COURSE NUMBER PT 7311
Clinical Exercise Physiology
SEMESTER 2022

Coordinator: Dr. Shelly D. Weise, PT, EdD
Email: shelly.weise@angelo.edu
Phone: 325-486-6474
Office: AHHS 224E
Office Hours: by appointment

Instructor: Dr. You-jou Hung, PT, PhD, CSCS
Email: yhung@angelo.edu
Phone: 325-942-2742
Office: AHHS 224G
Office Hours: by appointment

Course Information

Course Description
An integrated approach to the study of human physiology as it pertains to physical fitness, activity, performance, and wellness. A scientific basis for connecting physical therapy to physical activity, performance, and health is presented. The course includes presentation of metabolic, hormonal, and structural systems of the body related to activity and performance. The course provides an opportunity for the student physical therapist to develop the skills necessary for implementing activity programs and exercise prescription for the normal, healthy individual. Experiences will be provided for the students to administer and interpret physiological tests for setting appropriate exercise and health goals for clients and determining if the goals have been met. Experiences related to psychological, social, cultural, and vocational aspects of exercise are included. The course offers learning experiences through problem/case study analysis and laboratory assessments with an emphasis on optimal health, wellness, and performance.
Course Credits
3 Graduate Credits (2-2-0)

Prerequisite and Co-requisite Courses
Student in Doctor of Physical Therapy Program

Prerequisite Skills
Accessing Internet websites, using ASU Library resources, and proficiency with Microsoft Word and PowerPoint are expectations of the course.

Program Outcomes
Upon completion of the program of study for the physical therapy program, the graduate will be prepared to:

Student Learning Outcomes

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Assignment(s) or activity(ies) validating outcome achievement:</th>
<th>Mapping to Program Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe and contrast the role of carbohydrates, lipids and proteins in metabolism at rest and with activity.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C</td>
</tr>
<tr>
<td>Describe and contrast the role of vitamins, minerals and water in metabolism at rest and with activity.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C</td>
</tr>
<tr>
<td>Compare nutrient and energy intake between sedentary and physically active counterparts; recommend basic information regarding optimal nutrient intake for physically active individuals.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D34</td>
</tr>
<tr>
<td>Instruct and educate a patient/client and their family/significant relative on the concept of “calories in = calories out” for weight management including daily intake/output assessment.</td>
<td>Complete reading assignment, participate in discussion, and submit a lab report that achieve mastery.</td>
<td>Fulfill CAPTE Standard: 7A, 7D12, 7D27h</td>
</tr>
<tr>
<td>Outline the fundamental scientific pathways of energy transfer with utilization of carbohydrates, protein and lipids during rest and activity.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C</td>
</tr>
<tr>
<td>Student Learning Outcome</td>
<td>Assignment(s) or activity(ies) validating outcome achievement:</td>
<td>Mapping to Program Outcomes</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
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<tr>
<td>Describe methods of measurement of human energy expenditure during rest and physical activity.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7D19a, 7D19w, 7D34</td>
</tr>
<tr>
<td>Discuss and diagram the normal anatomy and physiology of the human cardiac and pulmonary systems.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C</td>
</tr>
<tr>
<td>Discuss and diagram the normal anatomy and physiology of the human musculoskeletal and neuromuscular systems.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C</td>
</tr>
<tr>
<td>Describe the responses of the human cardiac and pulmonary systems as they are placed under various exercise stresses.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D19a, 7D19e, 7D19w</td>
</tr>
<tr>
<td>Describe the responses of the human musculoskeletal and neuromuscular systems as they are placed under various exercise stresses.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D19o, 7D19n, 7D19p</td>
</tr>
<tr>
<td>Contrast anaerobic and aerobic energy output and how this difference plays a role in sports events and physical therapy activities.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D34</td>
</tr>
<tr>
<td>Discuss principles of exercise training as they relate to the neuromuscular and cardiopulmonary systems.</td>
<td>Meet mastery (earning 80% of the total score or better) for this course.</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D34</td>
</tr>
<tr>
<td>Describe/demonstrate the foundations of and the processes required for body composition assessment.</td>
<td>Demonstrate clinical skills and submit a lab report that achieve mastery.</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D19b</td>
</tr>
<tr>
<td>Demonstrate the performance of aerobic and anaerobic assessments in the laboratory setting.</td>
<td>Demonstrate clinical skills and submit a lab report that achieve mastery.</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D19a, 7D19e, 7D19w, 7D31</td>
</tr>
<tr>
<td>Demonstrate a “hands on” ability to successfully perform vital signs objective measurements.</td>
<td>Demonstrate clinical skills that achieve mastery (pass the vital sign check-off)</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D19a, 7D19e, 7D19w</td>
</tr>
<tr>
<td>Discuss the societal problem of obesity and weight management. Demonstrate the ability to set up an exercise and weight management exercise prescription program.</td>
<td>Complete reading assignment, participate in discussion, and submit a clinical case report that achieve mastery.</td>
<td>Fulfill CAPTE Standard: 7A, 7C, 7D34, 7D36, 7D27a, 7D27d, 7D27d, 7D27h, 7D27i, 7D24, 7D10, 7D11</td>
</tr>
</tbody>
</table>
Course Delivery
This is a mixed course offering. The course will be delivered via the Blackboard Learning Management System. The course site can be accessed at ASU’s Blackboard Learning Management System. The content of the course includes primarily face to face instruction with some on-line discussions, lab demonstrations, case study analyses, multi-media programs (including PowerPoints), self-instructional materials, reading assignments, lab reports, and student projects.

Required Texts and Materials

Required Texts


Required instruments/materials for lab:

1. Stethoscope (ask coordinator for approval)
2. Blood Pressure Cuff/Sphygmomanometer (see coordinator for approval)
3. Watch with second hand; calculator
4. Proper lab attire: loose fitting shorts/T-shirt, sports bra (females), running shoes

Recommended Texts and Materials
None

Technology Requirements
To participate in one of ASU’s mixed format education programs, you need this technology:

- A computer capable of running Windows 7 or later, or Mac OSX 10.8 or later
- The latest version of one of these web browsers: internet Explorer, Firefox, or Safari
- Microsoft Office Suite or a compatible Open Office Suite
• Adobe Acrobat Reader
• High Speed Internet Access
• Ethernet adapter cable required (wireless connections can drop during tests and Collaborate sessions)
• Webcam

Students also need access to ASU Blackboard, Blackboard Collaborate, and Respondus Lockdown Browser to successfully complete this course.

**Topic Outline**
Week 1: nutritional aspects of human performance
Week 2: energy transfer at rest and with exercise
Week 3: energy expenditure measurement at rest and with activity
Week 4: the neuromuscular system and exercise
Week 5: the pulmonary and cardiovascular systems and exercise
Week 6: exercise prescription and testing
Week 7: training the anaerobic and aerobic energy systems
Week 8: muscular strength and resistance; body composition

**Communication**
All communications for the whole class will take place via Blackboard, which will send an e-mail to all active participants’ ASU e-mail accounts.

E-mail through the ASU e-mail address is the preferred communication method for this course. Faculty will respond to e-mail messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday. Students should check ASU email account daily for announcements and schedule changes.

Appointments can be made for individual meetings via Blackboard Collaborate as needed.

**Grading**

**Evaluation and Grades**
Course grades will be determined as indicated in the table below.
### Assessment

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent/Points of Total Grade</th>
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<tbody>
<tr>
<td>Participation (discussion board: 25% posting; 75% content)</td>
<td>60 points</td>
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<tr>
<td>Lab reports: 10 points each (6)</td>
<td>60 points</td>
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<tr>
<td>Quizzes: 25 points each (4)</td>
<td>100 points</td>
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<tr>
<td>Midterm exam</td>
<td>100 points</td>
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<tr>
<td>Clinical case study</td>
<td>80 points</td>
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<tr>
<td>Final exam</td>
<td>100 points</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>500 points</strong></td>
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</tbody>
</table>

### Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:
- A = 450+ points
- B = 399 - 449 points **Mastery**
- C = 350 - 398 points
- F < 350 points

### Teaching Strategies

Students are expected to be “active learners.” It is a basic assumption of the instructor that students will be involved (beyond the materials and lectures presented in the course) discovering, processing, and applying the course information using peer-review journal articles, researching additional information and examples on the Internet, and discussing course material and clinical experiences with their peers.

### Assignment and Activity Descriptions

*Please note: Rubrics for all assignments and activities are located at the end of this syllabus.*

**Discussion Board Activities:** Discussion Boards provide an avenue for synthesis of material / information. A Discussion Board is provided in this course as a way to help students’ process course materials, express thoughts, and engage others opinions and ideas in a healthy and productive learning environment. Students are expected to respond to all discussion board assessments using the “**Online Discussion Rubric**” to support individual answers to the assigned questions throughout this course.
Lab Report and Case Study Assignments: There are six lab reports students will complete during this course. Lab activities are design for students to practice clinical skills and/or reiterate the knowledge obtained during the lecture. Background information and lab procedures will be described in the lab report templates posted on the Blackboard. Students will be assigned to work in groups for the case study. The case study requires the students to construct a comprehensive intervention of a patient/client using the knowledge learned throughout the whole semester. Expectations and rubrics of the lab report and case study will be discussed in class.

Assignment Submission
All assignments MUST be submitted through the Assignments link in the Blackboard site. This is for grading, documenting, and archiving purposes. Issues with technology use arise from time to time. If a technology issue does occur regarding an assignment submission, email me at shelly.weise@angelo.edu and attach a copy of what you are trying to submit. Please contact the IT Service Center at (325) 942-2911 or go to your Technology Support tab to report the issue. This lets your faculty know you completed the assignment on time and are just having problems with the online submission feature in Blackboard. Once the problem is resolved, submit your assignment through the appropriate link. This process will document the problem and establish a timeline. Be sure to keep a backup of all work.

Late Work or Missed Assignments Policy
Assignment due dates are shown on the calendar/schedule or posted within Blackboard. Late assignments are not accepted without prior approval of faculty. Faculty reserve the right to deduct points for late assignments that are accepted past the original due date. No papers or postings will be accepted more than one week past the assigned due date.

General Policies Related to This Course
All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

Student Responsibility and Attendance
Please remember that it is extremely disruptive and unprofessional to be late for class, come to lab unprepared or be absent from class/lab, especially when group activities are scheduled.

1. Absences
ATTENDANCE AT ALL SCHEDULED EXAMINATIONS IN THE SCHEDULED LOCATION (e.g., CLASSROOM OR TESTING CENTER) IS MANDATORY. Any unexcused absence from an examination will automatically result in a score of ZERO for that examination. Attempt(s) to take the exam in a location other than that scheduled by the professor without prior approval will automatically result in a score of ZERO for that examination. In the event that a student is late to an exam, that student will automatically receive a MINIMUM of 15 percentage points off of the total exam grade, and will ONLY be given the remainder of the time from the scheduled start time to finish the exam. Additionally, attempting to take the exam in an unscheduled location or being late to or absent from an exam will result in initiation of a disciplinary tracking form. Any student absent from examinations due to illness or injury must have a written justification from their physician. Absence from or tardiness to an examination for any other reason must be excused before the time of the scheduled examination by the professor or brought about by a very serious circumstance. For excused absences only, make-up examinations must be taken no later than one week after the student returns to class. Extended absences must be approved by the Program Director of Physical Therapy.

Additionally:

a. Students will abide by the absence policy delineated in each course instructor’s syllabus.
b. In case of absence, the student is responsible for obtaining the skills and knowledge necessary to meet required mastery level. Faculty members are not obligated to remediate students in these circumstances.
c. Absences without prior notification will not be tolerated during any field or clinical experience. This may result in immediate removal from the clinical experience.
d. Student must notify their instructor(s) via email regarding their absence.

2. Tardiness
Tardiness is a disruption to the instructor and the students. A student is considered tardy when he/she arrives for class after the instructor has begun class activities. It reflects poor professional behavior and will not be tolerated. Students will abide by the tardiness policy delineated in each course instructor’s syllabus.

Repeated tardiness or absences (≥ 2 occurrences combined or mixed) will result in the initiation of a Disciplinary Tracking Form.

Attendance and promptness to classes, meetings, and future work obligations are considered professional behaviors. As this department is preparing potential professionals in the area of physical therapy, it is part of our expectation that student presence and timeliness will be held in highest regard. Tardiness is a disruption to the instructor and fellow students. A student is
considered tardy if he/she arrives for class after the instructor has begun class activities. Please see the following related to implications from excessive lateness or absences without a reasonable excuse:

a. First offense - verbal warning
b. Second offense - second verbal warning, initiation of Disciplinary Tracking Form
c. Third offense - 1% off final course grade
d. 1% off final course grade for each additional unexcused tardy or absence

Per the student handbook, 2 or more occurrences combined or mixed will result in the initiation of a Disciplinary Tracking Form. If a student has an unexcused absence during integrations it may lead to the removal of that student from that clinical environment. It is the responsibility of the student to contact the clinical site and give notice if they are ill, or have transportation issues. If the student is unable to attend class, it is the student’s responsibility to email the course instructor(s) of the class directly. This notification should be made prior to commencement of the class.

Continued issues with tardiness/attendance across all courses will result in disciplinary probation and will be referred to the PT faculty for consideration of options, including program dismissal. The PT faculty is not oblivious to doctor’s appointments and other potential hazards and emergencies in daily life. Simply taking responsibility to notify the office or the professor if issues arise is considered professional behavior. Please do not rely on a classmate or other form of notification, as these have proven unreliable in years past.

3. Cell phone
Students must silence cell phones and place them out of sight during class. Permission may be granted, at the instructor's discretion, to have a cell phone out during class. Students seeking permission to have cell phones out during class must do so prior to the start of class. The first offense includes a verbal warning that will be documented in the behavioral tracking sheet. The second offense includes the initiation of a disciplinary tracking form. The third offense will result in the convening of a disciplinary committee to decide upon further disciplinary action.

**Academic Integrity**
Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.
The College of Health and Human Services adheres to the university’s Statement of Academic Integrity.³

Accommodations for Students with Disabilities
ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website.⁴ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Program Technical Standards

Policy Statement: “Angelo State University is committed to the principle that no qualified person, on the basis of a disability, be excluded from the participation in or be denied the benefit of services, programs, or activities of the University, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments Act of 2008 (ADAAA) and subsequent legislation.” The university will review requests for accommodation on a case-by-case basis.

The Physical Therapy Program supports the Mission of Angelo State University (ASU) by providing access to a graduate, entry-level professional Doctor of Physical Therapy program that prepares a globally diverse, reflective, service-oriented, and flexible physical therapist
practitioner capable of multiple styles of thinking and learning. Enrolled students are expected to complete the academic and clinical requirements of the professional program. The purpose of this document is to broadly delineate the cognitive, affective and psychomotor skills deemed essential for completion of this program and performance as a competent generalist physical therapist. Candidates for the degree must be able to meet these standards for completion of degree requirements.

I. Cognitive skills to be demonstrated in all classroom, laboratory and clinical situations

A. The student physical therapist must possess the ability to independently:
   1. Measure, calculate, reason, analyze, integrate, retain and synthesize information to formulate effective solutions to problems congruent with a physical therapist.
   2. Examples of such behaviors:
      a. Student physical therapists must be able to read, write, speak and understand English at a level consistent with successful course completion and development of positive patient/client-therapist relationships.
      b. Student physical therapists must exercise critical thinking, decision-making and sound judgment.
      c. Student physical therapists must be able to plan and supervise intervention procedures in a safe manner.

II. Affective skills to be demonstrated in all classroom, laboratory and clinical situations

A. Student physical therapists must possess the emotional health and stability required to fully utilize their intellectual abilities, to adapt to changing environments and to function effectively in stressful situations.
B. Student physical therapists must demonstrate ethical behaviors in compliance with the ethical standards of the American Physical Therapy Association.
C. Student physical therapists must be able to communicate in both oral and written form with patient/clients and other members of the health care community to:
   1. Effectively and sensitively elicit information.
   2. Convey information essential for safe and effective care.
D. Student physical therapists must be aware of and interpret non-verbal communications.
E. Student physical therapists must be able to acknowledge and respect individual values and opinions to foster harmonious working relationships with colleagues, peers, and patients/clients.

III. Physical/Psychomotor skills to be demonstrated in all classroom, laboratory and clinical situations
A. Student physical therapists must have sufficient motor function and endurance as reasonably required to perform the following:
   1. Safely provide general physical therapist examination, evaluation and intervention procedures as identified in the Guide to Physical Therapist Practice for eight hour days.
   2. Perform CPR according to the guidelines of the American Heart Association.
   3. Perform patient transfers (lifting 50 pounds to waist level).

B. Student physical therapists must have sufficient coordination and balance in sitting and standing to safely engage in physical therapist procedures such as the following:
   1. Moving and positioning patients/clients.
   2. Gait training.
   3. Stabilizing and supporting patients/clients.
   4. Manipulation of equipment and tools used in patient/client examination, evaluation and intervention.

C. Student physical therapists must have sufficient fine motor skills to safely and effectively engage in physical therapists procedures such as the following:
   1. Manipulation of equipment and tools used in patient/client examination, evaluation and intervention.
   2. Legibly recording/documenting exams, evaluations and interventions in the clinic’s standard medical records in a timely manner and consistent with acceptable norms of the clinic.
   3. Legibly recording thoughts for written assignments and exams.
   4. Assessment and intervention of soft tissue restrictions and joint dysfunctions.
   5. Palpation of muscle tone, skin quality and temperature.

D. Student physical therapists must have visual acuity necessary to obtain accurate information from patients/clients and the treatment environment in the performance of routine physical therapist activities such as the following:
   1. Observation and inspection of patient’s/client’s skin condition, movements, body mechanics, gait pattern and postures.
   2. Observation of environmental safety hazards.
   3. Reading dials/LED displays on equipment.
   4. Reading digits/scales on diagnostic tools.

E. Student physical therapists must have auditory acuity necessary to obtain accurate information from patients/clients and the treatment environment in the performance of routine physical therapist activities such as the following:
   1. Blood pressure
   2. Lung/heart auscultation
   3. Patient calls or equipment alarms
   4. Verbal communication
F. Student physical therapists must have sufficient non-material handling and repetitive movement ability to safely provide examination, evaluation and intervention procedures as identified in the Guide to Physical Therapist Practice for 8 hour days such as the following:
1. Crouching, kneeling, or squatting
2. Reaching
3. Standing
4. Ambulation
5. Bending or stooping
6. Sitting

Incomplete Grade Policy
It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

Plagiarism
Plagiarism is a serious topic covered in ASU’s Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the ASU Writing Center.

Student Absence for Observance of Religious Holy Days
A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

Copyright Policy
Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of
course readings in printed or electronic form without written permission from the copyright holders or publishers.

Syllabus Changes
The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student’s responsibility to look for such communications about the course on a daily basis.

Title IX at Angelo State University
Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D.

You may submit reports in the following manner:

Online: www.angelo.edu/incident-form
Face to face: Mayer Administration Building, Room 210
Phone: 325-942-2022
Email: michelle.boone@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State’s policy please visit: www.angelo.edu/title-ix.
## Course Schedule

<table>
<thead>
<tr>
<th>Week/Date</th>
<th>Topic/Assignments/Assessments DUE</th>
</tr>
</thead>
</table>
| **Week 1/May 31** | **Topic**: intro to exercise physiology; nutritional aspects of human performance  
**Lecture**: May 31, All Meet, 1:30 pm, HHS 210  
Intro to course & online concepts  
Key concepts, *Weise*/Hung (Ch. 1, 2, 3, 31)  
**Lab 1**: handout for online assignment  
**Reading**: MKK: Ch. 1, 2, 3, 31  
Topic of the week: age & exercise. A feature on the literature to be posted on Blackboard for class discussion  
**Assignment**: discussion board (DB) 1 and lab 1  
DB1 and lab 1 due June 6, 12 noon |
| **Week 2/June 7 and 9** | **Topic**: energy transfer at rest and with exercise  
**Lecture**: June 7 (All Meet, HHS 210): 8:30 - 11:30 am  
Key concepts, *Weise*/Hung (Ch. 5, 6, 7)  
**Lab 2**: energy values of foods - online assignment  
**Reading**: MKK: Ch. 5, 6, 7  
Topic of the week: the problem of obesity. A feature on the literature to be posted on Blackboard for class discussion  
**Assignment**: DB2 and lab 2  
DB2 due June 10, 12 noon  
Lab 2 due June 10, 5 pm |
| **Week 3/June 14 and 16** | **Topic**: energy expenditure measurement at rest and with activity  
**Lecture**:  
June 14 (All Meet, HHS 210): 8:30 – 11:30 am  
Key concepts, *Weise*/Hung (Ch. 8 - 11) |
<table>
<thead>
<tr>
<th>Week/Date</th>
<th>Topic/Assignments/Assessments DUE</th>
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<tr>
<td></td>
<td><strong>Week 4/June 21 and 23</strong></td>
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<td></td>
<td><strong>Topic:</strong> the neuromuscular system and exercise</td>
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<td></td>
<td><strong>Lab 3:</strong> June 21 (HHS 210): 8:30 – 11:30 am and 1:30 – 4:30 pm</td>
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<td><strong>Lab 3:</strong> Vital signs</td>
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<td></td>
<td><strong>Lecture:</strong> June 23 (All Meet, HHS 210): 8:30 – 11:30 am</td>
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<td></td>
<td><strong>Key concepts, Weise/Hung (Ch. 18, 19)</strong></td>
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<tr>
<td></td>
<td><strong>Reading:</strong> M KK: Ch. 18, 19</td>
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<td></td>
<td><strong>Quiz 2:</strong> June 23: 11:30 am – 1:00 pm. Respondus Lockdown Browser With Monitor (webcam required)</td>
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<td><strong>Week 5/June 28 and June 30</strong></td>
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<td><strong>Topic:</strong> the pulmonary system and exercise</td>
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<td><strong>the cardiovascular system and exercise</strong></td>
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<td></td>
<td><strong>Lecture:</strong> June 28 (All Meet, HHS 210): 8:30 – 11:30 am</td>
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<tr>
<td></td>
<td><strong>Key concepts, Weise/Hung (Ch. 15, 16, 17)</strong></td>
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<td></td>
<td><strong>Reading:</strong> M KK: Ch. 15, 16, 17</td>
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<td></td>
<td><strong>Midterm exam:</strong> June 30: 8:30 – 11:30 am. Respondus Lockdown Browser with Monitor (webcam required)</td>
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<td><strong>Vital Signs Checkoff:</strong> June 30: 11:30 am – 2:30 pm</td>
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<td><strong>Week 6/July 5 and July 7</strong></td>
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<td></td>
<td><strong>Topic:</strong> the American College of Sports Medicine/guidelines for exercise prescription and testing: Hung</td>
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<td><strong>Lab 4:</strong> July 5 (HHS 210): 8:30 – 11:30 am and 1:30 – 4:30 pm</td>
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<td><strong>Lab 4:</strong> Submax exercise testing; Review of case study assignment</td>
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<tr>
<td>Week/Date</td>
<td>Topic/Assignments/Assessments DUE</td>
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<tr>
<td>Week 7/July 12</td>
<td><strong>Topic:</strong> training the anaerobic and aerobic energy systems</td>
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</table>
| and 14          | **Lecture:** July 12 (All Meet, HHS 210): 8:30 – 11:30 am  
|                 | Key concepts, Weise/Hung (Ch. 21) |
|                 | **Lab 5:** July 12 (HHS 210): 1:30 – 6:30 pm (see schedule for testing)  
|                 | Max testing |
|                 | **Quiz 4:** July 14: 8:30 am – 10:30 pm. Respondus Lockdown Browser  
|                 | With Monitor (webcam required)  
|                 | Work on case studies |
|                 | **Reading:** MKK: Ch. 21 |
| Week 8/July 19  | **Topic:** muscular strength and resistance  
| and 21          | body Composition |
|                 | **Lecture:** July 19 (All Meet, HHS 210): 8:30 – 11:30 am  
|                 | Key concepts, Weise/Hung (Ch. 28) |
|                 | **Lab 6:** July 21 (HHS 210): 8:30 – 11:30 am and 1:30 – 4:30 pm  
|                 | 6a: strength training  
<p>|                 | 6b: body composition |
|                 | <strong>Reading:</strong> MKK: Ch. 28, 30 |
|                 | <strong>Assignment:</strong> Clinical case studies due: July 21, 12 noon |</p>
<table>
<thead>
<tr>
<th>Week/Date</th>
<th>Topic/Assignments/Assessments DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 9/July 26</td>
<td>Final exam: July 28: 8:30 – 11:30 am. Respondus Lockdown Browser With Monitor (webcam required)</td>
</tr>
</tbody>
</table>

**Grading Rubrics**

For discussion board, lab report, and case study, 25% of the grading will be determined by formats (if submitted on time and have all the required components) and 75% of the grading will be determined by content.

**Student Evaluation of Faculty and Course**

Students in all programs are given the opportunity to evaluate their courses and the faculty who teach them. Evaluations are most helpful when they are honest, fair, constructive, and pertinent to the class, clinical experience, or course. Faculty value student evaluations, and use student suggestions in making modifications in courses, labs and clinical experiences.

Angelo State University uses the IDEA (Individual Development and Educational Assessment) system administered through Kansas State University for all course evaluations. The Office of Institutional Research and Assessment administers IDEA for the entire university, online and has established a policy whereby students can complete course evaluations free from coercion.

Select the SLO's you use

1. Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)
2. Learning to apply course material (to improve thinking, problem solving, and decisions)
3. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
4. Acquiring skills in working with others as a member of a team
5. Learning how to find, evaluate, and use resources to explore a topic in depth
6. Learning to apply knowledge and skills to benefit others or serve the public good

**End of Syllabus**

1. [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)
2. [https://www.angelo.edu/catalogs/](https://www.angelo.edu/catalogs/)
4. [https://www.angelo.edu/services/disability-services/](https://www.angelo.edu/services/disability-services/)
5 https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
6 https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php
7 https://www.angelo.edu/dept/writing_center/academic_honesty.php
8 https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of