NURS 5319: Advanced Pathophysiology

CRN # 20318 & 17463

Placement in Curriculum: Graduate Program College of Nursing

Pre-requisites and Co-requisites: Graduate Standing in School of Nursing

Credit Hours: 3 Credit

Course Description: The course builds on knowledge of basic physiology and pathophysiologic processes and examines the process involved in manifestations of altered physiological functioning across the lifespan. The theories, concepts and principles of pathophysiology are emphasized in order that insight and understanding of consequences of changes in physiology may be achieved. Current research is used to explore the most recent data examining disruptions in normal physiological functioning. Systems theory and psychophysiological interrelationships are used to analyze the relationships among disease process, their causative factors and normal physiology. Theoretical formulations and research related to human pathophysiology are integral to the course content.

Course Objectives: At the completion of this course, students should be able to:

1. Analyze the relationships among disease processes, their causative factors and normal physiology utilizing an integrated systems theory approach.
2. Evaluate the relationships among disease process, causative factors and normal physiology utilizing current theoretical formulations and research findings.
3. Evaluate the dynamically changing manifestations of the disease process.
4. Analyze, synthesize and interpret observable or available data in order to explicate pathophysiological process.
5. Analyze the relationships among pathology, normal physiology, positive health practices and health care.
6. Analyze and explicate therapeutic strategies for the acute and chronic pathophysiological process-affecting individuals across the lifespan.

Faculty

Franchesca E. Nunez, PhD, RN
Assistant Professor
Office: #322 HSSN Building
Email: feoberhelman@utep.edu
Office Phone #: (915) 747-7226

Office Hours

Virtual and On Campus Office Hours: Wednesdays 1100 to 1330

10/24/2022
Meeting Times: This is a 7-week course offered 100% online, asynchronous format. The course will meet from 10/24/2022 to 12/10/2022.


Teaching/Learning Strategies: A variety of teaching/learning strategies will be used to enrich the experience of learners and may include individual and/or group work, reading assignments, videos, case studies, presentations and discussion board postings. The purpose of assignments is to assist the student in understanding and demonstrating understanding of Advanced Pathophysiology.

Course Assignments:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Possible Points</th>
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<tbody>
<tr>
<td>Introduction</td>
<td>25</td>
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<tr>
<td>Assignments (x3, each 175 points)</td>
<td>525</td>
</tr>
<tr>
<td>Week 2-6 Assessments (x5, each 50 points)</td>
<td>250</td>
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<tr>
<td>Week 7 Assessment</td>
<td>150</td>
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<tr>
<td>Key Learning Points</td>
<td>50</td>
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<td><strong>Total</strong></td>
<td><strong>1000</strong></td>
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*Two attempts per each assessment allowed. Last attempt is for a recorded grade.

Grading Scale: A = 900 -1000  B = 800 – 899  C = 700 – 799  D = 600 – 699  F = < 600

Earning an 80% of the points or greater for all activities is expected of students. Students who earn < 80% on activities are given the opportunity to resubmit their work for one additional time, however, the maximum grade for resubmission will be 80% of the points. This only applies to work submitted by the original due date.

Seventh edition APA format (citation and references) is required for all activities. Work may be subjected to point deduction independently from the rubric for using non-APA 7th edition format.
Course Participation
Attendance in the course is determined by participation in the learning activities of the course. Your participation in the course is important not only for your learning and success but also to create a community of learners. Participation is determined by completion of the following activities:

- Reading/Viewing all course materials to ensure understanding of assignment requirements
- Participating in engaging discussion with your peers on the discussion boards (grading rubric provided in the "grading information" area of each forum)
- Participating in any scheduled Blackboard Collaborate sessions
- Other activities as indicated in the weekly modules
- Review of assessment feedback within one week of completion

Because these activities are designed to contribute to your learning each week, they cannot be made up after their due date has passed.

Incomplete, Late, and Incorrect Assignment Submission
To receive credit for work, respond to all items, questions, and review rubrics. It is recommended that students verify the appropriate document was submitted. Students will be notified via email if submitted incorrect work (wrong drafts, wrong assignment, missing content, not following directions, content submitted that is not gradable by faculty, assignments in different formats then what was requested). Point deductions for incorrect submissions will incur (10%). Late work will not be accepted after the last day of class.

All assignments listed are required for successful completion of this course. If a student anticipates difficulty in completing assignment/s on time, he or she shall notify faculty in advance of the due date and request an extension and provide a new due date. Faculty will make a final decision on the late assignment(s). If a new due date is not provided with the request, the student has 3 days post original due date to submit work. If an assignment is submitted late without prior approval or work is submitted late after the approved extension due date, a deduction of 10% of activity points will occur.

Expectations & Responsibilities of Students
The majority of learning occurs outside the actual or virtual classroom during discussions with peers, colleagues, and friends; while researching solutions to practice problems or digesting reading material, and when completing assignments. Students share, examine, and clarify information and learning within the virtual classroom setting and in discussion boards. Students are to be well prepared and actively involved in learning. In order to participate, attending to readings and assignments is essential.

Students are expected to:
- Complete the course acknowledgement to avoid delay in receiving graded work
- Review course updates/announcements and email at least every other day
- Complete all activities and participate in discussion boards as individual work unless otherwise noted
- Communicate clearly and openly with peers and faculty
- Use netiquette and show respect for the opinions and work of others
• Seek assistance for writing and presentation of materials as needed to meet graduate level standards
• Use resources such as: those provided by faculty, articles from journals that are peer reviewed, evidence based material from established bodies (e.g. associations and organization), videos from known entities (JAMA, Cleveland Clinic).
• Avoid referencing resources that are non-peer reviewed (e.g. personal web sites, homemade YouTube videos, blogs, or Wikipedia) as point deductions may incur.
• Review assessment feedback prior to the due date and time.

Technology Requirements
Course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP’s Microsoft Office Portal. Click the following link for more information about Microsoft Office 365 and follow the instructions.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP Help Desk as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

Students and faculty have 24/7/365 support through Blackboard in a variety of ways. The Online Support Center offers phone, chat, and email contact options:

• Online Support Center http://admin.utep.edu/Default.aspx?tabid=74092
• Phone: 1-915-747-4357
• Email Support: helpdesk@utep.edu
• Live Chat: Chat with Us

University resources are also available for students: Monday - Friday from 8:00 am - 5:00 pm MT at the UTEP Help Desk.

Incomplete Grades
Students may receive a grade of an "I" for incomplete work only in exceptional circumstances and with the approval of the instructor. Students who expect to take an incomplete must develop with the professor, a written plan including a time line for completing the course assignments. Although University policy requires completion of all required assignments within one year, the SON policy may be more stringent and the instructor may require completion of course requirements within a shorter time period. Late submissions will not be accepted without prior agreement with instructor.

Scholastic Integrity
Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more, please visit HOOP: Student Conduct and Discipline.

Plagiarism Detecting Software
This course may utilize third party software that has the ability to automatically detect plagiarism on documents submitted for grading. Many of the materials that are posted within this course are protected by copyright law. They may not be copied without a source citation.

Accommodations Policy
The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the UTEP Center for Accommodations and Support Services (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the CASS portal.

HIPAA Statement
HIPAA (Health Insurance Portability and Accountability Act of 1996) is a mandatory federal law that protects patient health information. In keeping with HIPAA guidelines, nursing students shall not, under any circumstance; photocopy, fax, or remove from the agency premises, any component of the patient's medical record. Failure to comply with HIPAA policies will result in disciplinary action which may include course failure and/or dismissal from the nursing program. In addition, legal action may be taken against the student.

Clinical Clearances
You must comply with current Graduate School of Nursing Clinical Compliance policies.

Safety Statement
Graduate students are registered nurses in good standing. As such, it is expected that students will use the requisite knowledge, expertise, and education to provide safe and effective nursing care to any patients with whom they come in contact in their roles as graduate nursing students.

University and Course Resources
UTEP provides a variety of student services and support:

**Technology Resources**
- **Help Desk**: Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

**Academic Resources**
- **UTEP Library**: Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- **University Writing Center (UWC)**: Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- **Math Tutoring Center (MaRCS)**: Ask a tutor for help and explore other available math resources.
- **History Tutoring Center (HTC)**: Receive assistance with writing history papers, get help from a tutor and explore other history resources.
- **RefWorks**: A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

**Individual Resources**
- **Military Student Success Center**: Assists personnel in any branch of service to reach their educational goals.
- **Center for Accommodations and Support Services**: Assists students with ADA-related accommodations for coursework, housing, and internships.
- **Counseling and Psychological Services**: Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.

**COVID-19 Precautions**
Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID-19 testing.
### Course Calendar

**Primary Resources for Learning Each Week:** Assigned Readings, Diagrams/Figures; PowerPoint Slides, Assigned Videos, and Pre (1st) Assessment

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<thead>
<tr>
<th>Week</th>
<th>Readings</th>
<th>Course Activities (Submit in Blackboard)</th>
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</table>
| **Week 1**<br>10/24-10/30 | McCance & Huether, (2019)  
Chapter: 2  
Altered Cellular and Tissue Biology Pages 46-103 |  
Course Acknowledgement  
• Due 10/30 at 11:59 pm MDT  
Self-introduction  
• Due 10/30 at 11:59 pm MDT |
| **Week 2**<br>10/31-11/6 | McCance & Huether, (2019)  
Chapter 3 The Cellular Environment Pages 104-132  
Chapter 7 Innate Immunity  
Topic:  
Systemic Manifestations of Acute Inflammation Page 210  
Chapter 39 Alterations in Renal and Urinary Tract Functions  
Topics:  
Acute Kidney Disease Pages 1263-1267  
Chronic Kidney Disease Pages 1267-1273  
Urinary Tract Infection Pages 1254-1257  
Chapter 40 Alteration in Renal and Urinary Tract Function in Children  
Topics:  
Fluid and Electrolyte Balance in Children Pages 1279-1280  
Glomerulonephritis Pages 1282-1284  
Nephrotic Syndrome Pages 1284-1286  
Urinary Tract Infections Pages 1287-1290 |  
Pre and Post Assessment  
• Due 11/6 at 11:59 pm MDT  
Assignment 1: Clinical Case Study  
• Due 11/6 at 11:59 pm MDT |
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<th>Week</th>
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<th>Course Activities (Submit in Blackboard)</th>
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| **Week 3**  |                                                                                                                                          | Pre and Post Assessment  
• Due 11/13 at 11:59 pm MDT                                                                                   |
| 11/7-11/13 | **McCance & Huether, (2019)**  
Chapter 7 Innate Immunity  
Topic: Chronic Inflammation Pages 210-212  
Chapter 9 Alterations in Immunity and Inflammation  
Topic: Autoimmunity Pages 269-273  
Chapter 29 Alteration of Erythrocyte, Platelet, and Hemostatic Function  
Topics:  
Anemias of Blood Loss (Acute and Chronic) Pages 928-932  
Iron Deficiency Anemia Pages 934-936  
Anemia of Chronic Disease Pages 936-938  
Disorders of Platelets Pages 947-952  
Impaired Hemostasis Page 953  
Chapter 31 Alteration of Hematological Function in Children  
Topics:  
Iron Deficiency Anemia Pages 995-996  
Hemolytic Disease of the Fetus and Newborn Pages 996-999  
Sickle Cell Disease Pages 1000-1004  
Chapter 42 Alterations of Digestive Function  
Topics:  
Peptic Ulcer Disease Page 1332-1336  
Inflammatory Bowel Disease Pages 1337-1338  
Disorders of the Liver Page 1347-1353  
Chapter 43 Alterations of Digestive Function in Children  
Topics:  
Diarrhea Pages 1385-1386  
Gastroesophageal Reflux Disease Page 1379  
Neonatal Jaundice Pages 1386-1387  
Inflammatory Disorders – Liver Pages 1387-1388 |
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<th>Week</th>
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Chapter 5 Genes, Environment-Lifestyle, and Common Diseases  
Topics:  
Alzheimer Disease Pages 173-174  
Bipolar Disorder Page 175  
Chapter 6 Epigenetics and Disease  
Topic:  
Epigenetics and Mental Health Page 182  
Chapter 16 Pain, Temperature Regulation, Sleep, and Sensory  
Topics:  
Chronic Pain Pages 474-477  
Pediatrics and Perception of Pain Page 477  
Aging and Perception of Pain Pages 477  
Chapter 17 Alterations in Cognitive Systems, Cerebral Hemodynamics, and Motor Function  
Topics:  
Acute Confusional States and Delirium Pages 516-519  
Alzheimer’s Disease Pages 520-524  
Vascular Dementia Page 524  
Hypokinesia & Parkinson Disease Pages 536-538  
Chapter 18 Disorders of the Central and Peripheral Nervous Systems and the Neuromuscular Junction  
Topics:  
Degenerative Disorders of the Spine Pages 561-565  
Cerebrovascular disorders Pages 565-572  
Primary Headache Syndrome Pages 573-574  
Chapter 19 Neurobiology of Schizophrenia, Mood Disorders, Anxiety Disorders, and Obsessive Compulsive Disorder  
Topics:  
Mood Disorder – Depression and Bipolar Disorder Pages 605-611  
Anxiety Disorders Pages 611-614 | Pre and Post Assessment  
• Due 11/20 at 11:59 pm MDT  
Assignment 2: Clinical Case Study  
• Due 11/20 at 11:59 pm MDT |
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<th>Week</th>
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<tr>
<td>Week 5</td>
<td>Chapter 20 Alterations of Neurologic Function in Children Topic:</td>
<td>Pre and Post Assessment</td>
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<tr>
<td>11/21-11/27</td>
<td>Epilepsy and Seizure Disorders in Children Pages 633-635</td>
<td>• Due 11/27 at 11:59 pm MDT</td>
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<td>McCance &amp; Huether, (2019)</td>
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<td>Chapter 5 Genes, Environment-Lifestyle, and Common Diseases Topics:</td>
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<td>Coronary Heart Disease Page 167</td>
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<td>Hypertension Page 169</td>
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<td>Chapter 33 Alterations of Cardiovascular Function Topics:</td>
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<td>Deep Venous Thrombosis Pages 1060-1061</td>
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<td>Hypertension Pages 1061-1068</td>
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<td>Atherosclerosis Page 1072</td>
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<td>Peripheral Artery Disease Pages 1072-1074</td>
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<td></td>
<td>Coronary Artery Disease, Myocardial Ischemia, and Acute Coronary Syndrome</td>
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<td>Heart Failure Pages 1098-1103</td>
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<td>Chapter 34 Alterations of Cardiovascular Function in Children Topics:</td>
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<td>Systemic Hypertension Pages 1137-1139</td>
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<td>Childhood Obesity Pages 1139-1140</td>
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<td>Week 6</td>
<td>McCance &amp; Huether, (2019)</td>
<td>Assignment 3: Clinical Case Study</td>
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<tr>
<td>11/28-12/4</td>
<td>Chapter 36 Alterations of Pulmonary Function Topics:</td>
<td>• Due 12/4 at 11:59 pm MDT</td>
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<td></td>
<td>Acute Lung Injury/ Acute Respiratory Distress Syndrome Pages 1174-1176</td>
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<td>Asthma Pages 1177-1181</td>
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<td>Chronic Obstructive Pulmonary Disease Pages 1181-1185</td>
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<td>Pneumonia Pages 1186-1188</td>
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<td>Pulmonary Embolism Pages 1190-1191</td>
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<td>Cor Pulmonale Pages 1192-1193</td>
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<td>Week</td>
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<td><strong>Chapter 36 Alterations of Pulmonary Function in Children</strong>&lt;br&gt;Topics:&lt;br&gt;Infections of the Upper Airway Pages 1206-1209&lt;br&gt;Pediatric Asthma Pages 1218-1220&lt;br&gt;Cystic Fibrosis Pages 1220-1222</td>
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<td><strong>McCance &amp; Huether, (2019)</strong>&lt;br&gt;Chapter 5 Genes, Environment-Lifestyle, and Common Diseases&lt;br&gt;Topics:&lt;br&gt;Breast Cancer Pages 170-171&lt;br&gt;Colorectal Cancer Page 171&lt;br&gt;Prostate Cancer Pages 171-172&lt;br&gt;Diabetes Mellitus Page 172&lt;br&gt;Diabetes Type 1 and 2 Pages 172-173&lt;br&gt;Obesity Page 173&lt;br&gt;Chapter 12 Cancer Biology&lt;br&gt;Topics:&lt;br&gt;Genomic Hallmarks Pages 351-358&lt;br&gt;Cellular Adaptations Pages 358-360&lt;br&gt;Resistance to Destruction Pages 360-364&lt;br&gt;Chapter 22 Alterations of Hormonal Regulation&lt;br&gt;Topics:&lt;br&gt;Alterations of Thyroid Function Pages 676-683&lt;br&gt;Diabetes Mellitus Pages 685-691&lt;br&gt;Chapter 23 Obesity and Disorder of Nutrition&lt;br&gt;Topic:&lt;br&gt;Obesity Pages 715-720&lt;br&gt;Chapter 25 Alterations of Female Reproductive System&lt;br&gt;Topics:&lt;br&gt;Delayed Puberty Page 757&lt;br&gt;Precocious Puberty Pages 757-759</td>
<td><strong>Pre and Post Assessment</strong>&lt;br&gt;• Due 12/10 at 11:59 pm MDT&lt;br&gt;<strong>The post assessment will include questions from the previous weeks.</strong>&lt;br&gt;<strong>Key Learning Points</strong>&lt;br&gt;• Due 12/10 at 11:59 pm MDT</td>
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<td>Week 7</td>
<td>12/5-12/10</td>
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<td>Week</td>
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<td></td>
<td>Primary Amenorrhea Pages 759-760</td>
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<td>Secondary Amenorrhea Pages 760-762</td>
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<td>Abnormal Uterine Bleeding Pages 762-764</td>
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<td>Benign Breast Disease Pages 789-792</td>
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<td>Breast Cancer Pages 792-823</td>
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<td>Chapter 26 Alterations of Male Reproductive System</td>
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<td>Topics:                                                                    Cancer of the Testes Pages 844-846</td>
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<td>Cancer of the Prostate Pages 849-859</td>
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<td>Sexual Dysfunction Pages 859-861</td>
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Edited 10/24/2022 Week 7 Assignment. FN