle-related chronic diseases and associated comorbid states.
6. By the end of the class, each participant will create a personal action plan or lifestyle prescription to adopt and sustain behaviors to improve their health and quality of life.

PTOT 6650, Diagnostic Imaging for Rehabilitation Professionals
1. Understand the science behind the generation of x-rays, bone scans and MRI
2. Learn the standard film series for the cervical and lumbar spine and extremities and the major extremity joints and bones
3. Identify the more common bony pathologies of the cervical and lumbar spine and extremities
4. Identify the specific levels in the spine on x-ray and MRI
5. Describe how the appearance on images of bones and cartilages with pathology differs significantly from that of normal tissues
6. Utilize correct professional and anatomical terminology when discussing images
7. Understand the American College of Radiology Appropriateness Criteria (ACR AC) and apply this knowledge to ordering diagnostic imaging exams.
8. Review anatomy with radiographs and learn to perform a basic evaluation of the image using the ABC’S (Alignment, Bone, Cartilage, and Soft Tissue)

PTOT 7715 Physical Therapy Resource Management
1. Discuss the influence of the current service delivery environment in the U.S. on the practice of occupational and physical therapy.
2. Discuss issues of access to healthcare services and the ethical and practical implications of the current service delivery environment in the U.S. as it affects the wellness needs of disparate populations.
3. Explain the various ways that healthcare services are funded and the influence of reimbursement systems on the practice of OT and PT.
4. Review theories of management and leadership and explain the ways in which the specific approach chosen by a manager might affect subordinate actions.
5. Demonstrate an understanding of fiscal management systems and reports.
6. Describe the mechanisms, systems, and techniques needed to properly maintain, organize, and prioritize workloads and intervention settings including inventories.
7. Generate clear and concise business correspondence.
8. Determine the need for occupational/physical therapy services within institutional and community settings.

9. Demonstrate knowledge of systems for assessment of professional credentials, abilities, and competencies in self and subordinates and for the formulation of plans for their maintenance and development.

10. Demonstrate knowledge of assessment and enhancement of occupational/physical therapy service provision using formal quality improvement programs.

11. Devise a marketing program to effectively communicate focused messages to specified target populations.

12. Discuss ways to organize the provision of therapy services in order to assure compliance with legal requirements and to minimize risk.

13. Demonstrate an understanding of the process of locating and securing grants and of how grants can serve as a fiscal resource for research and practice.

14. Understand when and how to use the consultative process with groups, programs, organizations, or communities.

15. Describe and discuss professional responsibilities and issues when providing service on a contractual basis.

16. Describe the federal and state mechanisms by which laws are enacted through legislation and implemented by executive agencies and the implications of these mechanisms for professional practice.

17. Discuss ways in which occupational and physical therapists can advocate for the health and wellness needs of society both within and outside of the political process.

18. Differentiate the roles of the professional therapist and the therapy assistant (OTA/PTA) and demonstrate an awareness of state laws and regulations in setting specific parameters for supervision.

**PTOT 7725, Multisystem Management**

1. Identify the signs and symptoms that indicate systemic rather than neuromuscular sources of pathology.

2. Recognize the indications and process for referring to other health care professionals.

3. Describe the role of a physical therapist when practicing in the areas of ergonomics, women’s health, primary care, and managing patients with multiple complex diagnoses.

**PTOT 7727: Geriatric Management**

1. Discuss the scope of PT practice as it relates to the geriatric population in the U.S.

2. Discuss different theories of aging and identify which ones may influence PT practice.

3. Describe the changes in body systems that occur with normal aging.

4. Describe the most common pathological manifestations that may reduce functional independence in people over the age of 65 years.

5. Collaboratively develop and implement a community service project for people aged >65 years.

6. Describe similarities/differences in the PT examination and intervention for people aged >65 years.

7. Discuss the role of the PT when working with patients/clients near the end of life.

8. Discuss the roles of a PT on an interdisciplinary team working with people aged >65 years.

**PTOT 7728 Lifespan Development**
1. Apply the basic PT concepts learned in previous courses to the pediatric patient (i.e. examination, evaluation, PT diagnosis, prognosis, plan of care, interventions, delegation of activities, training of support personnel, documentation and referrals)
2. Describe basic information about the most common childhood diagnoses addressed by PT and be able to attain detailed information or information about less common ones to the extent that decisions about treatment are well-informed
3. Describe the various pediatric settings and the laws that legislate provision of PT services to children in different treatment environments (i.e. early intervention, schools, outpatient, community) and be able to compare and contrast the treatment approaches needed for each and describe the components of transition between environments
4. Create a plan of care for a pediatric patient, including parent/caregiver involvement that is appropriate with respect to culture/lifestyle, educational level, socioeconomic status, motivation and understanding of the current condition
5. Describe why children are a "vulnerable Population" and assess and objectively describe a situation when a child might be in danger and act accordingly
6. Describe the development of motor skills throughout childhood, and assess if a specific child is developing as expected, and determine appropriate treatment strategies to address development
7. Create a positive, supportive, treatment/learning environment for a pediatric patient, family, advocates, and other healthcare/educational providers, and be able to assess the effectiveness on an ongoing basis and change approach when indicated

PTOT 7733, Clinical Affiliation III
1. Practices in a safe manner that minimizes risk to patient, self, and others. (CPI skill #1; CAPTE Element 7D; V7)
2. Demonstrates responsible behaviors. (CPI skill #3; CAPTE Code of Ethics, Element 7D; V7)
3. Demonstrates professional behavior during interactions with others. (CPI skill #2; CAPTE Element 7D; V7)
4. Demonstrates ethical practice. (CPI skill #2,6; CAPTE Element 7D, Code of Ethics; V7)
5. Adheres to legal practice standards. (CPI skill #2,3; CAPTE Element 7D; V7)
6. Communicates in ways that are congruent with situational needs. (CPI skill #4; CAPTE Element 7D, Code of Ethics; Element 8; V7)
7. Documents accurately and concisely within facility guidelines. (CPI #15; CAPTE Element 7D, Code of Ethics; V7)
8. Adapts delivery of care to reflect individual patient needs and acknowledgement of differences. (CPI #12; CAPTE Element 7D, Code of Ethics; V7)
9. Applies the principles of logic and the scientific method to the practice of physical therapy. (CPI #7; CAPTE Element 7D, Code of Ethics, Element 6; V7)
10. Performs screens to assess the effectiveness and appropriateness of physical therapy services. (CPI #8; CAPTE Element 7D; V7)
11. Performs physical therapy patient examinations. (CPI #9; CAPTE Element 7D; V7)

EXAMINATION SKILLS INCLUDE ASSESSMENT OF:
   a) aerobic capacity and endurance
   b) anthropometric measurements
   c) arousal, mentation, and cognition
   d) assistive and adaptive devices
12. Performs evaluation to establish a diagnosis and prognosis. (CPI #10,11; CAPTE Element 7D; V7)

13. Designs a physical therapy plan of care that integrates goals, treatment, outcomes and discharge plan. (CPI #12; CAPTE Element 7D; V7)

14. Performs physical therapy interventions in a competent manner. (CPI skill #13; CAPTE Element 7D; V7)

15. SKILLS/INTERVENTIONS INCLUDE:
   a) airway clearance techniques
   b) debridement and wound care (assessed only in a mock lab situation)
   c) electrical modalities
   d) basic manual therapy techniques
      i) connective tissue and therapeutic massage
      ii) joint mobilization
      iii) manual traction
      iv) passive ROM
      v) soft tissue mobilization
   e) communication and coordination of care
   f) consultation
   g) functional training in community and work, reintegration, IADLs, home management
   h) patient – related instruction
   i) thermal modalities (hot, cold, ultrasound, etc.)
   j) mechanical modalities (tilt table, traction, compression, CPM)
   k) therapeutic exercise
      i) aerobic endurance
      ii) aquatics exercises
      iii) breathing exercises / strategies
      iv) stretching,
      v) strengthening,
vi) home exercise,
 vii) body mechanics, ergonomics,
 viii) proprioception, balance and coordination training,
 ix) neuromuscular education / relaxation, inhibition, and facilitation techniques
 x) developmental activities training
 xi) posture awareness training
 l) vital monitoring
 m) gait and transfer training
 n) prescription and application of gait assistive devices
 o) prescription, application and as appropriate fabrication of adaptive, assistive, orthotics,
 protective and supportive devices and equipment

16. Educates others using relevant and effective teaching methods. (CPI #14; CAPTE Element 7D; V7)
17. Participates in quality assessment activities. (CPI #16; CAPTE Element 7D; V7)
18. Provides consultation to various organizations and individuals. (CPI #17; CAPTE Element 7D; V7)
19. Addresses patient needs for services other than physical therapy as needed. (CPI #18; CAPTE Element 7D; V7)
20. Manages resources to achieve patient and facility goals. (CPI #18; CAPTE Element 7D; V7)
21. Incorporates an understanding of economic factors in the delivery of physical therapy services. (CPI #17; CAPTE Element 7D; V7)
22. Uses support personnel according to legal standards and ethical and facility guidelines. (CPI #18; CAPTE Element 7D; V7)
23. Recognizes and participates in additional professional and social responsibilities. (CPI #2; CAPTE Element 7D; V7)
24. Implements a self-directed plan for professional development and lifelong learning. (CPI #6; CAPTE Element 7D; V7)
   a) * Please reference the www.capteonline.org for a complete listing of the educational standards established by the Commission on Accreditation in Physical Therapy Education (CAPTE).
   b) ^Validation Legend: 1 = assignment, 2 = lab / skills test, 3 = objective test, 4 = essay test, 5 = project/presentation, 6 = other-class discussion, 7= patient simulations/care.

PTOT 7734, Clinical Affiliation IV

1. Practices in a safe manner that minimizes risk to patient, self, and others. (CPI skill #1; CAPTE Element 7D; V7)
2. Demonstrates responsible behaviors. (CPI skill #3; CAPTE Code of Ethics, Element 7D; V7)
3. Demonstrates professional behavior during interactions with others. (CPI skill #2; CAPTE Element 7D; V7)
4. Demonstrates ethical practice. (CPI skill #2,6; CAPTE Element 7D, Code of Ethics; V7)
5. Adheres to legal practice standards. (CPI skill #2,3; CAPTE Element 7D; V7)
6. Communicates in ways that are congruent with situational needs. (CPI skill #4; CAPTE Element 7D, Code of Ethics; Element 8; V7)
7. Documents accurately and concisely within facility guidelines. (CPI #15; CAPTE Element 7D, Code of Ethics; V7)
8. Adapts delivery of care to reflect individual patient needs and acknowledgement of differences. (CPI #12; CAPTE Element 7D, Code of Ethics; V7)
9. Applies the principles of logic and the scientific method to the practice of physical therapy. (CPI #7; CAPTE Element 7D, Code of Ethics, Element 6; V7)
10. Performs screens to assess the effectiveness and appropriateness of physical therapy services. (CPI #8; CAPTE Element 7D; V7)
11. Performs physical therapy patient examinations. (CPI #9; CAPTE Element 7D; V7)

Recognize that depending on the student’s prior clinical experiences, some skills may not have been performed yet in the clinical setting.

EXAMINATION SKILLS INCLUDE ASSESSMENT OF:

- aerobic capacity and endurance
- anthropometric measurements
- arousal, mentation, and cognition
- assistive and adaptive devices
- community and work (job, school or play) reintegration
- cranial nerve integrity
- environmental, home, and work barriers
- ergonomics and body mechanics
- gait and assisted locomotion
- integumentary integrity (skin color, temp, tone/turgor)
- joint integrity and mobility
- muscle performance (strength, power and endurance)
- special tests for orthopedic pathology / dysfunction
- pain
- posture
- prosthetic requirements
- range of motion
- muscle length
- reflex integrity
- self care and home management, IADLs
- basic ADLS
- sensory integrity
- ventilation, respiration and circulation (basic vital signs, breathing quality and patterns, auscultation of heart and lung sounds, observation of signs and symptoms of poor circulation / gas exchange)

12. Performs evaluation to establish a diagnosis and prognosis. (CPI #10,11; CAPTE Element 7D; V7)

13. Designs a physical therapy plan of care that integrates goals, treatment, outcomes and discharge plan. (CPI #12; CAPTE Element 7D; V7)

14. Performs physical therapy interventions in a competent manner. (CPI skill #13; CAPTE Element 7D; V7)

15. SKILLS/INTERVENTIONS INCLUDE:

- airway clearance techniques
- debridement and wound care (assessed only in a mock lab situation)
- electrical modalities
- basic manual therapy techniques
  - connective tissue and therapeutic massage
  - joint mobilization
  - manual traction
  - passive ROM
  - soft tissue mobilization
- communication and coordination of care
- consultation
- functional training in community and work, reintegration, IADLs, home management
- patient – related instruction
i. thermal modalities (hot, cold, ultrasound, etc.)

j. mechanical modalities (tilt table, traction, compression, CPM)

k. therapeutic exercise
   i. aerobic endurance
   ii. aquatics exercises
   iii. breathing exercises / strategies
   iv. stretching,
   v. strengthening,
   vi. home exercise,
   vii. body mechanics, ergonomics,
   viii. proprioception, balance and coordination training,
   ix. neuromuscular education / relaxation, inhibition, and facilitation techniques
   x. developmental activities training
   xi. posture awareness training

l. vital monitoring

m. gait and transfer training

n. prescription and application of gait assistive devices

o. prescription, application and as appropriate fabrication of adaptive, assistive, orthotics, protective and supportive devices and equipment

16. Educates others using relevant and effective teaching methods. (CPI #14; CAPTE Element 7D; V7)

17. Participates in quality assessment activities. (CPI #16; CAPTE Element 7D; V7)

18. Provides consultation to various organizations and individuals. (CPI #17; CAPTE Element 7D; V7)

19. Addresses patient needs for services other than physical therapy as needed. (CPI #18; CAPTE Element 7D; V7)

20. Manages resources to achieve patient and facility goals. (CPI #18; CAPTE Element 7D; V7)

21. Incorporates an understanding of economic factors in the delivery of physical therapy services. (CPI #17; CAPTE Element 7D; V7)

22. Uses support personnel according to legal standards and ethical and facility guidelines. (CPI #18; CAPTE Element 7D; V7)

23. Recognizes and participates in additional professional and social responsibilities. (CPI #2; CAPTE Element 7D; V7)

24. Implements a self-directed plan for professional development and lifelong learning. (CPI #6; CAPTE Element 7D; V7)

   a. * Please reference the www.capteonline.org for a complete listing of the educational standards established by the Commission on Accreditation in Physical Therapy Education (CAPTE).

   b. *Validation Legend: 1 = assignment, 2 = lab / skills test, 3 = objective test, 4 = essay test, 5 = project/presentation, 6 = other-class discussion, 7= patient simulations/care.