Course Change Request

Date Submitted: 02/27/18 1:49 pm

Viewing: **NURS 312 : Introduction to Pathophysiology**

Last edit: 02/27/18 1:49 pm
Changes proposed by: brickla1

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Catalog Pages
- NURS - Nursing (NURS)
- BSN-NURS ACI: Nursing - BS, Second Degree BSN Track
- BSN-NURS: Nursing - BS, Traditional BSN

Programs referencing this course

As A Banner Prerequisite:

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Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alisha Brickley-Meyer</td>
<td><a href="mailto:brickley-meyer@tamhsc.edu">brickley-meyer@tamhsc.edu</a></td>
<td>979-436-0132</td>
</tr>
</tbody>
</table>

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Rationale for Course

**Edit**

*The proposed changes are part of a routine curriculum review. The proposed changes are to meet the demand/interest of students.*

Course prefix: NURS  
Course number: 312  
Department: College of Nursing  
College/School: Nursing  
Academic Level: Undergraduate  
Undergraduate course level justification (Select One)

Effective term: **2018-2019**

Complete Course Title
Introduction to Pathophysiology

Abbreviated Course Title
INTRO TO PATHOPHYSIOLOGY

Catalog course description

An introduction to pathophysiologic alterations in major regulatory mechanisms of the body. Provides a foundation for understanding general nursing practice, various diagnostic procedures and selected therapeutic regimens.

Prerequisites and Restrictions

Should catalog prerequisites / concurrent enrollment be enforced?  
No

Crosslistings  
No  
Crosslisted With

Stacked  
No  
Stacked with

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In Workflow

1. CLNU Department Head  
2. Curricular Services Review  
3. NU Committee Preparer  
4. NU Committee Chair  
5. NU College Dean  
6. UCC Preparer  
7. UCC Chair  
8. Faculty Senate Preparer  
9. Faculty Senate  
10. Provost II  
11. President  
12. Curricular Services  
13. Banner

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Approval Path

1. 02/27/18 1:50 pm  
   Brian Holland  
   (beh9828): Approved for CLNU Department Head

2. 02/28/18 1:03 pm  
   Sandra Williams  
   (sandra-williams): Approved for Curricular Services Review

3. 02/28/18 1:22 pm  
   Alisha Brickley-Meyer  
   (brickla1): Approved for NU Committee Preparer

4. 02/28/18 3:15 pm  
   Debra Matthews  
   (dmathews): Approved for NU Committee Chair

5. 02/28/18 3:16 pm  
   Debra Matthews  
   (dmathews): Approved for NU College Dean

6. 03/05/18 9:07 am  
   Sandra Williams  
   (sandra-williams): Approved for UCC Preparer

7. 03/09/18 3:34 pm  
   Sandra Williams  
   (sandra-williams): Approved for UCC Chair

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https://nextcatalog.tamu.edu/courseleaf/approve/
NURS 312: Introduction to Pathophysiology

Semester: 3
Credit: 3
Contact Hour(s): 3
(per week):
Lecture: 3
Lab: 0
Other: 0
Total: 3

Repeatable for credit? No
CIP/Fund Code: 5138010020
Default Grade Mode: Letter Grade(G)
Method of instruction: Lecture and Laboratory
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education) Yes

Learning Outcomes
Meets traditional face-to-face learning outcomes.
Describe how learning outcomes are met or provide justification why they are not met.
Please see additional documentation attached below.

Hours
Meets traditional face-to-face hours.
Describe how hours are met or provide justification why they are not met.
Please see additional documentation attached below.

Will this course be taught as a distance education course? Yes No
I verify that I have reviewed the FAQ for Export Control Basics for Distance Education. Yes No
Is 100% of this course going to be taught in Texas? Yes
Will classroom space be needed for this course? Yes

This will be a required course or an elective course for the following programs:
Required (select program)
Elective (select program)
Has/will this course be (en) submitted for core curriculum consideration? No
Has/will this course be (en) submitted for Writing or Communication consideration? No
Has/will this course be (en) submitted for ICD consideration? No
Course Syllabus

Syllabus: Upload syllabus

Upload syllabus:  
- NURS 312 Proposed Syllabus.pdf
- NURS 312 Syllabus Fall 2017.pdf

Letters of support or other documentation: Yes No

Upload files:  
- NURS 312 Face to Face-Online Course Equivalency Charts.pdf

Additional information: Fall 2017 and new syllabus attached.

Reviewer Comments:  
Sandra Williams (sandra-williams) (02/27/18 1:14 pm): Rollback: Please attach a traditional syllabus and a non-traditional syllabus (if applicable).
Sandra Williams (sandra-williams) (03/09/18 3:34 pm): UCC approved March 9 via e-vote.
Course title and number
NURS 312 Introduction to Pathophysiology

Term (e.g., Fall 200X)
Fall 2017

Meeting times and location
Monday, 0900-1200 in BCS HPEB LL 46; RR S307

Course Description & Prerequisites
NURS 312 serves as an introduction to pathophysiological alterations in major regulatory mechanisms of the body. This course provides a foundation for understanding general nursing practice, various diagnostic procedures, and selected therapeutic regimes.
Prerequisite: Admission to TAMHSC-CON or approval from the Associate Dean of Academic Affairs.

Learning Outcomes
1. Explain the alterations in structure & function that occur with specific pathophysiological disorders.
2. Assess protective & predictive factors, including genetics, which influence the health of individuals, families, & populations.
3. Assess environmental exposure & family history, including genetic risks, to identify current & possible future health problems.
4. Extrapolate from health status, health needs, risk factors, genetics & genomic factors, & epidemiological indicators the anticipated deficit of a given pathophysiologic alteration in the body systems.
5. Compare & contrast alterations within a system noting key differences in the causative process symptoms.
6. Draw conclusions about appropriate treatments for the pathophysiologic alterations based upon the relationship of natural, social, & behavioral sciences.
7. Infer long-term as well as short-term consequences of the pathophysiologic alterations.
8. Evaluate conceptually the currently accepted nursing practices on the basis of knowledge about pathophysiologic alterations & disease management.
10. Develop detailed concept maps identifying compensatory mechanisms, clinical manifestations, treatments, & possible outcomes for key abnormal conditions integrating concepts from human anatomy & physiology, biology, & microbiology.
11. Integrate clinical practice guidelines in pathophysiology concept maps for key alterations in normal function.
12. Utilize effective written & verbal communication in the dissemination of information.

Objectives for this course are based on AACN Essentials supplement of Recommended Baccalaureate Competencies and Curricular Guidelines. In addition, course objectives reflect Texas Board of Nursing Education Department Differentiated Essential Competencies (DECs). There is a table at the end of this syllabus shows how the course objectives align with the College of Nursing Expected Outcomes, AACN Essentials & DECs.

Instructor Information
Name
R. Cody Bruce MSN, RN

Telephone number
Cell 318.332.8900; Office 512.341.4944

Email address
bruce@tamhsc.edu

Office hours
By appointment

Office location
RR N405D (teleconference available)

Textbook and/or Resource Materials

Course Evaluation Methods & Due Dates

<table>
<thead>
<tr>
<th>ASSIGNMENT NAME</th>
<th>POINTS</th>
<th>PLATFORM</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXAM 1</td>
<td>20</td>
<td>Examsoft</td>
<td>M 9/25/17 @ 0900</td>
</tr>
<tr>
<td>EXAM 2</td>
<td>20</td>
<td>Examsoft</td>
<td>M 10/23/17 @ 0900</td>
</tr>
<tr>
<td>EXAM 3</td>
<td>20</td>
<td>Examsoft</td>
<td>M 11/20/17 @ 0900</td>
</tr>
<tr>
<td>PrepU Quizzes</td>
<td>10</td>
<td>PrepU</td>
<td>See Course Schedule</td>
</tr>
<tr>
<td>Presentations</td>
<td>10</td>
<td>N/A</td>
<td>See Course Schedule</td>
</tr>
<tr>
<td>FINAL EXAM</td>
<td>20</td>
<td>HESI</td>
<td>F 12/8/17 @ 0900</td>
</tr>
</tbody>
</table>

TOTAL 100

Every graded assignment is to be completed individually. Textbook use is allowed on exam reviews, PrepU, and presentations but giving or receiving any other unauthorized help will be considered a violation of the Aggie Honor Code and will be referred to the Aggie Honor System Office.

Grading Policies

<table>
<thead>
<tr>
<th>GRADING SCALE</th>
<th>In order to be successful in this course the student must:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 90-100</td>
<td>• Achieve an exam average greater than or equal to 70%</td>
</tr>
<tr>
<td>B = 80-89</td>
<td>• Achieve an overall average of 70% or greater for all graded work</td>
</tr>
<tr>
<td>C = 70-79</td>
<td></td>
</tr>
<tr>
<td>D = 60-69</td>
<td></td>
</tr>
<tr>
<td>F = &lt; 60</td>
<td></td>
</tr>
</tbody>
</table>

In order to be successful in this course the student must:

- Achieve an exam average greater than or equal to 70%
- Achieve an overall average of 70% or greater for all graded work

This course follows the College of Nursing grading policies that are published in the Student Handbook. Per policy all graded assignments and assessments will be calculated to the hundredth (i.e. 99.99). The CON does not round grades. 89.99% is a B and 69.99% or below is not considered a passing grade.

Students must have an average exam score greater or equal to 70% on unit exams and comprehensive final exam to pass the course. You must achieve an average of 70% on the exams BEFORE the remaining content percentages are factored in to your final course grade. If an exam average of 70% is not achieved, then the final grade earned for the course will reflect the average of exam scores.

PrepU Quizzes

PrepU quizzes are assigned as reviews to be completed before 0800 on the date of each exam. The completion of all 3 required PrepU quizzes is required to receive the full 10 points toward your final course grade. No partial credit will be awarded.

Group Presentation

A. Working in groups, students will complete a presentation on a pathophysiology topic (i.e. congestive heart failure, diabetes...).
B. The instructions and grading rubric are posted in eCampus under Course Content area in the Group Presentation folder.
C. This presentation will be done as group work. Groups may not exceed four students and the contribution each group member completes did must be detailed on the appropriate form (see instruction packet).
D. The project will be presented in class and evaluated based on creativity.

Final Course Review

- A comprehensive final review will be administered before the final. There is no HESI-A available for pathophysiology and this review will help the student self-identify content areas that may need more review. The final course review is a practice exam only; score is not reflected on the course grade calculation.

Exams

- Exam content for Exam 1, 2, and 3 comes directly from the objectives found on the COURSE SCHEDULE.
### Exam Platform

<table>
<thead>
<tr>
<th>Exam Platform</th>
<th>Exam</th>
<th># of questions</th>
<th>Length of exam</th>
<th>Exam Question Inquiry form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExamSoft</td>
<td>Exam 1, 2, 3, Final Course Review</td>
<td>50 multiple choice</td>
<td>75 mins &amp; 15 mins rational review</td>
<td>Submit before 2359 on day of exam</td>
</tr>
<tr>
<td>HESI</td>
<td>Final Exam</td>
<td>55 multiple choice (5 pilot)</td>
<td>75 mins &amp; 15 mins rational review</td>
<td>Not Accepted</td>
</tr>
</tbody>
</table>

- Students should arrive at least 15 minutes early on exam days. It is expected at 0900 that you are ready to test – desk clear, computer up & running with the appropriate software, exam downloaded, students separated by 1 chair.
- No communication should occur between students once the exam begins. With the exception of questions to faculty & OIT support related to technical issues but not exam content.
- Each student will be provided a scratch sheet of paper that **MUST** be turned in to faculty at exam completion.
- A raw score will be available at that time but may change (see Statistical Review below). Final score availability is announced via eCampus. HESI final scores will be available immediately after the exam and cannot be adjusted. No notes, photos, etc. of test content will be taken out of the testing area.
- Rationale review must be completed during the testing session and no attempt should be made to save or reproduce exam content. After completing testing & rationale review, students should exit quietly.
- No congregating in the halls – go to another part of the building until class resumes.

### Statistical Review

There is no curving of grades. Following the exam, the course leader will review the exam statistics to see if scoring adjustments need to be made. Scores may **go up or down** based on this review. Example 1: If a question is omitted, those who got it correct may see a score decrease. Example 2: If there is an error in coding & and that error is fixed, some students may get credit for having originally picked the “real” correct answer, whereas those students that picked the response that was initially (but incorrectly) coded as correct will lose credit & see a decrease in exam score.

### Exam Question Inquiries

For questions regarding individual test items, students should email the Course Leader the completed **EXAM QUESTION INQUIRY FORM** (located in the Course Documents> Other Course Documents folder) **no later than 2359 the day of the exam.** Faculty decisions are considered final. The faculty reserves the right to limit the number of appeals if this process is deemed as being used inappropriately. Inappropriate use includes but is not limited to submitting an excessive number of appeals or working on these during lecture time. There will be no item appeals allowed for HESI examinations – these are standardized national assessments and no questions will be omitted & no alternate answers accepted.

### Remediation

Any student that scores 70 or less on Exam 1, 2, or 3 is responsible for completing the **REMEDIATION FORM** located under **OTHER COURSE DOCUMENTS** folder and submitting it to the course leader via email or hand delivery no later than the next class meeting. This form contains useful links and tips for studying & test taking that may be of interest to other students who are not satisfied with the grades that they are earning.

### Attendance & Makeup Policies

Class attendance and active participation are expected of each student. Being present for class discussions is highly recommended for your success.

### Make-up Policy

Every attempt should be made to take exams as scheduled. In an emergency, notify the course leader 2 hours prior to the scheduled exam. Make-up exams are not guaranteed & are handled on a case-by-case basis. Make-up exams may not be a duplicate of the original and may include alternate formats such as short answer. **There will be no extensions for reviews so I highly advise you to complete assignments well before the final due date.**

### Communication

Important information will be communicated to you by either email or eCampus announcements. Please check our course regularly as I post announcements fairly frequently. Your emails and texts are **always** welcome. Keep in mind I do check both
regularly but inquiries sent during the weekend likely will not be answered until the following Monday. Keep this in mind the week prior to the due date of an exam or assignment so that you can have questions answered in a timely fashion.

**Americans with Disabilities Act (ADA)**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit [http://disability.tamu.edu](http://disability.tamu.edu).

**Academic Integrity**
*For additional information please visit: [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu)*

“An Aggie does not lie, cheat, or steal, or tolerate those who do.”

**TAMU & College of Nursing (CON) Policies & Pertinent Course Information**
Refer to the Blackboard course site and the current College of Nursing Student Handbook & Universal Syllabus – all information contained in these documents applies to this course.

**Syllabus Disclaimer**
While the provisions of this syllabus are as accurate and complete as possible, faculty reserve the right to change any provisions herein without advance notice if circumstances so warrant.

### Course Learning Outcomes Alignment Table

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Texas A&amp;M CON Expected Student Outcomes</th>
<th>Texas BON Differentiated Essential Competencies (DECs)</th>
<th>AACN Essentials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain the alterations in structure and function that occur with specific pathophysiological disorders.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanities and the natural, psychological, and sociological sciences as the foundation for professional nursing practice.</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care.</td>
<td>1.1 Integrate theories and concepts from liberal education into nursing practice. Also 1.2, 9.3</td>
</tr>
<tr>
<td>2. Assess protective and predictive factors, including genetics, which influence the health of individuals, families, and populations.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanities and the natural, psychological, and sociological sciences as the foundation for professional nursing practice. 4. Utilize the nursing process in the holistic care of diverse individuals, families, groups, communities, and populations.</td>
<td>2c. Synthesize comprehensive assessment data to identify problems, formulate goals/ outcomes, and develop plans of care for patients, families, populations, and communities using information from evidence-based practice and published research in collaboration with the above groups and the interdisciplinary health care team. Also 1b.</td>
<td>9.2 Recognize the relationship of genetics and genomics to health, prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness, using a constructed pedigree from collected family history information as well as standardized symbols and terminology. Also 1.1, 1.2, 9.1</td>
</tr>
<tr>
<td>3. Assess environmental exposure and family history, including genetic risks, to identify current and future health problems.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanities and the natural, psychological, and sociological sciences as the foundation for professional nursing practice. Also #4</td>
<td>2c. Synthesize comprehensive assessment data to identify problems, formulate goals/outcomes, and develop plans of care for patients, families, populations, and communities using information from evidence-based practice and published research in collaboration with the above groups and the interdisciplinary health care team. Also 1b, 3c.</td>
<td>7.1 Conduct a health history, including environmental exposure and a family history that recognizes genetic risks, to identify current and future health problems. Also 1.1, 1.2, 9.1, 9.2</td>
</tr>
<tr>
<td>4. Extrapolate from health status, health needs, risk factors, genetics and genomic factors, and epidemiological indicators the anticipated deficit of a given pathophysiologic alteration in the body systems.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanities and the natural, psychological, and sociological sciences as the foundation for professional nursing practice. Also #4</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care. Also 1b, 3c.</td>
<td>9.2 Recognize the relationship of genetics and genomics to health, prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness, using a constructed pedigree from collected family history information as well as standardized symbols and terminology. Also 1.5, 7.5</td>
</tr>
<tr>
<td>5. Compare and contrast alterations within a system noting key differences in the causative process symptoms.</td>
<td>2. Apply concepts and theories as a base for problem-solving decision-making and critical reasoning in evidenced based nursing practice.</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care.</td>
<td>1.3 Use skills of inquiry, analysis, and information literacy to address practice issues.</td>
</tr>
<tr>
<td>6. Draw conclusions about appropriate treatments for the pathophysiologic alterations based upon the relationship of natural, social, and behavioral sciences.</td>
<td>2. Apply concepts and theories as a base for problem-solving decision-making and critical reasoning in evidenced based nursing practice. Also #4 &amp; 5</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care.</td>
<td>1.2 Synthesize theories and concepts from liberal education to build an understanding of the human experience. Also 7.5</td>
</tr>
<tr>
<td>7. Infer long-term as well as short-term consequences of the pathophysiologic alterations.</td>
<td>2. Apply concepts and theories as a base for problem-solving decision-making and critical reasoning in evidenced based nursing practice. Also #4 &amp; 5</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care.</td>
<td>1.7 Integrate the knowledge and methods of a variety of disciplines to inform decision making.</td>
</tr>
<tr>
<td>8. Evaluate conceptually the currently accepted nursing practices on the basis of knowledge about pathophysiologic alterations and disease management.</td>
<td>2. Apply concepts and theories as a base for problem-solving decision-making and critical reasoning in evidenced based nursing practice.</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care. Also 2c</td>
<td>7.5 Use evidence-based practices to guide health teaching, health counseling, screening, outreach, disease and outbreak investigation, referral, and follow-up throughout the lifespan. Also 1.2, 1.7</td>
</tr>
<tr>
<td>9. Assume responsibility for professional growth and lifelong learning.</td>
<td>12. Demonstrate accountability for lifelong learning and professional growth.</td>
<td>1d. Demonstrate responsibility for continued competence in nursing practice, and develop insight through reflection, self-analysis, self-care, and lifelong learning. Also 1a, 1b</td>
<td>1.9 Value the ideal of lifelong learning to support excellence in nursing practice. Also 8.13</td>
</tr>
<tr>
<td>Date</td>
<td>Week</td>
<td>Topic Objectives</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>------------------</td>
<td></td>
</tr>
</tbody>
</table>
| 8/28  | 1    | - Skim Porth text, pages listed below  
|       |      |   o Chapter 1, 5, 6, 7, & 9  
|       |      | - Review Prezi in eCampus on Genetics  
|       |      | - Consider completing chapter quizzes in PrepU to check your understanding. Achieving a Master Level of “3” or above is your goal.  
|       |      | **Course Intro** – Discussion of syllabus and course schedule.  
|       |      | **Health & Disease** (pp.2-7)  
|       |      |   - Discuss the concepts of health and disease  
|       |      |   - Define pathophysiology  
|       |      | **Cellular Adaptation, Injury, & Death** (pp.101-116)  
|       |      |   - Cite the general purpose of changes in cell structure and function that occur as a result of normal adaptive processes.  
|       |      |   - Describe cell changes that occur with atrophy, hypertrophy, hyperplasia, metaplasia, and dysplasia, and state general conditions under which the changes occur.  
|       |      | **Stress & Adaptation** (pp. 202-213)  
|       |      |   - Apply the concept of homeostasis to normal body processes  
|       |      |   - State Selye’s definition of stress  
|       |      |   - Explain the interactions among components of the nervous system in mediating the stress response  
|       |      |   - Describe the stress response of the autonomic nervous system, the endocrine system, the immune system, and the musculoskeletal system.  
|       |      |   - Describe the physiologic and psychological effects of a chronic stress response.  
|       |      | **Genetics & Congenital Disorders** (pp. 125-126, Summary 127, 130-139, 142-146)  
|       |      |   - Explain the role of transcription in regulating gene activity  
|       |      |   - Contrast genotype and phenotype  
|       |      |   - Define the terms allele, locus, expressivity, and penetrance.  |
• Describe the inheritance of recessive, dominant, and sex-linked traits
• Differentiate between chromosomal, single-gene, and multifactorial inheritance disorders
• Construct a Punnett square to predict inheritance
• Describe the process of genetic assessment

9/4 2
• Skim the pages listed below
  a. Chapter 8, 12, 13, 14, 15, & 16
• Consider completing chapter quizzes in PrepU to check your understanding. Achieving a Master Level of “3” or above is your goal.

Innate & Adaptive Immunity (pp. 277-303)
• Discuss the function of the immune system
• Contrast and compare the general properties of innate and adaptive immunity

Inflammation and Wound Healing (pp. 306-309, 321-322, 324-326)
• Identify the five cardinal symptoms of the body's normal inflammatory response
• Identify the major chemical mediators of inflammation and describe their effects
• Trace the wound-healing process through the inflammatory, proliferative, and remodeling phases.
• Describe factors that affect wound healing

Mechanisms of Infection (pp. 261, 262-268)
• Summarize mechanisms of infection
• Describe the stages of an infectious disease after the potential pathogen has entered the body.
• Discuss the risk factors, clinical manifestations, and selected treatments for sepsis

Alterations in Immunity (pp. 329, Summary 340, 341-350, 353-357, 361-377)
• Describe the pathogenesis of the four major hypersensitivity reactions and differentiate among them
• Describe general mechanisms of common autoimmune diseases

HIV & AIDS (pp. 361-377)
• State the virus responsible for AIDS and explain how it differs from most other viruses.
• Describe the mechanisms of HIV transmission and relate them to the need for public awareness and concern regarding the spread of AIDS.
• Discuss the difference between HIV and AIDS
• Describe the alterations in immune function that occur in persons with AIDS and relate these to the systemic manifestations

Neoplasia (Summary on 166, 166-186, plus pages below)
• Define neoplasm and explain how neoplastic growth differs from the normal adaptive changes seen in atrophy, hypertrophy, and hyperplasia.
• Trace the pathway of hematologic spread of a metastatic cancer cell.
• Describe genetic events and epigenetic factors that are important in tumorigenesis.
• Discuss the treatment goals for chemotherapy, radiation, and surgery for cancer
• Describe physiologic basis for potential side effects of chemotherapy (p.193)

9/11 3
• Skim pp. 1019-1082
  o Chapter 38, 39, & 40
• Consider completing chapter quizzes in PrepU to check your understanding. Achieving a Master Level of “3” or above is your goal.

Fluids, Electrolytes
A. Differentiate the intercellular from the extracellular fluid compartments in terms of distribution and composition of water, electrolytes, and other osmotically active solutes.
B. Describe the control of cell volume and the effect of isotonic, hypotonic, and hypertonic solutions on cell size.
C. State the functions and physiologic mechanisms controlling body water levels and sodium concentration, including the effective circulating volume, sympathetic nervous system, renin-angiotensin-aldosterone system, and antidiuretic hormone.
D. Contrast fluid volume excess and fluid volume deficit
E. Distinguish clinical manifestations and common pathogenesis of electrolyte disorders
   i. Hyponatremia, Hypernatremia
   ii. Hypokalemia, Hyperkalemia
   iii. Hypocalcemia, Hypercalcemia
iv. Hypophosphatemia, Hyperphosphatemia
v. Hypomagnesemia, Hypermagnesemia

**Acid-Base Balance**
- Compare the roles of the kidneys and respiratory system in regulation of acid-base regulation.
- Define and describe the common causes of metabolic acidosis, metabolic alkalosis, respiratory acidosis, and respiratory alkalosis.

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*The respiratory lecture has been posted as an independent review. After completing this module, please contact Prof. Bruce if you have any further questions.*

- Skim pp. 921-922, 967-968, 973-978, pages listed below, & all summaries in chapter 35
- **Chapter 35, 36, & 37**
  - Consider completing chapter quizzes in PrepU to check your understanding.
  - **Complete Test 1 Review** on PrepU at least one time. You may retake the review one additional time.

**Respiratory**
1. Define and compare the terms hypoxemia and hypercapnia.
2. Describe Chronic Obstructive Pulmonary Disorder, differentiating pathology and clinical manifestations of emphysema and chronic bronchitis.
3. Discuss alterations in structure or function, clinical manifestations, risk factors, and selected treatments for the following key abnormalities:
4. Pneumonia pp.934-938
5. Tuberculosis pp.939-942
6. Pleural effusion pp.963-964
7. Pneumothorax pp.965-966
8. Asthma pp.969-972
9. Pulmonary Embolism pp.984-986
10. Pulmonary Hypertension pp.986-988
11. ARDS/Resp Failure pp.989-993
12. Lung Cancer pp.945-948

9/25 5

**Exam 1 (Content: Wks 1-4)**
- 75 minutes long, 50 questions
- Plan to arrive 15 minutes early & be prepared to begin at 0900

*The lecture following this exam has been posted as an independent review. Based on course feedback and requests from prior students, exam fatigue impedes the ability to absorb new content. Please contact Prof. Bruce if you have any further questions after completing this module.*

  - **Chapter 29, 30, 31, 32, 33, & 34**

B. Consider completing chapter quizzes in PrepU to check your understanding.

**Cardiovascular (10:30-12p)**
- Compare and contrast the alterations in structure or function, risk factors, clinical manifestations, and treatments for
  - Atherosclerotic occlusive disease
  - Acute Arterial occlusion
  - Peripheral Vascular Disease
  - Venous Thrombosis
- Discuss hypertension including definition, etiology, pathogenesis, and complications
- Contrast pericarditis and endocarditis
- Identify clinical manifestations of coronary artery disease
- Differentiate between the cardiomyopathies
- Compare & contrast the clinical manifestations of cardiac valve disorders
  - Aortic Stenosis
### Aortic Regurgitation
- Mitral Stenosis
- Mitral Regurgitation

- Distinguish between cardiac conduction abnormalities using characteristics of the ECG tracing for the following rhythms:
  - Bradycardia
  - Tachycardia
  - Atrial Fibrillation
  - Ventricular Fibrillation

- Distinguish left sided heart failure from right sided heart failure
- Describe the various classifications of shock

#### Hematology
- Interpret a Complete Blood Cell Count
- Correlate abnormalities in formed blood cells to clinical manifestations
- Describe normal clotting mechanisms
- Discuss alterations in structure or function, risk factors, clinical manifestations, and selected treatments for thrombocytopenia, coagulation factor deficiencies, & Disseminated intravascular coagulation
- Summarize the life cycle of a red blood cell, including formation, transport, and elimination
- Discuss alterations in structure or function, risk factors, clinical manifestations, and selected treatments for Iron Deficiency Anemia, Megaloblastic Anemias, Sickle Cell Disease, & Aplastic Anemia
- Compare & contrast Non-Hodgkin and Hodgkin lymphomas
- Discuss the four major classifications of leukemia

#### Renal and GU
- Review Starling’s Forces
- Discuss alterations in structure or function, risk factors, clinical manifestations, and selected treatments for the following conditions:
  - Renal Calculi
  - Urinary Tract Infections
  - Glomerulonephritis
  - Pyelonephritis
- Differentiate between acute kidney injury and chronic kidney disease
- Explain the systemic manifestations of CKD and identify selected treatments and lifestyle/dietary modifications
- State the most common sign of bladder cancer
- Correlate the alterations in structure to the clinical manifestations exhibited by men with Benign Prostatic Hyperplasia

### Endocrine
- Identify the source and major action of the following hormones: CRH, TRH, GHRH, Somatostatin, GH, ACTH, TSH, ADH, Aldosterone, Cortisol, Androgens, Epinephrine, Norepinephrine, Thyroid hormone, Calcitonin, PTH, Insulin, Glucagon (Table 48.1 p.1266)
- Describe the role of the hypothalamus and pituitary gland in regulating pituitary control of endocrine function
- Identify the role of growth hormone including consequences of hypo- or hyper-secretive states
- Discuss alterations in structure or function, identify compensatory mechanisms, clinical manifestations, risk factors, and treatments for
  A. Hypothyroidism
  B. Hyperthyroidism
  C. Cushing Disease
  D. Addison Disease

**Diabetes Mellitus**
- Contrast the hormones glucagon and insulin
- Discuss alterations in structure or function, identify compensatory mechanisms, clinical manifestations, risk factors, and treatments for the following key abnormal conditions: Diabetes Mellitus I, Diabetes Mellitus II, and Metabolic Disorder
- Discuss the acute complications of diabetes mellitus
- Contrast Diabetic Ketoacidosis & Hyperosmolar Hyperglycemic Syndrome
- Discuss the chronic complications of diabetes mellitus

**Exam 2 (Content: Wks 5-8)**
- 75 minutes long, 50 questions
- Plan to arrive 15 minutes early & be prepared to begin at 0900

*The lecture following this exam has been posted as an independent review. Based on course feedback and requests from prior students, exam fatigue impedes the ability to absorb new content. Please contact Prof. Bruce if you have any further questions after completing this module.*

A. Skim pp. 383-387, Summary on 391, Summary on 412-413, Summary on 420, Summary on 442, 443-444, 496-500, 503-505, 506-514, 519-523, & pages listed below in objectives
   - Chapter 17, 18, 19, & 20

B. Consider completing chapter quizzes in PrepU to check your understanding.

**Neuro**
- Distinguish between functions of the neurons and neuroglial cells of nervous system
- Explain the metabolic requirements of nervous tissue
- Summarize the gate control theory of pain
- Differentiate between neuropathic pain, neuralgias, and phantom limb pain
- Discuss alterations in structure or function, risk factors, clinical manifestations, and selected treatments for the following conditions:
  A. Muscular Dystrophy pp.461-463
  B. Myasthenia gravis pp.464-465
  C. Guillain-Barre pp.467
  D. Parkinson Disease pp.472-475
  E. ALS pp.476
  F. Multiple Sclerosis pp.476-479
- Differentiate between epidural, subdural, and intracerebral bleeds
- Compare and contrast ischemic and hemorrhagic stroke
- Describe the alterations in structure, risk factors, and clinical manifestations of subarachnoid hemorrhage/cerebral aneurysm.

**GI, Hepatobiliary & Pancreatic Disorders**
- Describe common manifestations of GI tract disorders to include anorexia, nausea, vomiting, diarrhea, and constipation
- Discuss alterations in structure or function, risk factors, clinical manifestations, and selected treatments for the following conditions:
• Hiatal hernia pp.1174
• Gastroesophageal Reflux pp.1174-1175
• Peptic Ulcer Disease pp.1180-1182
• Diverticular Disease pp.1192
• Appendicitis pp.1193
• Colorectal Cancer pp.1202-1204

• Compare and contrast the etiology and pathogenesis, clinical manifestations, and treatment for the inflammatory bowel diseases Crohn Disease and Ulcerative Colitis
• Cite possible causes and describe the clinical manifestations of acute and chronic pancreatitis
• Compare and contrast cholelithiasis and cholecystitis
• Describe the functions of the liver and manifestations of altered function (Table 46.1)
• Describe intrahepatic and post-hepatic causes of jaundice
• Compare Hepatitis A, B, C, D, and E in terms of transmission and prevention.
  ▪ Describe cirrhosis and portal hypertension and relate it to development of ascites, esophageal varices, and splenomegaly

11/6 11
A. **Skim** pp.1433-1443, 1444-1460, 1565-1570, & pages listed in objectives below
   a. **Chapter 56, 57, & 61**
B. **View** the voiceover PowerPoints by Prof. Bruce posted on eCampus.
C. **Consider** completing chapter quizzes in PrepU to check your understanding.
D. **Complete Test 3 Review** on PrepU at least one time. You may retake the review one additional time.

**Integument & Burns**
• Correlate the pathophysiology of burn injury to the major complications
• Calculate total body surface area affected by a burn using the rule of 9s

**Musculoskeletal**
• State the function of parathyroid hormone, calcitonin, and vitamin D in terms of bone formation and metabolism
• Differentiate between contusion, hematoma, and laceration
• Compare and contrast the traumatic musculoskeletal injuries: Fractures, Dislocations, Sprains, Strains
• Examine complications of musculoskeletal injuries to include compartment syndrome, venous thromboembolism, and fat embolism
• Trace the mechanism of Osteomalacia (pp.1493-1494)
• Summarize alterations in structure or function, risk factors, clinical manifestations, and treatments for the following musculoskeletal disorders: Osteomyelitis, Osteoporosis, Rheumatoid Arthritis, Osteoarthritis, & Gout.

11/13 12
**Final Course Review (Comprehensive Review)**
• 75 minutes long, 50 questions
• Plan to arrive 15 minutes early & be prepared to begin at 0900

**Consider retaking** Test 1, Test 2, Test 3 Reviews on PrepU. You may retake the reviews one additional time. This is great practice for the Final HESI Exam.

**Group Presentations**

11/20 13
**Exam 3 (Content: Wks 9-11)**
• 75 minutes long, 50 questions
• Plan to arrive 15 minutes early & be prepared to begin at 0900

**Course leaders from Patho, Pharm, Health Assessment, and Fundamentals opted to: Move the Patho course review to Week 12 and move Exam 3 to Week 13 to prevent students from having two exams on the same day and three exams that week.**

**Group Presentations**

11/27 14
**Group Presentations**
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/8</td>
<td>0900</td>
<td><strong>Final HESI Exam – 0900 BCS: LL46, RR: S306</strong></td>
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<tr>
<td></td>
<td></td>
<td>• 75 minutes long, 55 questions (5 pilot questions)</td>
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<tr>
<td></td>
<td></td>
<td>• Plan to arrive 15 minutes early &amp; be prepared to begin at 0900</td>
</tr>
</tbody>
</table>
# SYLLABUS

**Course title and number**  
NURS 312 Introduction to Pathophysiology

**Term**  
Summer 2018

**Meeting times and location**  
Online

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## Course Description & Prerequisites

NURS 312 serves as an introduction to pathophysiological alterations in major regulatory mechanisms of the body. This course provides a foundation for understanding general nursing practice, various diagnostic procedures, and selected therapeutic regimes.

Prerequisite: Admission to TAMHSC-CON or approval from the Associate Dean of Academic Affairs.

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## Learning Outcomes

1. Explain the alterations in structure & function that occur with specific pathophysiological disorders.
2. Assess protective & predictive factors, including genetics, which influence the health of individuals, families, & populations.
3. Assess environmental exposure & family history, including genetic risks, to identify current & possible future health problems.
4. Extrapolate from health status, health needs, risk factors, genetics & genomic factors, & epidemiological indicators the anticipated deficit of a given pathophysiologic alteration in the body systems.
5. Compare & contrast alterations within a system noting key differences in the causative process symptoms.
6. Draw conclusions about appropriate treatments for the pathophysiologic alterations based upon the relationship of natural, social, & behavioral sciences.
7. Infer long-term as well as short-term consequences of the pathophysiologic alterations.
8. Evaluate conceptually the currently accepted nursing practices on the basis of knowledge about pathophysiologic alterations & disease management.
10. Develop detailed concept maps identifying compensatory mechanisms, clinical manifestations, treatments, & possible outcomes for key abnormal conditions integrating concepts from human anatomy & physiology, biology, & microbiology.
11. Integrate clinical practice guidelines in pathophysiology concept maps for key alterations in normal function.
12. Utilize effective written & verbal communication in the dissemination of information.

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## Instructor Information

**Name**  
Rickie Jo Bonner DNP RN CHSE CNE

**Telephone number**  
Cell (979)743-0359

**Email address**  
bonner@tamhsc.edu

**Office hours**  
Thursdays 1000-1200 or by appointment

**Office location**  
HPEB 3035 (Bryan Campus)
## Course Learning Outcomes Alignment Table

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Texas A&amp;M CON Expected Student Outcomes</th>
<th>Texas BON Differentiated Essential Competencies (DECs)</th>
<th>AACN Essentials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain the alterations in structure and function that occur with specific pathophysiological disorders.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanities and the natural, psychological, and sociological sciences as the foundation for professional nursing practice.</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care.</td>
<td>1.1 Integrate theories and concepts from liberal education into nursing practice. Also 1.2, 9.3</td>
</tr>
<tr>
<td>2. Assess protective and predictive factors, including genetics, which influence the health of individuals, families, and populations.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanities and the natural, psychological, and sociological sciences as the foundation for professional nursing practice.</td>
<td>2c. Synthesize comprehensive assessment data to identify problems, formulate goals/outcomes, and develop plans of care for patients, families, populations, and communities using information from evidence-based practice and published research in collaboration with the above groups and the interdisciplinary health care team. Also 1b.</td>
<td>9.2 Recognize the relationship of genetics and genomics to health, prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness, using a constructed pedigree from collected family history information as well as standardized symbols and terminology. Also 1.1, 1.2, 9.1, 9.2</td>
</tr>
<tr>
<td>3. Assess environmental exposure and family history, including genetic risks, to identify current and future health problems.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanities and the natural, psychological, and sociological sciences as the foundation for professional nursing practice. Also #4</td>
<td>2c. Synthesize comprehensive assessment data to identify problems, formulate goals/outcomes, and develop plans of care for patients, families, populations, and communities using information from evidence-based practice and published research in collaboration with the above groups and the interdisciplinary health care team. Also 1b, 3c.</td>
<td>7.1 Conduct a health history, including environmental exposure and a family history that recognizes genetic risks, to identify current and future health problems. Also 1.1, 1.2, 9.1, 9.2</td>
</tr>
<tr>
<td>4. Extrapolate from health status, health needs, risk factors, genetics and genomic factors, and epidemiological indicators the anticipated deficit of a given pathophysiologic alteration in the body systems.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanities and the natural, psychological, and sociological sciences as the foundation for professional nursing practice. Also #4</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care. Also 1b, 3c</td>
<td>9.2 Recognize the relationship of genetics and genomics to health, prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness, using a constructed pedigree from collected family history information as well as standardized symbols and terminology. Also 1.5, 7.5</td>
</tr>
<tr>
<td>5. Compare and contrast alterations within a system noting key differences in the causative process symptoms.</td>
<td>2. Apply concepts and theories as a base for problem-solving decision-making and critical reasoning in evidenced based nursing practice.</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care.</td>
<td>1.3 Use skills of inquiry, analysis, and information literacy to address practice issues.</td>
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<tr>
<td>6. Develop 02/2018 RJB</td>
<td>2. Apply concepts and theories as a base for problem-solving decision-making and critical reasoning in evidenced based nursing practice. Also #4 &amp; 5</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care. Also 2c</td>
<td>1.2 Synthesize theories and concepts from liberal education to build an understanding of the human experience. Also 7.5</td>
</tr>
<tr>
<td>7. Infer long-term as well as short-term consequences of the pathophysiologic alterations.</td>
<td>2. Apply concepts and theories as a base for problem-solving decision-making and critical reasoning in evidenced based nursing practice. Also #4 &amp; 5</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care. Also 2c</td>
<td>1.7 Integrate the knowledge and methods of a variety of disciplines to inform decision making.</td>
</tr>
<tr>
<td>8. Evaluate conceptually the currently accepted nursing practices on the basis of knowledge about pathophysiologic alterations and disease management.</td>
<td>2. Apply concepts and theories as a base for problem-solving decision-making and critical reasoning in evidenced based nursing practice.</td>
<td>2a. Use clinical reasoning and knowledge based on the baccalaureate degree nursing program of study, evidence-based practice outcomes, and research studies as the basis for decision-making and comprehensive patient care. Also 2c</td>
<td>7.5 Use evidence-based practices to guide health teaching, health counseling, screening, outreach, disease and outbreak investigation, referral, and follow-up throughout the lifespan. Also 1.2, 1.7</td>
</tr>
<tr>
<td>9. Assume responsibility for professional growth and lifelong learning.</td>
<td>12. Demonstrate accountability for lifelong learning and professional growth.</td>
<td>1d. Demonstrate responsibility for continued competence in nursing practice, and develop insight through reflection, self-analysis, self-care, and lifelong learning. Also 1a, 1b</td>
<td>1.9 Value the ideal of lifelong learning to support excellence in nursing practice. Also 8.13</td>
</tr>
<tr>
<td>10. Develop detailed concept maps identifying compensatory mechanisms, clinical manifestations, treatments, and possible outcomes for key abnormal conditions integrating concepts from human anatomy and physiology, biology, and microbiology.</td>
<td>1. Integrate concepts, models, and theories of nursing, the humanized learning and the natural, psychological, and sociological sciences as the foundation for professional nursing practice.</td>
<td>2b. Determine the physical and mental health status, needs, and preferences of culturally, ethnically, and socially diverse patients, families, populations, and communities based upon interpretation of comprehensive health assessment findings compared with evidence-based health data and a synthesis of knowledge derived from a baccalaureate degree nursing program of study. Also 2a, 2c, 2g</td>
<td>1.2 Synthesize theories and concepts from liberal education to build an understanding of the human experience. Also 1.3, 7.5, 9.3, 9.4</td>
</tr>
<tr>
<td>11. Integrate clinical practice guidelines in pathophysiology concept maps for key alterations.</td>
<td>5. Apply current standards of professional nursing practice in providing care to individual, families, groups, communities and populations. Also #9</td>
<td>2f. Evaluate and report patient, family, population, and community outcomes and responses to therapeutic interventions in comparison to benchmarks from evidence-based practice and research findings, and plan follow-up nursing care. Also 2a</td>
<td>1.7 Integrate the knowledge and methods of a variety of disciplines to inform decision making. Also 3.9, 8.12</td>
</tr>
<tr>
<td>12. Utilize effective written and verbal communication in the dissemination of information.</td>
<td>3. Use effective and therapeutic communication in formal and informal interaction with clients, colleagues and other members of health care team.</td>
<td>4e. Communicate and manage information using technology to support decision making to improve patient care and delivery systems. Also 2f, 2g</td>
<td>1.4 Use written verbal, nonverbal, and emerging technology methods to communicate effectively. Also 3.4, 3.7, 6.3, 9.3, 9.4</td>
</tr>
</tbody>
</table>
Required Learning Material:
  (This gives access to the eCampus online modules and activities)
- Textbook ISBN: 9780323354097 $124 (used is acceptable)


Optional:

Course Evaluation Methods & Due Dates

<table>
<thead>
<tr>
<th>ASSIGNMENT NAME</th>
<th>POINTS</th>
<th>PLATFORM</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>15</td>
<td>ExamSoft</td>
<td>06/13</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15</td>
<td>ExamSoft</td>
<td>06/27</td>
</tr>
<tr>
<td>Exam 3</td>
<td>15</td>
<td>ExamSoft</td>
<td>07/18</td>
</tr>
<tr>
<td>Exam 4</td>
<td>15</td>
<td>ExamSoft</td>
<td>08/01</td>
</tr>
<tr>
<td>Case Studies</td>
<td>20</td>
<td>Collaborate Ultra</td>
<td>06/06, 06/20, 07/11, 07/25</td>
</tr>
<tr>
<td>(4 worth 5 points each)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL EXAM</td>
<td>20</td>
<td>HESI</td>
<td>??</td>
</tr>
</tbody>
</table>

Every graded assignment is to be completed individually.
You are expected to follow the Aggie Honor Code.

Grading Policies

<table>
<thead>
<tr>
<th>GRADING SCALE</th>
<th>In order to be successful in this course the student must:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 90-100</td>
<td>• Achieve an exam average greater than or equal to 70%</td>
</tr>
<tr>
<td>B = 80-89</td>
<td>• Achieve an overall average of 70% or greater for all graded work</td>
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<tr>
<td>C = 70-79</td>
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<tr>
<td>D = 60-69</td>
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<tr>
<td>F = &lt; 60</td>
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</tbody>
</table>

This course follows the College of Nursing grading policies that are published in the Student Handbook. Per policy all graded assignments and assessments will be calculated to the hundredth (i.e. 99.99). The CON does not round grades. *89.99% is a B and 69.99% or below is not considered a passing grade.*

Faculty Expectations:
This course is provided in an online format. The Course Syllabus and Calendar is provided in detail to provide direction for successful completion of the course. Students are expected to follow specific directions given in course assignments.
Attendance and Absences:
The submission deadline for all assignments is by 11:59 pm on the designated due date specified on the course calendar. It is the student’s responsibility to contact the appropriate faculty for a missed or late assignment. Late assignments (other than discussion boards) will be reduced by 10% per day unless otherwise determined by the course faculty. Assignments that contain discussion boards will follow the policy described under Section VI. Exceptions are made for extraordinary circumstances, if the request is handled proactively and in a professional manner. Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible (prior to the due date and time) so that options can be discussed. Students who have an approved excused absence must complete any missed work within two weeks of the approval date.

It is the student’s responsibility to view the content in each weekly module and to make sure his/her computer is compatible with eCampus. Technical difficulties with accessing links within presentations and/or technical glitches will not be an excuse for incomplete or late assignments. Students receive the due dates for all assignments at the start of the course. If a technical issue prevents submission of the assignment to the appropriate submission area, then the assignment should be submitted to faculty via email to demonstrate timely completion of the assignment.

For additional expectations and procedures, please refer to Texas A&M Student Rules available at: http://student-rules.tamu.edu/ and to the TAMHSC College of Nursing Student Handbook available at: http://tinyurl.com/undergraduate-student-handbook

Electronic Communication and Etiquette:
As this is an online course, it is important to be aware of appropriate etiquette for online communication. The objective in any online communication is to be collaborative, not combative. Please proofread your work carefully before you post and/or send to make sure that it will not be offensive to others. Use communication to develop your skills in collaboration and teamwork. Treat discussion and communication areas as a creative environment where you and your peers can ask questions, express opinions, revise opinions, and take positions just as you would in a more traditional classroom setting. Always be respectful of others, but scholarly disagreements are fine. These comments provide an alternative perspective with a discussion of your point of view. Share your own experiences, but use empirical resources in the analysis for a better grade. Always use professional language free of vulgarity, swearing, or cursing. You may ask questions to further discussion, or post additional resources such as articles, websites video clips, etc.

General Information:
This course consists of multiple weekly learning modules. Weekly modules will open on Wednesday at 0001 Central Standard Time (CST) and must be completed by Tuesday at 2359 CST.

Exams

Students will take all exams using a virtual proctoring service called Examity. Virtual proctoring refers to service where a remote proctor will assist students individually in getting each exam started and watch the student for the duration of the exam. The student will need to have a webcam, microphone, solid internet connection, and a quiet space to test. The proctor will view the student and the student’s computer screen. More information will be provided on how to set up Examity for testing within eCampus. The College of Nursing Instructional Design team will send instructions and announcements to guide students through the exam taking process.

What info should be here for the HESI for an online class?

Statistical Review
There is no curving of grades. Following the exam, the course leader will review the exam statistics to see if scoring adjustments need to be made.
Remediation
Any student that scores 70 or less on Exam 1, 2, 3 or 4 is responsible for completing the RE
MEDICATION FORM located under OTHER COURSE DOCUMENTS folder and submitting it to the course leader via email or hand delivery no later than 3 days after the exam grades are posted. This form contains useful links and tips for studying & test taking that may be of interest to other students who are not satisfied with the grades that they are earning.

Make-up Policy
Every attempt should be made to take exams as scheduled. In an emergency, notify the course leader prior to the exam completion deadline. Make-up exams are handled on a case-by-case basis. Make-up exams may not be a duplicate of the original and may include alternate formats such as short answer.

Communication
Important information will be communicated to you by either email or eCampus announcements. Please check our course regularly as announcements are posted fairly frequently. Emails are always welcome. Please avoid using texting. Keep in mind, the instructor checks emails frequently, but inquiries sent after 5pm or during the weekend may not be answered until the following business day. Keep this in mind the week prior to the due date of an exam or assignment so that you can have questions answered in a timely fashion.

Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Academic Integrity
For additional information please visit: http://aggiehonor.tamu.edu

“An Aggie does not lie, cheat, or steal, or tolerate those who do.”

TAMU & College of Nursing (CON) Policies & Pertinent Course Information
Refer to the Blackboard course site and the current College of Nursing Student Handbook – all information contained in this document applies to this course.

Syllabus Disclaimer
While the provisions of this syllabus are as accurate and complete as possible, faculty reserve the right to change any provisions herein without advance notice if circumstances so warrant.
<table>
<thead>
<tr>
<th>Date</th>
<th>Week</th>
<th>Topic Objectives</th>
</tr>
</thead>
</table>
| 05/30  | 1    | Module 1: Genes and Genetic Diseases  
Module 2: Altered Cellular and Tissue Biology  
Module 4: Innate Defenses: Inflammation |
| 06/06  | 2    | Module 3: Fluids and Electrolytes, Acids, and Bases  
**Collaborate Ultra – Case Study Session** |
| 06/13  | 3    | **EXAM #1**  
Module 5: Adaptive Immunity  
Module 6: Hypersensitivities, Infection, and Immune Deficiencies  
Module 7: Biology of Cancer and Tumor Spread |
| 06/20  | 4    | Module 8: Alterations of Neurologic Function  
**Collaborate Ultra – Case Study Session** |
| 06/27  | 5    | **EXAM #2**  
Module 9: Alterations of Hormonal Regulation  
Module 10: Alterations of Hematologic Function |
| 07/04  | 6    | Module 11: Alterations of Cardiovascular Function                                |
| 07/11  | 7    | Module 12 Alterations of Pulmonary Function  
**Collaborate Ultra – Case Study Session** |
| 07/18  | 8    | **EXAM #3**  
Module 13: Alterations of Renal and Urinary Tract Function  
Module 14: Alterations of the Reproductive System  
Module 15: Alterations of Digestive Function |
| 07/25  | 9    | Module 16: Alterations of Musculoskeletal Function  
**Collaborate Ultra – Case Study Session** |
| 08/01  | 10   | **EXAM #4**  
Review ??? |
| ???    |      | **Final HESI Exam –**  
75 minutes long, 55 questions (5 pilot questions) |
<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Face to Face Teaching Method for Objective</th>
<th>Face to Face Assessment Method for Objective</th>
<th>Online Teaching Method for Objective</th>
<th>Online Assessment Method for Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain the alterations in structure &amp; function that occur with specific</td>
<td>Textbook reading assignments</td>
<td>Prep U Quizzes</td>
<td>Online interactive modules including self-assessment activities - matching, categorizing, multiple</td>
<td>Exams</td>
</tr>
<tr>
<td>pathophysiological disorders.</td>
<td>Voice over PPTs</td>
<td>Exams</td>
<td>choice questions; videos, links to websites for additional information</td>
<td>HESI</td>
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<td></td>
<td>Assigned videos (YouTube)</td>
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<td>2. Assess protective &amp; predictive factors, including genetics, which influence</td>
<td>Textbook reading assignments</td>
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<td>the health of individuals, families, &amp; populations.</td>
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<td>3. Assess environmental exposure &amp; family history, including genetic risks, to</td>
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<td>identify current &amp; possible future health problems.</td>
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| 4. Extrapolate from health status, health needs, risk factors, genetics & genomic factors, & epidemiological indicators the anticipated deficit of a given pathophysiologic alteration in the body systems. | Textbook reading assignments  
Voice over PPTs  
Assigned videos (YouTube)  
Prep U Worksheets | Prep U Quizzes  
Exams  
HESI  
Case Studies  
Group Presentation | Online interactive modules  
Including self-assessment activities - matching, categorizing, multiple choice questions; videos, links to websites for additional information | Exams  
HESI  
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|---|---|---|---|---|
| 5. Compare & contrast alterations within a system noting key differences in the causative process symptoms. | Textbook reading assignments  
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| 6. Draw conclusions about appropriate treatments for the pathophysiologic alterations based upon the relationship of natural, social, & behavioral sciences. | Textbook reading assignments  
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| 7. Infer long-term as well as short-term consequences of the pathophysiologic alterations. | Textbook reading assignments  
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8. Evaluate conceptually the currently accepted nursing practices on the basis of knowledge about pathophysiologic alterations & disease management.

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10. Develop detailed concept maps identifying compensatory mechanisms, clinical manifestations, treatments, & possible outcomes for key abnormal conditions integrating concepts from human anatomy & physiology, biology, & microbiology.

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11. Integrate clinical practice guidelines in pathophysiology concept maps for key alterations in normal function.

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12. Utilize effective written & verbal communication in the dissemination of information.

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<tr>
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<td>HESI</td>
<td>eCampus email, announcements, and discussion forum</td>
<td>Case Studies</td>
</tr>
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<td>Group Presentations</td>
<td></td>
<td>Participation in Collaborate Ultra sessions</td>
</tr>
<tr>
<td>eCampus Email and announcements, discussion forum</td>
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</table>

- Textbook reading assignments
- Voice over PPTs
- Assigned videos (YouTube)
- Prep U
- eCampus Email and announcements, discussion forum
For online or hybrid courses, this form is required! (see example on following page)

Course: NURS 312 Introduction to Pathophysiology

<table>
<thead>
<tr>
<th>Activity</th>
<th>Assignments</th>
<th>Estimated hours for the average student</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Engagement</strong></td>
<td>Orientation to course</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Utilize interactive course material online – reading presentations and watching animations and short clip videos (2 hours per module X 16 modules)</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Participating in a Collaborate Ultra session (75 minute sessions 4 times during the semester)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Taking exams: 4 exams (75 minutes per exam + 15 minutes to review results/rationale)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>HESI final exam (75 minutes + 15 minutes to review results/rationale)</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td></td>
<td>45</td>
</tr>
<tr>
<td><strong>Preparation (outside of class)</strong></td>
<td>Assigned textbook reading – 1 hour per chapter – 16 chapters</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Utilize interactive course material online – completing self-evaluation tools throughout the modules – matching, multiple choice, categorizing, etc. and reviewing rationale for each; visiting weblinks for further clarification of material (3 hours per module – 16 modules)</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Pre and post module quizzes for self-assessment (10 questions each) (20 minutes + 20 minutes for reviewing rationale - also may re-take quizzes multiple times (additional attempt for each -20 minutes) - 16 modules)</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Collaborate Ultra Prep Work (2.5 hours for each session)</td>
<td>10</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td></td>
<td>90</td>
</tr>
<tr>
<td><strong>Overall Total:</strong></td>
<td>Should be at least 135 hours for a 3 SCH per semester</td>
<td>135 hours</td>
</tr>
</tbody>
</table>

Total hour per week = 13.5 hrs/wk X 10 wks = 135 hours

Note: If you cannot fit all of your assignments on this table, please complete table in Excel and attach to submission packet.