Course Coordinator

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Office: HHS 224N  
Office Hours: By appointment

Course Information

Course Description

A comprehensive presentation of the general principles of disease with an emphasis on general pathology. Focus is on the mechanisms underlying disease and their management as a basis for therapeutic program planning in physical therapy.

Course Credits

3 credits (3-0-0)

Prerequisite and Co-requisite Courses

Successful completion of previous DPT coursework

Prerequisite Skills

Successful completion of previous DPT coursework

Course Objectives

At the end of this course, the students will have demonstrated mastery of the subject by being able to:

- Discuss the behavioral, social and environmental factors contributing to disease and dysfunction.
- Describe the primary pharmacokinetic factors involved in drug therapy including administration, distribution, interaction, and elimination.
• Interpret a dose response curve for drugs determining the threshold dose and the ceiling effect.
• Describe biotransformation or drug metabolism at a cellular and organ level.
• Discuss the factors such as age, disease, drugs, genetics, nutrition, chemicals, body composition, and gender that alter the normal pharmacokinetics.
• Examine how altered pharmacokinetics may lead to an increase or decrease in drug effects and how these effects may be recognized in the patient/client receiving physical therapy.
• Identify the conditions reflecting critical (life-threatening) drug interactions in patients/clients receiving physical therapy.
• Describe the cellular response to injury.
• Correlate the cardinal signs and symptoms and the physiologic basis of inflammation.
• Examine the relationship between the physiological basis of inflammation and the pharmacologic management to minimize inflammation.
• Describe the stages of healing comparing tissue repair versus tissue regeneration.
• Discuss the factors that impact healing.
• Compare and contrast the effects of comorbidities and drug interactions on tissue healing.
• Describe the pathology of selected genetic, nutritional, neoplastic, and infectious diseases.
• Describe the concepts of genetic characteristics or traits and their relationships to genetic risk and disease predisposition.
• Describe the pathologic clinical signs and symptoms of the selected genetic, nutritional, neoplastic, and infectious disease.
• Describe the pathology of common disorders in the listed systems:
  o Immune
  o Endocrine and metabolic
  o Gastrointestinal
  o Hepatic, pancreatic, and biliary
  o Hematologic
  o Renal/urologic
  o Genital/Reproductive
• Analyze the impact of pathological processes of common system disorders in terms of function.
• Analyze the impact of pathological processes of common disorders on the person’s ability to participate in physical therapy.
• Discuss, in general terms, the pharmacodynamics of drugs prescribed for common disorders.
• Define the signs and symptoms that distinguish/differentiate the common nonmusculoskeletal/nonneuromuscular/noncardiopulmonary diagnoses in patients/client seen by physical therapists.
• Describe the presenting signs and symptoms and natural course of the primary system disorders/diseases managed by physical therapists.
• Discuss the epidemiological factors for common conditions/disorders in patients treated in the acute care practice of physical therapists.
• Interpret the information provided in case studies determining the impact of the pathology on the patient participation in physical therapy.
• Explain the diagnostic techniques including laboratory tests used to differentiate various diagnoses.
• Describe the ‘red’ flags in the laboratory data indicating the need for referral/consultation.
• Describe the ‘red’ flags in the laboratory data that impact physical therapy interventions.

*CAPTE Standard 7A and 7C (found on the DPT Program Blackboard page).

Course Delivery

This is a face-to-face course with learning resources and supplemental materials posted on Blackboard.

Reading assignments are listed in the course schedule. The students are responsible for the assigned reading materials. The faculty may provide additional reading assignments.

Required Texts and Materials


Communication

Faculty will respond to email within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday. All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes.
Evaluations and Grading System

<table>
<thead>
<tr>
<th>Evaluations</th>
<th>Percentage of Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>10 %</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20 %</td>
</tr>
<tr>
<td>Exam 1</td>
<td>15 %</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15 %</td>
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<tr>
<td>Exam 3</td>
<td>15 %</td>
</tr>
<tr>
<td>Exam 4</td>
<td>25 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

Grading System

The final course grade will be assigned based on the cumulative percentage of points earned throughout the course:

- A = 90%-100%
- B = 80%-89%

Students must score 80% or better in total (A or B grade) in order to meet mastery and receive credit for this course. Students who receive a failing course grade are subject to dismissal from the DPT program. Exceptions may be sought by petition of the Academic Committee of the Physical Therapy Program.

Teaching Strategies

- Students are expected to be “active learners” and become “independent learners.”
- The didactic lecture provides guidance on how to study and what to focus on each topic.
- Following the pace of assigned readings on each topic is definitely the key to succeed in this course. Only studying the lecture slides will never be sufficient to master the materials.
- Assignments are active-learning base. The grading for each assignment is all or nothing. In order to receive a full credit, students must do their best to complete each assignment and submit it by **5 pm** on due date. Late assignments are NOT accepted without prior approval of faculty. The answers for the assignment will be posted after the due.
- Weekly quiz basically covers the materials from the assigned readings, lectures, and assignment from the last week.
- Exam 1, 2, and 3 are topics-specific, while the Exam 4 is comprehensive.
General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook¹
- Angelo State University Catalog²
- Angelo State University DPT Student Handbook found on Blackboard in the DPT Program Contents

Student Responsibility and Attendance

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 the student is unable to attend class, it is the student’s responsibility to email the course coordinator and if it’s an emergency, call the PT office at 942-2545 or the office of the professor of the class directly. This notification should be made prior to commencement of said 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.

**ATTENDANCE AT ALL SCHEDULED EXAMINATIONS IS MANDATORY.** Any unexcused absence from an examination will automatically result in a score of ZERO for that examination. Any student absent from examinations due to illness or injury must have a written justification from their physician. **Absence from an examination for any other reason must be excused before the time of the scheduled examination** 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.

**Technology**

It is an expectation of the program that technology be used in a way that supports learning and benefits you and your classmates. Students must silence cell phones and place them out of sight during class unless instructed to use them by the professor. 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. Points will be deducted from your final course grade at the discretion of faculty members if any technology (including but not limited to cell phone, tablet, laptop) is used in a manner that is not professional and beneficial in the learning environment. Additionally, 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](#).

**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](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#). 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](mailto:dallas.swafford@angelo.edu)
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 assignments, 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

Course schedule is subject to change at the discretion of the instructor.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Concepts of Pathology</td>
<td>G&amp;F, Chapter 1</td>
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<tr>
<td></td>
<td>Epigenetics: Behavioral, Social, and</td>
<td></td>
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<tr>
<td></td>
<td>Environmental Factors</td>
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<tr>
<td>2</td>
<td>General Principles of Pharmacology</td>
<td>Ciccone, Chapter 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>General Principles of Pharmacology</td>
<td>Ciccone, Chapter 3 &amp; 4</td>
</tr>
<tr>
<td>3</td>
<td>Injury, Inflammation, Healing, and Repair</td>
<td>G&amp;F, Chapter 6</td>
</tr>
<tr>
<td></td>
<td>Injury, Inflammation, Healing, and Repair</td>
<td>G&amp;F, Chapter 6</td>
</tr>
<tr>
<td>4</td>
<td>Exam 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oncology</td>
<td>G&amp;F, Chapter 9</td>
</tr>
<tr>
<td>5</td>
<td>Oncology</td>
<td>G&amp;F, Chapter 9</td>
</tr>
<tr>
<td></td>
<td>Cancer Chemotherapy</td>
<td>Ciccone, Chapter 36</td>
</tr>
<tr>
<td>6</td>
<td>The Immune System</td>
<td>G&amp;F, Chapter 7</td>
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<tr>
<td></td>
<td>The Immune System</td>
<td>G&amp;F, Chapter 7</td>
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<tr>
<td>7</td>
<td>Infectious disease</td>
<td>G&amp;F, Chapter 8</td>
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<tr>
<td></td>
<td>Treatment of infections</td>
<td>Ciccone, Chapter 33 &amp; 34</td>
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<tr>
<td>8</td>
<td>Exam 2</td>
<td></td>
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<tr>
<td>Week</td>
<td>Topics</td>
<td>Readings</td>
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<tr>
<td>9</td>
<td>The Endocrine and Metabolic Systems</td>
<td>G&amp;F, Chapter 11</td>
</tr>
<tr>
<td>10</td>
<td>The Endocrine and Metabolic Systems</td>
<td>G&amp;F, Chapter 11</td>
</tr>
<tr>
<td></td>
<td>Endocrine Pharmacology</td>
<td>Ciccone, Chapter 28, 29, 31, &amp; 32</td>
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<tr>
<td>11</td>
<td>The Gastrointestinal System and Gastrointestinal Drugs</td>
<td>G&amp;F, Chapter 16</td>
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<tr>
<td></td>
<td>The Hepatic, Pancreatic, and Biliary Systems</td>
<td>Ciccone, Chapter 27</td>
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<td>12</td>
<td>The Hematologic System</td>
<td>G&amp;F, Chapter 14</td>
</tr>
<tr>
<td></td>
<td>Opioid Analgesics and Nonsteroidal Anti-Inflammatory Drugs</td>
<td>Ciccone, Chapter 14 &amp; 15</td>
</tr>
<tr>
<td>13</td>
<td>Exam 3</td>
<td>G&amp;F, Chapter 3</td>
</tr>
<tr>
<td>14</td>
<td>The Psychosocial-Spiritual Impact on Health Care</td>
<td>G&amp;F, Chapter 4</td>
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<tr>
<td></td>
<td>The Renal and Urologic Systems</td>
<td>G&amp;F, Chapter 18</td>
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<tr>
<td></td>
<td>The Genital/Reproductive System</td>
<td>G&amp;F, Chapter 19 &amp; 20 Ciccone, Chapter 28</td>
</tr>
<tr>
<td>15</td>
<td>Environmental and Occupational Medicine</td>
<td>G&amp;F, Chapter 4</td>
</tr>
<tr>
<td></td>
<td>Thanksgiving Holiday Break</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Exam 4- Comprehensive</td>
<td></td>
</tr>
</tbody>
</table>
*Additional readings maybe assigned.

2. https://www.angelo.edu/catalogs/
4. https://www.angelo.edu/services/disability-services/
5. https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
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