

**The University of Texas at Tyler  
School of Nursing**

**NURS 3303.560  
Pathophysiology of Acute Care  
WEB Course  
Long Summer Semester 2016**

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Office Hours: As needed

**The content of this syllabus/WEB site is subject to change at the discretion of the faculty leaders according to current learning needs.**

**Course Schedule:**

**NURS 3303 Pathophysiology RN to BSN Course  
Summer 2016**

**EXAMS and Quizzes – open on Sunday @ 0800, close on Thursday @ 1700**

Week #	Week of:	Module/Title	Chapters	Due Dates
1	5/23	Module 1: Cellular Biology, Cellular Adaptation Fluid Movement  Module 2: Fluid and Electrolytes Acid Base Balance	1, 2	<b>Complete required forms</b> Quiz 1 - due 5/26 - Module 1 and 2
2	5/30	Module 3: Inflammation, Healing Infection	5,6	Quiz 2 – due 6/2 – Module 3
3	6/6	Module 4: Immune and Abnormal Responses Genetics	7, 21	<b>EXAM 1 – Module 1, 2, and 3</b> <b>Opens 6/5 at 0800 – closes 6/9 @ 1700</b>
4	6/13	Module 5: Neoplasms Blood and Lymph Disorders	20,10 & 11	Quiz 3 – due 6/16 – Module 4 and 5
5	6/20	Module 6: Renal/ Urinary Disorders	18	<b>EXAM 2 – Module 4,5</b> <b>Opens 6/19 @ 0800 – closes 6/23 @ 1700</b>
6	6/27	Module 7: Cardiovascular Disorders (flow, pump disorders, shock)	12	Quiz 4 – due 6/30 - Module 6 and 7
7	7/4	Module 8: Reproductive, Skin Disorders (includes burns)  Module 9: Musculoskeletal Disorders	19, 8 & 5  9	Quiz 5 – due 7/7 - Module 8

8	7/11	Module 10: Acute & Chronic Neurological Disorders Pain	14, 4	<b>EXAM 3 - Module 6,7,8</b> <b>Opens 7/10 @ 0800 – closes 7/14 @ 1700</b>  Quiz 6 – <b>due 7/21</b> – Module 9 and 10
9	7/18	Module 11: Respiratory System Disorders	13	Quiz 7 –due 7/21 – Module 11
10	7/25	Module 12: Endocrine Disorders	16	<b>EXAM 4 – Module 9,10,11</b> <b>Opens 7/24 @ 0800 – closes 7/28 @ 1700</b>
11	8/1	Module 13: Gastrointestinal and Accessory Organ Function	16, 17	Quiz 8 – due 8/4 – Module 12 and 13
12		<b>FINAL EXAM WEEK</b>		<b>EXAM 5 - Opens SATURDAY August 6 – Closes THURSDAY August 11</b>

**Important Dates:****July 11 – LAST Day to withdraw from class with a “W” on your transcript****August 13 – end of Summer term****Exam Content:**

Exam 1 – Cell biology, cellular changes, fluid movement, electrolytes, acid –base, inflammation, healing and infection (Modules 1, 2 and 3)

Exam 2 – Immune, genetics, neoplasms, blood and lymph (Modules 4 and 5)

Exam 3 – Renal, cardiovascular, reproductive and skin/burns (Modules 6, 7 & 8)

Exam 4 – Acute and chronic neuro, pain, respiratory, musculoskeletal (Modules 9, 10, & 11)

Exam 5 – 25% Endocrine and GI, 75% comprehensive

**NURS 3303.560 WEB Course – Pathophysiology of Acute Care Long Summer 2016****SEMESTER CREDIT HOURS**

Three (3) hours didactic

**PREREQUISITES**

Successful completion of Anatomy and Physiology 1 & 2, Microbiology, and Chemistry. The course may be taken 1 semester prior to admission to the College of Nursing, or must be taken during the first semester admitted to the nursing program.

**COURSE DESCRIPTION**

This course focuses on the etiologic, symptomatologic, and pathologic aspects of selected human diseases across the life span. Concepts of health promotion, disease prevention, disease progression, and treatment are approached from a cellular and multi-system perspective. Influences of genetic, ethnic, and cultural variables on human diseases is analyzed. Content aims at stimulating critical thinking for application to nursing practice.

### **COURSE OBJECTIVES**

Upon successful completion of the course, students will have demonstrated the ability to:

1. Integrate knowledge from the biological sciences into the study of the pathophysiology of human diseases.
2. Compare the pathologic origins of selected disease processes at the cellular and systemic levels.
3. Correlate the effects of internal and external environmental risk factors with disease development and progression.
4. Discuss the influence of genetic, ethnic and cultural factors on health promotion and disease prevention, progression and treatment.
5. Explain the effects of compensatory body mechanisms in response to major alterations in physiology.
6. Relate diagnostic test findings to both objective and subjective disease symptoms.
7. Employ select nursing and biomedical research studies in the application of pathophysiologic principles to nursing practice.
9. Discuss the impact of the current body of knowledge in pathophysiology on evidence-based nursing practice

### **REQUIRED TEXTS/MATERIALS**

**SYLLABUS: NURS 3303: Pathophysiology of Acute Care Long Summer Semester 2016**—located in the Blackboard course

**Course Schedule:** located in Blackboard and syllabus

### **REQUIRED TEXTBOOK:**

Van Meter, K. and Hubert, R, R. (2014) Gould's Pathophysiology for the Health Professions (5<sup>th</sup> ed.). Elsevier Saunders. ISBN 9781455754113.

### **RECOMMENDED:**

VanMeter, K. and Hubert, R, R. (2014) **Study Guide** for Gould's Pathophysiology for the Health Professions (5<sup>th</sup> ed.). Elsevier Saunders. ISBN 978-0323240864

### **UNIVERSITY POLICIES**

University policies regarding students' rights and responsibilities, absence for religious observance, absence for university-supported trips, services to students with disabilities, grade replacement, state mandated course drop policy, social security and privacy, and emergency evacuation may be found at <http://www.utt Tyler.edu/academicaffairs/syllabuspolicies.pdf> and University Student Handbook: <http://www2.utt Tyler.edu/mopp/>

### **American Disabilities Act Statement:**

“If you have a disability, including a learning disability, for which you request an accommodation, please contact the Disability Support Services Office so that appropriate arrangements can be made. In accordance with federal law, a student requesting accommodation must provide documentation of his/her disability to the Disability Support Services counselor.” **Students should inquire about accommodations before the first exam.**

### **Student Affirmation, Social Media Policy—Documentation of Compliance**

All students are required to read and sign the Student Affirmation, Audio-Video Recording Agreement, and Social Media Policy statement found in the NURS 3303. Failure to submit signed forms will result in an “Incomplete” grade for the course.

### **Grade Forgiveness**

If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the Enrollment Services Center by the Census date in the semester in which the course will be repeated. Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. A student will receive grade forgiveness (grade replacement) for only three (undergraduate student) course repeats during their career at UT Tyler. Undergraduate/Graduate Catalog (2014-15), p.18-19.

### **EXAMINATIONS/ASSIGNMENTS AND GRADING POLICY-**

Completion of NURS 3303 is based on satisfactory attainment of all course criteria. Any student failing to meet the course objectives and expectations must repeat the course..

#### **Grading Policy:**

The simple average of the exam grades, before weighted calculation is performed, must be **75% or above to pass the course**. Grades will not be rounded when calculating the average (74.5 -74.9 is not rounded to 75). Students with an exam average of 75 or higher will have course grades calculated based on the weighted calculation of the exams and other required course work.

1. **The simple average of exam grades before weighted calculation is performed, must be 75% (C) or above to pass the course. Grades will not be rounded when calculating the average** (74.5 -74.9 is not rounded to 75). Students with an exam average of 75 or higher will have final course grades calculated based on the weighted calculation of the exams, quizzes and other required course work.
2. Completion of NURS 3303 is based on satisfactory attainment of meeting the course objectives. Any student failing to meet the course objectives and expectations must repeat the course.
3. Students with an exam grade average of 75% or higher will have the final course grade calculated on the weighted values of all graded work. **Students who do not attain an exam grade average of 75% will not receive credit for assignments, or other graded course work and the final grade will be based on the simple average of the course exams.**

4. The weighted values of course work are as follows:

Grade Calculation

5 classroom exams—16% each	80%
Interactive Learning	5%
Graded Quizzes	<u>15%</u>
	100%

Letter grade assigned according to the following scale:

A	90-100
B	80-89
C	75-79
D	60-74
F	59 and below

(Approved Faculty Organization: Fall 1999, implemented Spring 2000)

5. Interactive Learning - This grade represents the percent of completion of the interactive activities developed for each course module. The Interactive Learning score is calculated into the course final grade only after a simple average of 75% is attained on course exams.
6. **Evidence of plagiarism on any submitted assignment may result in failure of the course and/or removal from the nursing program.** See Scholastic Conduct and Discipline Policy in the current School of Nursing (CON) [Guide for Baccalaureate Students, pp. 44-46.](#)
7. **Paper/Assignment Re-Grading Policy:** Student assignments will not be re-graded.
8. PENALTY FOR LATE WORK
9. A deduction of 5 points a day or any part of a day will be taken off assignments that are submitted after the deadline.
- 10.

**EXAMINATION and EXAMINATION REVIEW POLICY**

1. Completion of exams and assignments are mandatory to ensure compliance with course expectations.
2. **Exams will be administered online** through ExamSoft (testing software). Students are required to download ExamSoft onto a reliable PC prior to the day of the first exam. Firefox or Chrome browsers are required for the use of ExamSoft. Instructions for downloading the program is located under the Start Here tab and Activities located on the left side of the home page. Students may take exams on the UT Campus in the designated computer labs including the computer lab located in the Braithwaite Nursing Building.
3. **Exams must be taken within the announced timeframe.** Make-up time for an exam will be given at the discretion of faculty. If a student cannot complete an exam during the scheduled timeframe, the student must notify faculty in advance

with an acceptable reason. **Failure to notify faculty of the need to take an exam on an alternate date or time will result in a grade of 0 for that exam.**

4. Exam blueprints will be posted to Blackboard under the Activities tab one week prior to the exam.
5. Students will be able to review the questions missed and correct answer rationale immediately after the exam is completed. Exam reviews may be scheduled with faculty during office hours within 10 school days from the return of exam grades if needed.

### **ACADEMIC INTEGRITY**

1. Students are expected to assume full responsibility for the content and integrity of all academic work submitted as assignments and examinations.
2. Students are advised to review the Scholastic Conduct and Discipline Policy in the current CON [Guide for Baccalaureate Students](#) and [UT Tyler Student Conduct and Discipline Policy](#). These policies are fully endorsed and enforced by all faculty members within the School of Nursing.
3. Plagiarism, cheating and collusion are unacceptable and if found violating any of these standards the student will be disciplined accordingly (see *Guide for Baccalaureate Students* for definitions).
4. The CON has the right to dismiss students from the program for any infraction of a legal, moral, social, or safety nature, pursuant to the procedures detailed in the *Regent's Rules*

### **EXPECTATIONS OF STUDENTS IN NURS 3303**

1. Students are responsible for all course assignments and content, including announcements, posted to Blackboard.
2. Weekly module content, including video lectures and interactive learning material are posted on Blackboard within each module. Students are responsible for viewing the lecture video and any other required videos then completing the Check for Understanding activities including the quiz. Completion of ALL components of the interactive learning activities results in a percentage of completion grade in the grade center. Completion of the course work for each module is recommended for successful completion of the course.
3. **Late assignments** will only be accepted at the discretion of faculty:  
There will be a 5 point penalty for assignments submitted after the due time unless special permission obtained from faculty.  
There will be a 10 point penalty each day for assignments submitted after the due date unless special permission obtained from faculty.
4. All submitted written material (papers, assignments, examinations, etc.) are the property of the School of Nursing.
5. Communication with faculty will be via phone, scheduled Zoom meetings, email or scheduled appointment. Students are required to use their student Patriot email accounts for all correspondence. Email communication should include NURS 3303,560 WEB in the subject line. Students are expected to check their

university email at least every two business days. Faculty will respond to email correspondence within two business days.

**MODULE OBJECTIVES:**

**Due dates – follow the course schedule**

**Cell Biology Review**

Module 1 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Describe the cellular components and the functions of each.</li> <li>2. Discuss the functions of the cell membrane.</li> <li>3. Explain how cells communicate.</li> <li>4. Explain how tissues are formed.</li> <li>5. Identify types of tissue and state examples of each.</li> </ol>	<ol style="list-style-type: none"> <li>1. Cell function                             <ol style="list-style-type: none"> <li>a. all cells</li> <li>b. specialized</li> </ol> </li> <li>2. Cell Components                             <ol style="list-style-type: none"> <li>a. structures</li> <li>b. functions</li> </ol> </li> <li>3. Cell Membrane                             <ol style="list-style-type: none"> <li>a. control</li> <li>b. communication</li> <li>c. conductivity</li> </ol> </li> <li>4. Tissues and Organs                             <ol style="list-style-type: none"> <li>a. epithelial</li> <li>b. connective</li> <li>c. muscular</li> <li>d. nerve</li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 1</p> <p><b>Evaluation:</b> Exam 1</p>

**Cellular Adaptation**

Module 1 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Describe common cellular adaptations and possible reasons for the occurrence of each.</li> <li>2. Identify precancerous cellular changes.</li> <li>3. List the common causes of cell damage</li> <li>4. Describe the common types of cell necrosis and possible outcomes</li> <li>5. Differentiate between apoptosis and necrosis.</li> </ol>	<ol style="list-style-type: none"> <li>1. Cell Adaptation                             <ol style="list-style-type: none"> <li>a. healthy</li> <li>b. pathologic</li> </ol> </li> <li>2. Cell Damage Mechanisms                             <ol style="list-style-type: none"> <li>a. hypoxia</li> <li>b. free radicals</li> <li>c. physical injury</li> </ol> </li> <li>3. Necrosis                             <ol style="list-style-type: none"> <li>a. liquification</li> <li>b. coagulative</li> <li>c. caseous</li> <li>d. infarction</li> <li>e. gangrene</li> </ol> </li> <li>4. Apoptosis and aging</li> </ol>	<p><b>READ:</b> VanMeter, Chapter 1</p> <p><b>Evaluation:</b> <b>Exam 1 and Quiz 1</b></p>

**Fluid Movement**

Module 1 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Explain the movement of water between body compartments.</li> </ol>	<ol style="list-style-type: none"> <li>1. Body Water                             <ol style="list-style-type: none"> <li>a. compartments</li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 2</p>

<ol style="list-style-type: none"> <li>2. Describe the mechanism of edema.</li> <li>3. Discuss the causes and effects of dehydration</li> </ol>	<ol style="list-style-type: none"> <li>b. movement             <ol style="list-style-type: none"> <li>1. mechanisms</li> <li>2. controls</li> </ol> </li> <li>c. Edema             <ol style="list-style-type: none"> <li>1. mechanism</li> <li>2. consequences</li> </ol> </li> <li>d. Dehydration             <ol style="list-style-type: none"> <li>1. mechanism</li> <li>2. consequences</li> </ol> </li> </ol>	<p><b>Evaluation:</b> <b>Exam 1 and Quiz 1</b></p>
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**Electrolyte and Acid Base Balance**

<b>Module 2 Objectives</b>	<b>Outline</b>	<b>Preparation and Evaluation</b>
<ol style="list-style-type: none"> <li>1. Explain the movement of water between body compartments.</li> <li>2. Describe the mechanism of edema.</li> <li>3. Discuss the causes and effects of dehydration</li> <li>4. Compare and contrast the causes, signs and symptoms of hyponatremia and hypernatremia.</li> <li>5. Compare and contrast the causes, signs and symptoms of hypokalemia and hyperkalemia.</li> <li>6. Compare and contrast the causes, signs and symptoms of hypocalcemia and hypercalcemia.</li> <li>7. Describe the relationship of phosphorus to calcium.</li> <li>8. Describe the compensatory mechanism of acid-base homeostasis.</li> <li>9. Explain the effects of the primary types of alterations of acid-base balance on body function.</li> </ol>	<ol style="list-style-type: none"> <li>1. Body Water             <ol style="list-style-type: none"> <li>a. compartments</li> <li>b. movement                 <ol style="list-style-type: none"> <li>1. mechanisms</li> <li>2. controls</li> </ol> </li> <li>c. Edema                 <ol style="list-style-type: none"> <li>1. mechanism</li> <li>2. consequences</li> </ol> </li> <li>d. Dehydration                 <ol style="list-style-type: none"> <li>1. mechanism</li> <li>2. consequences</li> </ol> </li> </ol> </li> <li>2. Electrolytes             <ol style="list-style-type: none"> <li>a. Sodium                 <ol style="list-style-type: none"> <li>1. function</li> <li>2. hyponatremia</li> <li>3. hypernatremia</li> </ol> </li> <li>b. Potassium                 <ol style="list-style-type: none"> <li>1. function</li> <li>2. hypokalemia</li> <li>3. hyperkalemia</li> </ol> </li> <li>c. Calcium                 <ol style="list-style-type: none"> <li>1. function</li> <li>2. hypocalcemia</li> <li>3. hypercalcemia</li> </ol> </li> <li>d. Phosphorus                 <ol style="list-style-type: none"> <li>1. function</li> <li>2. relationship with calcium</li> </ol> </li> </ol> </li> <li>3. Acid- Base Balance             <ol style="list-style-type: none"> <li>a. compensatory mechanisms</li> <li>b. acidosis                 <ol style="list-style-type: none"> <li>1. respiratory</li> <li>2. metabolic</li> </ol> </li> <li>c. alkalosis                 <ol style="list-style-type: none"> <li>1. respiratory</li> <li>2. metabolic</li> </ol> </li> <li>d. compensation</li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 2</p> <p><b>Evaluation:</b> Exam 1 and Quiz 1</p>

### Inflammation, Healing and Infection

Module 3 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Explain the role of normal defenses in preventing disease.</li> <li>2. Describe the chemical and cellular responses to injury.</li> <li>3. Discuss normal capillary exchange and this exchange during the inflammatory response.</li> <li>4. Describe the local and systemic effects of inflammation.</li> <li>5. Describe the types of healing and complications of each.</li> </ol>	<ol style="list-style-type: none"> <li>1. Normal Defenses</li> <li>2. Inflammatory Process                             <ol style="list-style-type: none"> <li>a. Chemical mediators</li> <li>b. Cellular responses</li> <li>c. Capillary responses</li> <li>d. Signs and Symptoms                                     <ol style="list-style-type: none"> <li>1. local</li> <li>2. systemic</li> </ol> </li> </ol> </li> <li>3. Healing                             <ol style="list-style-type: none"> <li>a. Types</li> <li>b. Process</li> <li>c. Scar tissue                                     <ol style="list-style-type: none"> <li>1. function</li> <li>2. complications</li> </ol> </li> </ol> </li> <li>4. Infection</li> </ol>	<p><b>READ:</b> VanMeter, Chapter 5, 6</p> <p><b>Evaluation:</b> <b>Exam 1 and Quiz 2</b></p>

### Congenital and Genetic Disorders

Module 4 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Describe the interrelationships of DNA, RNA and proteins.</li> <li>2. Discuss prediction of inheritance.</li> <li>3. Describe and cite examples of chromosomal disorders.</li> <li>4. Describe and cite examples of single-gene disorders.</li> <li>5. Discuss the Human Genome Project and possible impacts on health care.</li> </ol>	<ol style="list-style-type: none"> <li>1) Genetic Building Blocks                             <ol style="list-style-type: none"> <li>a) DNA</li> <li>b) Chromosomes</li> <li>c) Genes</li> </ol> </li> <li>2) Principles of predication                             <ol style="list-style-type: none"> <li>a) Autosomal dominant</li> <li>b) Autosomal recessive</li> <li>c) X- linked</li> </ol> </li> <li>3) Chromosomal abnormality                             <ol style="list-style-type: none"> <li>a) Downs syndrome</li> </ol> </li> <li>4) Gene abnormality                             <ol style="list-style-type: none"> <li>a) Duchenne's Muscular Dystrophy</li> </ol> </li> <li>5) Human Genome Project</li> </ol>	<p><b>READ:</b> VanMeter, Chapter 21</p> <p><b>Evaluation:</b> <b>Exam 2 and Quiz 3</b></p>

### Immune and Abnormal Responses

Module 4 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Describe the normal immune response.</li> <li>2. Differentiate between cell mediated and humoral responses.</li> <li>3. Explain the methods of acquiring immunity.</li> <li>4. Describe the mechanisms of the four types of hypersensitivity</li> <li>5. Reactions and give examples of each.</li> <li>6. Discuss the mechanism of autoimmune disorders.</li> </ol>	<ol style="list-style-type: none"> <li>1. Immune Response                             <ol style="list-style-type: none"> <li>a. Cell mediated</li> <li>b. Humoral</li> </ol> </li> <li>2. Immunity                             <ol style="list-style-type: none"> <li>a. Acquisition</li> <li>b. Types                                     <ol style="list-style-type: none"> <li>1. I – hay fever</li> <li>2. II – Blood incompatibility</li> <li>3. III – Autoimmune Disorders</li> <li>4. IV – transplant rejection</li> </ol> </li> </ol> </li> <li>3. Immunodeficiency</li> </ol>	<p><b>READ:</b> VanMeter, Chapter 7</p> <p><b>Evaluation:</b> Exam 2 and Quiz 3</p>

<p>7. Explain the causes and effects of immunodeficiency.</p> <p>8. Describe the course, effect and complications of HIV –AIDS.</p>	<p>a. Causes</p> <p>b. Effects</p> <p>c. HIV- AIDS</p> <p>    1. course</p> <p>    2. effects</p> <p>    3. complications</p>	
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**Neoplasms**

Module 5 Objectives	Outline	Preparation and Evaluation
<p>1. Define “cancer” in terms of abnormal tissue growth, cell types of origin and benign vs. malignant tumor properties.</p> <p>2. Explain the methods of staging and grading tumors.</p> <p>3. Identify viral, bacterial and environmental risk factors for cancer.</p> <p>4. Review the clinical manifestations of cancer.</p>	<p>1) Cancer characteristics</p> <p>    a) Cell abnormalities</p> <p>    b) Tumor properties</p> <p>        i) Benign</p> <p>        ii) Metastatic</p> <p>2) Categorizing Cancers</p> <p>    a) staging</p> <p>    b) grading</p> <p>    c) prognosis</p> <p>3) Risk Factors</p> <p>    a) Viral</p> <p>    b) Bacterial</p> <p>    c) Environmental</p> <p>4) Clinical Manifestations</p>	<p><b>READ:</b> VanMeter, Chapter 20</p> <p><b>Evaluation:</b> Exam 2 and Quiz 3</p>

**Blood and Lymphatic Disorders**

Module 5 Objectives	Outline	Preparation and Evaluation
<p>1. Define anemia and describe the manifestations of anemia and the pathophysiology that generates them.</p> <p>2. Compare and contrast the pathophysiology underlying iron deficiency, pernicious, and folate deficiency anemias.</p> <p>3. Differentiate the leukemias by manifestations, treatment options, and prognosis.</p> <p>4. Identify the causes of thrombocytopenia and its signs and symptoms related to its pathophysiology.</p> <p>5. Discuss the conditions that predispose and individual to the development of thrombi.</p>	<p>1) Blood Characteristics</p> <p>    a) Red blood cells</p> <p>    b) White blood cells</p> <p>    c) Platelets</p> <p>    d) plasma</p> <p>2) Problems of red blood cells</p> <p>    a) Iron deficiency anemia</p> <p>    b) Pernicious anemia</p> <p>    c) Sickle Cell anemia</p> <p>3) Problems of white blood cells</p> <p>    a) leukemia</p> <p>4) Problems with platelets</p> <p>    a) Thrombocytopenia</p>	<p><b>READ:</b> VanMeter, Chapter 10, 11</p> <p><b>Evaluation:</b> Exam 2 and Quiz 3</p>

**Renal/Urinary Disorders**

Module 6 Objectives	Outline	Preparation and Evaluation
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<ol style="list-style-type: none"> <li>1. Describe the pathophysiology, symptoms and treatments for urinary tract obstructions.</li> <li>2. Review causes, types and treatments of urinary tract infections.</li> <li>3. Discuss types and causes of nephritis</li> <li>4. Explain the pathophysiology, causes, symptoms and treatment for acute and chronic renal failure.</li> <li>5. Discuss the role of the kidney in red blood cell production and control of blood pressure.</li> </ol>	<ol style="list-style-type: none"> <li>1) Inflammatory Problems             <ol style="list-style-type: none"> <li>a) Kidney                 <ol style="list-style-type: none"> <li>i) nephritis</li> </ol> </li> <li>b) bladder                 <ol style="list-style-type: none"> <li>i) UTI</li> </ol> </li> </ol> </li> <li>2) Blockage of system             <ol style="list-style-type: none"> <li>a) calculi</li> <li>b) Benign Prostatic Hypertrophy</li> <li>c) Prostatic cancer</li> </ol> </li> <li>3) Failure             <ol style="list-style-type: none"> <li>a) bacterial</li> <li>b) viral</li> </ol> </li> <li>4) Other functions             <ol style="list-style-type: none"> <li>a) hematopoiesis</li> <li><b>b) blood pressure</b></li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 18</p> <p><b>Evaluation</b> Exam 3 and Quiz 4</p>
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### Cardiovascular Disorders

Module 7 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Describe the principles that govern blood flow and pump function.</li> <li>2. Discuss the factors influencing the systemic blood pressure and blood flow.</li> <li>3. Identify the risk factors for atherosclerosis and discuss the progression of atherosclerotic heart disease from risk factor identification through the complications of acute myocardial infarction.</li> <li>4. Discuss the physiologic effects of hypertension.</li> <li>5. Describe venous flow disturbances and potential complications.</li> <li>6. Discuss the factors that determine effective heart pumping functions, including dysrhythmias and structural defects.</li> <li>7. Compare left and right heart failure, including causation, manifestations, treatment, and complications.</li> <li>8. Identify and describe the pathophysiologic effects of shock.</li> </ol>	<ol style="list-style-type: none"> <li>1) Alterations of flow             <ol style="list-style-type: none"> <li>a) Principles</li> <li>b) Atherosclerosis</li> <li>c) Ischemia vs. infarction</li> <li>d) Aneurysm</li> <li>e) Hypertension</li> <li>f) Venous flow                 <ol style="list-style-type: none"> <li>i) Varicose Veins</li> <li>ii) Deep Vein Thrombosis</li> </ol> </li> </ol> </li> <li>2) Alterations in Pump             <ol style="list-style-type: none"> <li>a) principles</li> <li>b) impulse conduction</li> <li>c) structural defects                 <ol style="list-style-type: none"> <li>i) valves</li> <li>ii) congenital defects</li> </ol> </li> <li>d) pump failure                 <ol style="list-style-type: none"> <li>i) left sided</li> <li>ii) right sided</li> </ol> </li> <li>e) cardiomyopathy</li> <li>f) restriction</li> </ol> </li> <li>3) Shock             <ol style="list-style-type: none"> <li>a) processes</li> <li>b) origins                 <ol style="list-style-type: none"> <li>i) cardiogenic</li> <li>ii) hypovolemic</li> <li>iii) neurogenic</li> <li><b>iv) septic</b></li> </ol> </li> </ol> </li> </ol>	<p><b>Read Chapter 12</b></p> <p><b>Evaluation:</b> Exam 3 and Quiz 4</p>

### Reproductive Disorders

Module 8 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Explain the function of the female and male reproductive systems.</li> <li>2. Discuss the causes and effects of pelvic inflammatory disease and endometriosis.</li> <li>3. Compare and contrast the primary cancers of women: ovarian, cervical and breast.</li> <li>4. Review the differences between benign prostatic hypertrophy and prostate cancer as it relates to male reproductive function.</li> <li>5. Compare and contrast common sexually transmitted diseases.</li> </ol>	<ol style="list-style-type: none"> <li>1) Female Reproductive Problems                             <ol style="list-style-type: none"> <li>a) Pelvic Inflammatory Disease</li> <li>b) endometriosis</li> <li>c) Cancers                                     <ol style="list-style-type: none"> <li>i) Cervical</li> <li>ii) ovarian</li> <li>iii) breast</li> </ol> </li> </ol> </li> <li>2) Male Reproductive Problems                             <ol style="list-style-type: none"> <li>a) Benign Prostatic Hypertrophy</li> <li>b) Prostatic cancer</li> </ol> </li> <li>3) Sexually Transmitted Diseases                             <ol style="list-style-type: none"> <li>a) bacterial</li> <li>b) viral</li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 19</p> <p><b>Evaluation</b> <b>Exam 3 and Quiz 5</b></p>

### Skin Disorders

Module 8 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Describe common skin lesions.</li> <li>2. Discuss conditions of inflammation of the skin.</li> <li>3. Compare and contrast skin cancers.</li> <li>4. Discuss the pathologic results of a thermal injury.</li> </ol>	<ol style="list-style-type: none"> <li>1. Anatomy of Skin                             <ol style="list-style-type: none"> <li>a. Structure</li> <li>b. Function</li> </ol> </li> <li>2. Inflammation                             <ol style="list-style-type: none"> <li>a. Processes and Effects</li> <li>b. Common lesions</li> </ol> </li> <li>3. Cancers                             <ol style="list-style-type: none"> <li>a. Causes and effects</li> <li>b. Conditions                                     <ol style="list-style-type: none"> <li>1. Basal cell</li> <li>2. Squamous Cell</li> <li>3. Melanoma</li> </ol> </li> </ol> </li> <li>4. Thermal Injuries                             <ol style="list-style-type: none"> <li>a. Causes</li> <li>b. Degree                                     <ol style="list-style-type: none"> <li>1. Partial Thickness</li> <li>2. Deep Partial Thickness</li> <li>3. Full Thickness</li> </ol> </li> <li>c. Effects                                     <ol style="list-style-type: none"> <li>1. Shock</li> <li>2. Pain</li> <li>3. Infection</li> </ol> </li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter Chapter 8, and pp, 79-85 (Burns)</p> <p><b>Evaluation:</b> <b>Exam 3 and Quiz 5</b></p>

### Musculoskeletal Disorders

Module 9 Objectives	Outline	Preparation and Evaluation

<ol style="list-style-type: none"> <li>1. Describe the structure and function of bones and muscles, including interaction of systems.</li> <li>2. Describe the process of bone fractures and healing.</li> <li>3. Discuss degenerative conditions of the bone and joints.</li> </ol>	<ol style="list-style-type: none"> <li>1) Structure and Function             <ol style="list-style-type: none"> <li>a) Bones</li> <li>b) Joints</li> <li>c) Muscles</li> </ol> </li> <li>2) Bones and Joints             <ol style="list-style-type: none"> <li>a) Fractures</li> <li>b) Degenerative Bones and Joints                 <ol style="list-style-type: none"> <li>i) Osteoporosis</li> <li>ii) Osteoarthritis</li> <li>iii) Rheumatoid Arthritis</li> <li>iv) Gout</li> </ol> </li> </ol> </li> <li>3) Muscles             <ol style="list-style-type: none"> <li>a) Fibromyalgia</li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 9</p> <p><b>Evaluation:</b> <b>Exam 4 and Quiz 6</b></p>
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**Acute Neurological Disorders**

<b>Module 10 Objectives</b>	<b>Outline</b>	<b>Preparation and Evaluation</b>
<ol style="list-style-type: none"> <li>1. Discuss causes and outcomes of increased intracranial pressure, including causes.</li> <li>2. Explain causes and outcomes of alterations in cranial blood flow focusing on ischemic events.</li> <li>3. Discuss clinical symptoms of spinal cord injuries including differentiation, loss of function and levels of disability.</li> </ol>	<ol style="list-style-type: none"> <li>1) Increased Intracranial Pressure             <ol style="list-style-type: none"> <li>a) causes                 <ol style="list-style-type: none"> <li>i) brain trauma</li> <li>ii) space occupying lesions</li> <li>iii) hemorrhage</li> <li>iv) edema</li> </ol> </li> <li>b) compensatory mechanisms</li> <li>c) manifestations of ICP                 <ol style="list-style-type: none"> <li>i) early</li> <li>ii) late</li> </ol> </li> </ol> </li> <li>2) Cranial blood flow             <ol style="list-style-type: none"> <li>a) Cerebral Vascular Accident</li> </ol> </li> <li>3) Spinal Cord Injuries             <ol style="list-style-type: none"> <li>a) partial</li> <li>b) transaction</li> <li>c) neurogenic shock</li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 14</p> <p><b>Evaluation:</b> <b>Exam 4 and Quiz 6</b></p>

**Chronic Neurological Disorders**

<b>Module 10 Objectives</b>	<b>Outline</b>	<b>Preparation and Evaluation</b>
<ol style="list-style-type: none"> <li>1. Discuss causes and outcomes of seizure disorders.</li> <li>2. Explain causes and outcomes of dementias.</li> <li>3. Discuss causes and outcomes of chronic degenerative neuromuscular conditions.</li> </ol>	<ol style="list-style-type: none"> <li>1) Seizure Disorders             <ol style="list-style-type: none"> <li>a) Risk Factors</li> <li>b) Neurologic alterations</li> <li>c) Characteristics</li> </ol> </li> <li>2) Dementias             <ol style="list-style-type: none"> <li>a) Neurologic manifestations</li> <li>b) Phases                 <ol style="list-style-type: none"> <li>i) Early</li> <li>ii) late</li> </ol> </li> </ol> </li> <li>3) Chronic Neuromuscular Disorders             <ol style="list-style-type: none"> <li>a) Neurotransmitters</li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 14</p> <p><b>Evaluation:</b> <b>Exam 4 and Quiz 6</b></p>

	<ul style="list-style-type: none"> <li>i) Parkinson's</li> <li>b) Nerve degeneration</li> <li>i) Multiple Sclerosis</li> </ul>	
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**Pain**

<b>Module 10 Objectives</b>	<b>Outline</b>	<b>Preparation and Evaluation</b>
1. Explore concepts of pain perception, modulation and clinical manifestations.	<ul style="list-style-type: none"> <li>1) Pain                             <ul style="list-style-type: none"> <li>a) transmission                                     <ul style="list-style-type: none"> <li>i) reflex arcs</li> <li>ii) sensory tracts</li> </ul> </li> <li>b) Interpretation</li> </ul> </li> <li>2) manifestations</li> </ul>	<p><b>READ:</b> VanMeter, Chapter 4</p> <p><b>Evaluation:</b> <b>Exam 4 and Quiz 6</b></p>

**Respiratory Disorders**

<b>Module 11 Objectives</b>	<b>Outline</b>	<b>Preparation and Evaluation</b>
<ul style="list-style-type: none"> <li>1. Explain the mechanics and controls of ventilation.</li> <li>2. Discuss the pathological processes of inflammation and how it effects air movement in the lungs.</li> <li>3. Describe the mechanical changes of lung or chest trauma that interfere with air movement.</li> <li>4. Discuss the pathological processes that precipitate a change in gas exchange in the lung.</li> <li>5. Describe the pathological mechanisms and effects of changes in pulmonary blood flow.</li> </ul>	<ul style="list-style-type: none"> <li>1. Controls                             <ul style="list-style-type: none"> <li>a. Thoracic mechanics</li> <li>b. Chemical controls</li> </ul> </li> <li>2. Inflammation                             <ul style="list-style-type: none"> <li>a. Processes and Effects</li> <li>b. Conditions                                     <ul style="list-style-type: none"> <li>1. Asthma</li> <li>2. Pneumonia</li> <li>3. Tuberculosis</li> <li>4. Lung Cancer</li> </ul> </li> </ul> </li> <li>3. Mechanical Alterations                             <ul style="list-style-type: none"> <li>a. Causes and effects</li> <li>b. Conditions                                     <ul style="list-style-type: none"> <li>1. Pneumothorax</li> <li>2. Chest wall trauma</li> </ul> </li> </ul> </li> <li>4. Gas Exchange Alterations                             <ul style="list-style-type: none"> <li>a. Causes and Effects</li> <li>b. Conditions                                     <ul style="list-style-type: none"> <li>1. Cystic Fibrosis</li> <li>2. Chronic Bronchitis</li> <li>3. Emphysema</li> <li>4. Pulmonary Edema</li> </ul> </li> </ul> </li> <li>5. Blood Flow Alterations                             <ul style="list-style-type: none"> <li>a. Causes and effects</li> <li>b. Conditions                                     <ul style="list-style-type: none"> <li>1. Pulmonary Embolus</li> <li>2. Pulmonary Hypertension</li> </ul> </li> </ul> </li> </ul>	<p><b>READ:</b> VanMeter, Chapter 13</p> <p><b>Evaluation:</b> <b>Exam 4 and Quiz 7</b></p>

**Endocrine Disorders**

Module 12 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Discuss the regulation of hormone secretion by positive and negative feedback loops.</li> <li>2. Compare and contrast Type 1 and Type 2 diabetes mellitus.</li> <li>3. Describe the degenerative complications of diabetes mellitus.</li> <li>4. Describe the condition of alterations in ADH on body function.</li> <li>5. Discuss the effects of thyroid hormone and effects of alterations on the metabolism.</li> <li>6. Discuss the role of corticosteroids in body function and changes when levels are altered.</li> <li>7. Discuss the functions of aldosterone on body functions.</li> </ol>	<ol style="list-style-type: none"> <li>4) Hormonal control                             <ol style="list-style-type: none"> <li>a) Feedback loops</li> <li>b) Target cell receptors</li> </ol> </li> <li>5) Pancreas - Insulin                             <ol style="list-style-type: none"> <li>a) Diabetes Mellitus, type 1</li> <li>b) Diabetes Mellitus, type 2</li> <li>c) Complications</li> </ol> </li> <li>6) Pituitary – Antidiuretic Hormone                             <ol style="list-style-type: none"> <li>a) SIADH</li> <li>b) Diabetes Insipidus</li> </ol> </li> <li>7) Thyroid – thyroxine                             <ol style="list-style-type: none"> <li>a) Hyperthyroid (Graves)</li> <li>b) Hypothyroid (Myxedema)</li> </ol> </li> <li>8) Adrenal -                             <ol style="list-style-type: none"> <li>a) Corticosteroids                                     <ol style="list-style-type: none"> <li>i) Too much</li> <li>ii) Too Little</li> </ol> </li> <li>b) Aldosterone                                     <ol style="list-style-type: none"> <li>i) Too much</li> <li>ii) Too little</li> </ol> </li> </ol> </li> </ol>	<p><b>READ:</b> Gould, Chapter 16</p> <p><b>Evaluation:</b> <b>Exam 5 and Quiz 8</b></p>

### Digestive System Disorders

Module 13 Objectives	Outline	Preparation and Evaluation
<ol style="list-style-type: none"> <li>1. Describe the physiologic alterations that occur in relation to infectious processes that cause gastroenteritis, hepatitis and pancreatitis.</li> <li>2. Identify the consequences of obstruction at various sites in the GI tract.</li> <li>3. Describe the causes, manifestations, treatments, outcomes, and complications of gastritis including ulcer disease and reflux problems.</li> <li>4. Describe inflammatory bowel diseases-- ulcerative colitis and Crohn's disease—and diverticular disease.</li> <li>5. Discuss the similarities and differences between acute and chronic pancreatitis.</li> <li>6. Discuss the pathophysiologic alterations that occur with liver failure.</li> </ol>	<ol style="list-style-type: none"> <li>1) Conditions of Upper Gastrointestinal System                             <ol style="list-style-type: none"> <li>a) Gastroesophageal Reflux (GERD)</li> <li>b) Peptic Ulcer Disease (PUD)</li> <li>c) Gastroenteritis                                     <ol style="list-style-type: none"> <li>(a) Bacterial</li> <li>(b) viral</li> </ol> </li> </ol> </li> <li>2) Conditions of Lower Gastrointestinal System                             <ol style="list-style-type: none"> <li>a) Inflammatory Bowel Disease</li> <li>b) Diverticulosis</li> <li>c) Bowel Obstruction</li> </ol> </li> <li>3) Conditions of Accessory Organs                             <ol style="list-style-type: none"> <li>a) Liver                                     <ol style="list-style-type: none"> <li>i) Hepatitis</li> <li>ii) Cirrhosis</li> <li>iii) Failure</li> </ol> </li> <li>b) Pancreatitis</li> <li>c) Cholecystitis</li> </ol> </li> </ol>	<p><b>READ:</b> VanMeter, Chapter 17</p> <p><b>Evaluation:</b> <b>Exam 5 and Quiz 8</b></p>

### Student Affirmation Form

\_\_\_\_ I agree to protect the privacy of faculty, peers, patients, and family members of patients by not inappropriately disclosing confidential information about faculty, peers, patients or their family members that is disclosed to me in my capacity as a University of Texas at Tyler nursing student. In addition, I agree not to inappropriately disclose confidential information about any agency or institution that is disclosed to me in my capacity as a University of Texas at Tyler nursing student. I will adhere to HIPAA guidelines.

\_\_\_\_ I have/will read the syllabus of this nursing course I am taking this semester, and I understand the criteria established for grading my course work. I understand that my average on exams must be 75 or higher in order to attain a passing grade for the course.

\_\_\_\_ I agree that I will conduct myself in a manner that exhibits professional values and in accordance with the American Nurses Association (ANA) Code of Ethics for Nurses, the Texas Nurse Practice Act and UTT's Student Academic Dishonesty Policy.

\_\_\_\_ I will maintain and uphold the academic integrity policy of the College of Nursing and will not condone or participate in any activities of academic dishonesty including, but not limited to, plagiarism, cheating, stealing, or copying another's assigned work.

\_\_\_\_ I will not recreate any items or portions of any exam for my own use, or for use by others during my enrollment in the College of Nursing

\_\_\_\_ I will not accept or access any unauthorized information related to any exam administered during my enrollment in the College of Nursing.

\_\_\_\_ I will sign only my own papers and other documents and will not sign any other student's name to anything, including class rolls.

\_\_\_\_ I will not allow any other student access to any of my paperwork for the purpose of copying.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Student Name

\_\_\_\_\_  
NURS 3303  
Course

**APPROVED:**

**University of Texas System-Spring 1996**

**Faculty Organization-Spring 1996**

**Revised: May 2004, Summer 2005**

### **Social Networking Policy**

Online social networking mediums, such as Facebook® and MySpace®, etc. may be effective modalities for students to connect in positive ways. However, students must be aware of, and, sensitive to, the information and pictures they post (of themselves and others).

The **purpose** of this policy is to outline the privacy and confidentiality issues related to students' postings to ensure safeguarding of The University of Texas at Tyler (U.T. Tyler), College of Nursing's identity, integrity and overall reputation, in an effort to prevent violations of confidentiality and privacy.

**Social Networking** (definition) – Any activity that involves interaction with other individuals/users in an online environment, *i.e.*, Facebook®, Twitter®, MySpace®, Flickr®, Friendstar®, Classmates.com®, LinkedIn®, Xanga®, Bebo®, etc. ([http://en.wikipedia.org/wiki/List\\_of\\_social\\_networking\\_websites](http://en.wikipedia.org/wiki/List_of_social_networking_websites)). In addition, the use of other electronic devices to record pictures, images, and other information or data that may be stored, reviewed, or shared with others either immediately or at a future date are considered social networking.

For purposes of this policy, this interaction includes, but is not limited to, browsing other users' profiles/personalized web pages, browsing other users' photos, reading messages sent through social networking forums, and engaging in online messaging services, such as instant messaging or email that is in any way related to U.T. Tyler or the College of Nursing or activities conducted while in attendance at the University. The following provides guidance as to what type of behavior is inappropriate relative to online social networking. These guidelines are not all inclusive; rather, they are intended to be used as a foundation for sound decision making.

Students are encouraged to refer to the following which was prepared by the National Council of State Boards of Nursing (NCSBN): *Professional Boundaries: A Nurse's Guide to the Importance of Professional Boundaries*, located at: [https://www.ncsbn.org/Professional\\_Boundaries\\_2007\\_Web.pdf](https://www.ncsbn.org/Professional_Boundaries_2007_Web.pdf)

## Confidentiality and Privacy

### Violations of confidentiality include but are not limited to:

1. Photocopying patient documents, removing patient documents from the clinical site, and postings of patient information on Internet social networking sites (Facebook®, MySpace®, Twitter®, YouTube®, etc.) as well as online blogs and journals.
2. Contacting patients/patients' family members through a social networking system.
3. Photographing in any clinical setting. Taking and/or posting any picture taken within a clinical facility without written permission of the facility or patient (even if the patient's identity is not disclosed) is a breach of the **Health Insurance Portability and Accountability Act** (HIPPA).
4. Discussing/posting any patient information related to the clinical facility one is assigned on Internet social networking sites or in a public place.
5. Social networking, texting, email, and other recreational computer use is prohibited during class or clinical time.
6. Using U.T. Tyler, College of Nursing's name, logo, or other information in one's personal social networking profile. Pictures of oneself should not be posted wearing U.T. Tyler nursing attire. Social networking mediums, blogs, Twitter® and Internet/electronic mail, all are considered public domain.

Failure to comply with the above guidelines will result in disciplinary action which can include dismissal from the program. Any student found in violation of the above mentioned policies and/or any policies related to conduct unbecoming a University of Texas at Tyler student, is subject to procedural disciplinary action as outlined in the U.T. Tyler Manual of Policies and Procedures for Student Affairs: Specifically Sec 8-801 and 8-804:

<http://www2.uttyler.edu/mopp/documents/MOPPCChapter8StudentConductandDiscipline-updated011411.pdf>

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Student Printed Name

\_\_\_\_\_  
NURS 3303  
Course Number

Approved: UG Studies: 5/11