# The University of Texas at Tyler
# School of Nursing

# NURS 3303
# Pathophysiology of Acute Care

## Spring 2016

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## Tyler Sections

**MONDAY Section 001 0800 – 1045 BRB 1030**
**THURSDAY Section 002 0800 – 1045 BRB 1025**

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

## COURSE TITLE

NURS 3303: Pathophysiology of Acute Care

## SEMESTER CREDIT HOURS

Three (3) hours didactic

## PREREQUISITES

Successful completion of Anatomy and Physiology 1 & 2, Microbiology, and Chemistry is required. These courses must be taken ≥1 semester prior to admission to the College of Nursing program. They may be taken concurrently with NURS 3205: Nursing Concepts and Theories.

## COURSE DESCRIPTION

This course focuses on the etiology, symptomatology and pathology of selected human diseases across the lifespan. 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.

## 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 MATERIAL/TEXTS

**SYLLABUS: NURS 3303: Pathophysiology of Acute Care; Fall 2015—**located in Blackboard under Course Information

**Course Schedules**: located in Blackboard under Course Information for each section/class day

## REQUIRED TEXTBOOK:

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

## RECOMMENDED:

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

## Course Schedule:

### Section 001 MONDAY:

| Week | Class Date | Course Module | Chapters | Assignment Prior to Class Due Dates |
|---|---|---|---|---|
| 1 | 1/18 | Module 1: Course Orientation, Cellular Biology and Changes, Fluid/Electrolytes & Acid-Base | 1 & 2 | No class this week – watch 5 videos posted in Module 1<br>Quiz 1<br>Opens 1/18, Closes 1/22 |
| 2 | 1/25 | Module 2: Inflammation, Healing & Infection | 5 & 6 | **Quiz 2**<br>**Opens 1/25, Closes 1/29** |
| 3 | 2/1 | **EXAM 1**<br>Module 3: Genetics<br>**(lecture on video)** | 21 | **EXAM # 1 February 1 @ 0800**<br>**No lecture after exam** |
| 4 | 2/8 | Module 4: Immune and Abnormal Responses | 7 | Quiz 3<br>Opens 2/8, Closes 2/12 |
| 5 | 2/15 | Module 5: Neoplasms, Blood and Lymph Disorders | 20, 10, 11 | Quiz 4<br>Opens 2/15, Closes 2/19 |
| 6 | 2/22 | **EXAM 2**<br>Module 6: Renal/ Urinary Disorders | 18 | **EXAM # 2 February 22 @ 0800**<br>****Lecture after exam – Module 6** |
| 7 | 2/29 | Module 7: Cardiovascular Disorders (flow and pump disorders) | 12 | Quiz 5<br>Opens 2/29, Closes 3/4 |
| **SPRING BREAK March 7 - 11** | | | | |
| 8 | 3/14 | Module 8: Cardiovascular Disorders (pump and shock) | 12 | Quiz 6<br>Opens 3/14, Closes 3/18 |
| 9 | 3/21 | **EXAM 3**<br>Module 9: Reproductive, Skin, Burns<br>**(lecture on video)** | 19, 8, 5 | **EXAM # 3 March 21 @ 0800**<br>**No lecture after exam – view videos**<br>Quiz 7<br>Opens 3/21, Closes 3/25 |
| 10 | 3/28 | Module 10: Musculoskeletal Disorders | 9 | |
| 11 | 4/4 | Module 11: Acute Neuro<br><br>Module 12: Chronic Neurological Disorders & Pain | 14, 4 | Quiz 8<br>Opens 4/4 , Closes 4/8 |
| 12 | 4/11 | Module 13: Respiratory | 13 | Quiz 9<br>Opens 4/11, Closes 4/15 |

| | | | | |
|---|---|---|---|---|
| 13 | 4/18 | **EXAM 4**<br>Module 14: Endocrine | 16 | **EXAM # 4 – April 18 @ 0800**<br>****Lecture after exam Endocrine**<br>Quiz10<br>Opens 4/18 - Closes 4/22 |
| 14 | 4/25 | Module 15: Gastrointestinal and Accessory Organ Function | 17 | Quiz 11<br>Opens 4/25- Closes 4/29 |
| | **5/2** | **FINAL EXAM 5/5** | | **FINAL EXAM: 5/5 at 12:30 PM** |

## Section 002: THURSDAY

| Week # | Class Day | Module/Title | Chapters | Assignment prior to class |
|---|---|---|---|---|
| 1 | 1/21 | Module 1: Course Orientation, Cellular Biology and Changes, Fluid/Electrolytes & Acid-Base | 1 & 2 | Quiz 1<br>Opens 1/18, Closes 1/22 |
| 2 | 1/28 | Module 2: Inflammation, Healing & Infection | 5 & 6 | Quiz 2<br>Opens 1/25, Closes 1/29 |
| 3 | 2/4 | **EXAM 1**<br>Module 3: Genetics<br>**(lecture on video)** | 21 | **EXAM 1 – February 4 0800**<br>**No lecture after exam** |
| 4 | 2/11 | Module 4: Immune and Abnormal Responses | 7 | Quiz 3<br>Opens 2/8, Closes 2/12 |
| 5 | 2/18 | Module 5: Neoplasms, Blood and Lymph Disorders | 20,10 & 11 | Quiz 4<br>Opens 2/15, Closes 2/19 |
| 6 | 2/25 | **EXAM 2**<br>Module 6: Renal/ Urinary Disorders | 18 | **EXAM 2 – February 25 0800**<br>**** Lecture after exam – Module 6** |
| 7 | 3/3 | Module 7: Cardiovascular Disorders (flow and pump disorders) | 12 | Quiz 5<br>Opens 2/29, Closes 3/4 |
| **SPRING BREAK – March 7-11** | | | | |
| 8 | 3/18 | Module 8: Cardiovascular Disorders (pump and shock | 12 | Quiz 6<br>Opens 3/14, Closes 3/18 |
| 9 | 3/24 | **EXAM 3**<br>Module 9: Reproductive, Skin Disorders (includes burns)<br>**(lecture on video)** | 19, 8 & 5 | **EXAM 3 – March 24 11:30 AM**<br>**No lecture before exam**<br>Quiz 7<br>Opens 3/21, Closes 3/25 |
| 10 | 3/31 | Module 10: Musculoskeletal | 9 | |
| 11 | 4/7 | Module 11: Acute Neurological Disorders | 14, 4 | Quiz 8<br>Opens 4/4, Closes 4/8 |

| | | | | |
|---|---|---|---|---|
| | | Module 12: Chronic Neurologic Disorders<br>Pain | | |
| 12 | 4/14 | Module 13: Respiratory Disorders | 13 | Quiz 9<br>Opens 4/11, Closes 4/15 |
| 13 | 4/21 | **EXAM 4**<br>Module 14: Endocrine Disorders | 16 | **EXAM 4 - April 21 11:30**<br>Quiz 10<br>Opens 4/18, Closes 4/22 |
| 14 | 4/28 | Module 15: Gastrointestinal and Accessory Organ Function | 17 | Quiz 11<br>Opens 4/25, Closes 4/29 |
| | **5/5** | **FINAL EXAM** | | **FINAL EXAM – May 5 at 2:30 PM** |

## CLASS PREPARATION/BLACKBOARD INFORMATION

All lecture outlines, notes, objectives and supplemental materials are found under the Unit Module tabs in Blackboard. Bring lecture notes and lecture pdf files to class and be prepared for discussion. Be aware that as one topic is completed, discussion on the next topic will begin. Read assigned chapters **BEFORE lecture** to be prepared to understand the additional information presented during lecture.
Quizzes are located under the Unit Module tab immediately after the module content folder. Exam blueprints are located under Course Information, Exam Blueprint folder.

### General Policies

These policies apply to all students of the university. Students should access and review these policies at:
http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf

### American Disabilities Act Statement: UT TYLER COUNSELING CENTER

"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.

## GRADING POLICIES

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 recieve credit for graded quizzes, 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 | |
|---|---|
| 4 classroom exams—17% each | 68% |
| Final Exam | 17% |
| On–line Quizzes | 10% |
| Participation/Assignments | 5% |
| | 100% |

Grades will be assigned according to the following scale in accordance with UTT School of Nursing Policy:

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

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

5. Weekly on-line quizzes will be posted on Blackboard five days prior to the due date. Each quiz will be worth 100 points**. Quizzes will be available for 1 week only.** Failure to complete the quiz within this time frame will result in 0 points for that quiz. It is recommended that the student take the quizzes on campus or on a laptop to avoid technical difficulties. The UTT IT department recommends using Firefox or Chrome browsers. Class notes and textbooks may be used for the weekly on-line quizzes. Quizzes will be calculated into the course final grade only after a simple average of 75% is attained on exams.
6. Individual assignments will be posted on Blackboard. Assignments are due on the date designated. Late submissions will not be accepted. Participation and assignment grades will be

calculated in to the course final grade only after a simple average of 75% is attained on course exams.

## EXAMINATION AND EXAMINATION REVIEW POLICY

1. Exam blueprints will be available a minimum of three days prior to each exam.
2. Attendance for exams is **mandatory**. If absence for an exam is necessary, the student is responsible for notifying the faculty **prior** to the exam with an acceptable reason.
3. No students will be allowed entry into the classroom after the exam has started unless prior notification and arrangements have been made with the faculty.
4. **ALL exams** will be administered using ExamSoft software in the UTT School of Nursing Computer Lab.
5. Students will be able to review exam responses, the correct response and rationale immediately after completing the exam in ExamSoft.
6. All hats/caps must be removed during exam time. All personal items such as purses, books, backpacks, notebooks and briefcases will be left in the front or back of the room during testing. Cell phones must be turned off. Cell phones will be left in backpacks or purse at the front of the classroom.
7. Silence will be enforced in the classroom before and during testing. No one will be permitted to leave the room during the testing time.
8. Students will be required to remain in the computer lab until all students have completed the exam.
9. Make-up exams will only be given at the discretion of the faculty member and may be in a different format than the original exam.

Failure to notify the course faculty of the need to take the exam on an alternate date prior to the time that the exam begins will result in a grade of 0 for that particular exam. Tests must be scheduled with faculty on the specific campus. Arrangements will be made on an individual basis for completion of exam requirements.

10. Students are allowed to review the correct response to exam items answered incorrectly immediately upon completion of the exam using ExamSoft. An individual exam review with faculty may be scheduled with the faculty during office hours and **within 10 school days** from the return of grades.
11. Students who **score below 75 on an exam** are encouraged to schedule a coaching appointment with the faculty member on that campus **within 1 week after grades are posted**.

### Testing Policy

Test integrity is a very important part of the nursing program to assess student knowledge, retention and preparation for the NCLEX and practice. Excessive student absences on test days threaten test integrity. The following process for course examinations will be followed within each nursing course.

1. Students who miss two or more exams will be required to provide a written statement from their physician. (Students with significant extenuating circumstances are encouraged to communicate with the course faculty member at least 24 business hours before the exam.)
2. Make up exam dates and times are at the discretion of the faculty.
3. Students are responsible for monitoring and acknowledging email from faculty regarding makeup date, time and location details. (I didn't see the email is not an excuse.)
4. If a student does not show up for a make-up exam on the designated date and time, the student will receive a zero on the exam.

## EXPECTATIONS OF STUDENTS IN NURS 3303

1. Understanding of anatomy and physiology is presumed. If a student requires review of basic anatomy and physiology, independent reading is expected. Study guides will focus on terms and anatomy and physiology of the system under study.
2. Students are expected to have read assigned materials prior to class time and prepared for interactive discussion based on the learning objectives.
3. Students will be assigned to a group for purposes of the Group Presentation at the discretion of faculty. Each member of the group will receive the same grade for the assignment.
4. Participation in classroom learning activities will focus on application of concepts presented in the required reading.
5. Students are responsible for all course assignments and content, including announcements posted in Blackboard.
6. Lecture outlines will be posted on Blackboard under "Course Materials" a minimum of two (2) working days prior to class. The majority of the outlines will be available at the beginning of the semester. Students are encouraged to print these materials weekly..
7. All submitted written material (papers, assignments, examinations, etc.) are the property of the UTT School of Nursing. They will be maintained in an archived file at the UTT School of Nursing for 1 semester after the course grade is assigned.

## ACADEMIC INTEGRITY

1. Students are expected to assume full responsibility for the content and integrity of all academic work submitted as homework and examinations.
2. Students are advised to review the UT Tyler Academic Dishonesty Policy and Academic Integrity Policy in the current School of Nursing Student Handbook and Academic Integrity Policy for UT Tyler students in the Student Guide. These policies are fully endorsed and enforced by the 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.
4. The School of Nursing reserves 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.*

## Student Dress Code for the University of Texas, College of Nursing:

**General:** It is the philosophy of the School of Nursing that the student has a responsibility to be neatly groomed and modestly dressed. Appearances should promote good health, safety and general well-being of the student. Clothing should avoid brevity and/or design that are offensive to the dignity and rights of others. School officials have the right and responsibility to counsel with the student or take any other corrective action. Types of clothing (other than those specified in this document) may be worn at the direction of the nursing instructor for special events.

**Classroom**: Casual or every day business wear is recommended. This includes but is not limited to the following: Slacks or skirt; sweater, blouse, and shirt. Jeans as well as conservative shorts (mid-thigh or longer) may be worn, but avoid overly frayed or soiled. Shoes must be worn. See items to be avoided below.

**Professional Presentations, Ceremonies/ Graduation**: Business or dressy day social: suit, dress, dressy separates, jacket, ties, nice fabrics. Dress shoes. Avoid denim, jeans, t-shirt or other casual clothes. For workshops/seminars attended by students, business attire will be worn.

**Items to be avoided in all School-related Functions (including but not limited to)**: Overly frayed, worn or soiled garments. Costume look, transparent blouses, bare midriff shirts, tank tops, spaghetti straps, muscle shirts, overtly sexual, gang colors or logos, facial or body piercing, obscene slogans or pictures, bedroom wear, short-shorts, short skirts, or clothing that may be offensive to others.

If the dress code rules are broken and a change of clothes is not available, the student may be removed from the school-related function for the remainder of the day. **Appropriate disciplinary action will be taken for repeated violations of this code.**

## Module Objectives:

**** Follow the Course Schedule for quiz and assignment due dates**

### Cell Biology Review

| Module 1 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| | | |
| 1. Describe the cellular components and the functions of each.<br>2. Discuss the functions of the cell membrane.<br>3. Explain how cells communicate.<br>4. Explain how tissues are formed.<br>5. Identify types of tissue and state examples of each. | 1. Cell function<br>a. all cells<br>b. specialized<br>2. Cell Components<br>a. structures<br>b. functions<br>3. Cell Membrane<br>a. control<br>b. communication<br>c. conductivity<br>4. Tissues and Organs<br>a. epithelial<br>b. connective<br>c. muscular<br>d. nerve | **READ:**<br>VanMeter, Chapter 1<br><br>Evaluation:<br>Exam 1 |

### Cellular Adaptation

| Module 1 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| | | |
| 1. Describe common cellular adaptations and possible reasons for the occurrence of each.<br>2. Identify precancerous cellular changes. | 1. Cell Adaptation<br>a. healthy<br>b. pathologic<br>2. Cell Damage Mechanisms<br>a. hypoxia | **READ:**<br>VanMeter, Chapter 1<br><br>Evaluation: |

| | | |
|---|---|---|
| 3. List the common causes of cell damage<br>4. Describe the common types of cell necrosis and possible outcomes<br>5. Differentiate between apoptosis and necrosis. | b. free radicals<br>c. physical injury<br>3. Necrosis<br>a. liquification<br>b. coagulative<br>c. caseous<br>d. infarction<br>e. gangrene<br>4. Apoptosis and aging | Quiz 1<br>Exam 1 |

## Fluid, Electrolyte and Acid Base Balance

| Module 1 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Explain the movement of water between body compartments.<br>2. Describe the mechanism of edema.<br>3. Discuss the causes and effects of dehydration<br>4. Compare and contrast the causes, signs and symptoms of hyponatremia and hypernatremia.<br>5. Compare and contrast the causes, signs and symptoms of hypokalemia and hyperkalemia.<br>6. Compare and contrast the causes, signs and symptoms of hypocalcemia and hypercalcemia.<br>7. Describe the relationship of phosphorus to calcium.<br>8. Describe the compensatory mechanism of acid-base homeostasis.<br>9. Explain the effects of the primary types of alterations of acid-base balance on body function. | 1. Body Water<br>a. compartments<br>b. movement<br>1. mechanisms<br>2. controls<br>c. Edema<br>1. mechanism<br>2. consequences<br>d. Dehydration<br>1. mechanism<br>2. consequences<br>2. Electrolytes<br>a. Sodium<br>1. function<br>2. hyponatremia<br>3. hypernatremia<br>b. Potassium<br>1. function<br>2. hypokalemia<br>3. hyperkalemia<br>c. Calcium<br>1. function<br>2. hypocalcemia<br>3. hypercalcemia<br>d. Phosphorus<br>1. function<br>2. relationship with calcium<br>3. Acid- Base Balance<br>a. compensatory mechanisms<br>b. acidosis<br>1. respiratory<br>2. metabolic<br>c. alkalosis<br>1. respiratory<br>2. metabolic | **READ:**<br>VanMeter, Chapter 2<br><br>**Evaluation:**<br>Quiz 1<br>Exam **1** |

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|---|---|---|
| | d. compensation | |

## Inflammation, Healing and Infection

| Module 2 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Explain the role of normal defenses in preventing disease.<br>2. Describe the chemical and cellular responses to injury.<br>3. Discuss normal capillary exchange and this exchange during the inflammatory response.<br>4. Describe the local and systemic effects of inflammation.<br>5. Describe the types of healing and complications of each. | 1. Normal Defenses<br>2. Inflammatory Process<br>a. Chemical mediators<br>b. Cellular responses<br>c. Capillary responses<br>d. Signs and Symptoms<br>1. local<br>2. systemic<br>3. Healing<br>a. Types<br>b. Process<br>c. Scar tissue<br>1. function<br>2. complications<br>4. Infection | **READ:**<br>VanMeter, Chapter 5, 6<br><br>**Assignment:**<br>Quiz 2<br><br>**Evaluation:**<br>**Exam 1** |

## Congenital and Genetic Disorders

| Module 3 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Describe the interrelationships of DNA, RNA and proteins.<br>2. Discuss prediction of inheritance.<br>3. Describe and cite examples of chromosomal disorders.<br>4. Describe and cite examples of single–gene disorders.<br>5. Discuss the Human Genome Project and possible impacts on health care. | 1) Genetic Building Blocks<br>a) DNA<br>b) Chromosomes<br>c) Genes<br>2) Principles of predication<br>a) Autosomal dominant<br>b) Autosomal recessive<br>c) X- linked<br>3) Chromosomal abnormality<br>a) Downs syndrome<br>4) Gene abnormality<br>a) Duchenne's Muscular Dystrophy<br>5) Human Genome Project | **READ:**<br>VanMeter, Chapter 21<br><br>**Evaluation Module 1-2**<br>**Exam 1** |

## Immune and Abnormal Responses

| Module 4 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Describe the normal immune response.<br>2. Differentiate between cell mediated and humoral responses.<br>3. Explain the methods of acquiring immunity. | 1. Immune Response<br>a. Cell mediated<br>b. Humoral<br>2. Immunity<br>a. Acquisition<br>b. Types<br>1. I – hay fever | **READ:**<br>VanMeter, Chapter 7<br><br>**Evaluation:**<br>Quiz 3<br>Exam 2 |

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|---|---|---|
| 4. Describe the mechanisms of the four types of hypersensitivity<br>5. Reactions and give examples of each.<br>6. Discuss the mechanism of autoimmune disorders.<br>7. Explain the causes and effects of immunodeficiency.<br>8. Describe the course, effect and complications of HIV –AIDS. | 2. II – Blood incompatibility<br>3. III – Autoimmune Disorders<br>4. IV – transplant rejection<br>3. Immunodeficiency<br>a. Causes<br>b. Effects<br>c. HIV- AIDS<br>1. course<br>2. effects<br>3. complications | |

## Neoplasms

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

## Blood and Lymphatic Disorders

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

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|---|---|---|
| **5.** Discuss the conditions that predispose and individual to the development of thrombi. | | |

## Renal/Urinary Disorders

| Module 6 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Describe the pathophysiology, symptoms and treatments for urinary tract obstructions.<br>2. Review causes, types and treatments of urinary tract infections.<br>3. Discuss types and causes of nephritis<br>4. Explain the pathophysiology, causes, symptoms and treatment for acute and chronic renal failure.<br>5. Discuss the role of the kidney in red blood cell production and control of blood pressure. | 1) Inflammatory Problems<br>a) Kidney<br>i) nephritis<br>b) bladder<br>i) UTI<br>2) Blockage of system<br>a) calculi<br>b) Benign Prostatic Hypertrophy<br>c) Prostatic cancer<br>3) Failure<br>a) bacterial<br>b) viral<br>4) Other functions<br>a) hematopoiesis<br>**b)** blood pressure | **READ:**<br>VanMeter, Chapter 18<br><br>**Evaluation**<br>Quiz 4<br>Exam 2 |

## Cardiovascular Disorders

| Module 7 & 8 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Describe the principles that govern blood flow and pump function.<br>2. Discuss the factors influencing the systemic blood pressure and blood flow.<br>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.<br>4. Discuss the physiologic effects of hypertension.<br>5. Describe venous flow disturbances and potential complications.<br>6. Discuss the factors that determine effective heart pumping functions, including dysrythmias and structural defects.<br>7. Compare left and right heart | 1) Alterations of flow<br>a) Principles<br>b) Atherosclerosis<br>c) Ischemia vs. infarction<br>d) Aneurysm<br>e) Hypertension<br>f) Venous flow<br>i) Varicose Veins<br>ii) Deep Vein Thrombosis<br>2) Alterations in Pump<br>a) principles<br>b) impulse conduction<br>c) structural defects<br>i) valves<br>ii) congenital defects<br>d) pump failure<br>i) left sided<br>ii) right sided<br>e) cardiomyopathy<br>f) restriction<br>3) Shock<br>a) processes | **Read Chapter 12**<br><br>**Evaluation:**<br>Quiz 5 & 6<br>Exam 2 |

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|---|---|---|
| failure, including causation, manifestations, treatment, and complications.<br>8. Identify and describe the pathophysiologic effects of shock. | b) origins<br>i) cardiogenic<br>ii) hypovolemic<br>iii) neurogenic<br>**iv)** septic | |

## Reproductive Disorders

| Module 9 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Explain the function of the female and male reproductive systems.<br>2. Discuss the causes and effects of pelvic inflammatory disease and endometriosis.<br>3. Compare and contrast the primary cancers of women: ovarian, cervical and breast.<br>4. Review the differences between benign prostatic hypertrophy and prostate cancer as it relates to male reproductive function.<br>5. Compare and contrast common sexually transmitted diseases. | 1) Female Reproductive Problems<br>a) Pelvic Inflammatory Disease<br>b) endometriosis<br>c) Cancers<br>i) Cervical<br>ii) ovarian<br>iii) breast<br>2) Male Reproductive Problems<br>a) Benign Prostatic Hypertrophy<br>b) Prostatic cancer<br>3) Sexually Transmitted Diseases<br>a) bacterial<br>b) viral | **READ:**<br>VanMeter, Chapter 19<br><br>**Assignment:**<br>Quiz 7<br>Exam |

## Skin Disorders

| Module 9 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Describe common skin lesions.<br>2. Discuss conditions of inflammation of the skin.<br>3. Compare and contrast skin cancers.<br>4. Discuss the pathologic results of a thermal injury. | 1. Anatomy of Skin<br>a. Structure<br>b. Function<br>2. Inflammation<br>a. Processes and Effects<br>b. Common lesions<br>3. Cancers<br>a. Causes and effects<br>b. Conditions<br>1. Basal cell<br>2. Squamous Cell<br>3. Melanoma<br>4. Thermal Injuries<br>a. Causes<br>b. Degree<br>1. Partial Thickness<br>2. Deep Partial Thickness<br>3. Full Thickness<br>c. Effects<br>1. Shock<br>2. Pain<br>3. Infection | **READ:**<br>VanMeter Chapter 8, and pp, 79-85 (Burns) |

## Musculoskeletal Disorders

| Module 10 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Describe the structure and function of bones and muscles, including interaction of systems.<br>2. Describe the process of bone fractures and healing.<br>3. Discuss degenerative conditions of the bone and joints. | 1) Structure and Function<br>a) Bones<br>b) Joints<br>c) Muscles<br>2) Bones and Joints<br>a) Fractures<br>b) Degenerative Bones and Joints<br>i) Osteoporosis<br>ii) Osteoarthritis<br>iii) Rheumatoid Arthritis<br>iv) Gout<br>3) Muscles<br>a) Fibromyalgia | **READ:**<br>VanMeter, Chapter 9<br><br>**Assignment:**<br>**Quiz 8** |

## Acute Neurological Disorders

| Module 11 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Discuss causes and outcomes of increased intracranial pressure, including causes.<br>2. Explain causes and outcomes of alterations in cranial blood flow focusing on ischemic events.<br>3. Discuss clinical symptoms of spinal cord injuries including differentiation, loss of function and levels of disability. | 1) Increased Intracranial Pressure<br>a) causes<br>i) brain trauma<br>ii) space occupying lesions<br>iii) hemorrhage<br>iv) edema<br>b) compensatory mechanisms<br>c) manifestations of ICP<br>i) early<br>ii) late<br>2) Cranial blood flow<br>a) Cerebral Vascular Accident<br>3) Spinal Cord Injuries<br>a) partial<br>b) transaction<br>c) neurogenic shock | **READ:**<br>VanMeter, Chapter 14<br><br>**Evaluation Module 6-9**<br>**Exam 3** |

## Chronic Neurological Disorders

| Module 12 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Discuss causes and outcomes of seizure disorders.<br>2. Explain causes and outcomes of dementias. | 1) Seizure Disorders<br>a) Risk Factors<br>b) Neurologic alterations<br>c) Characteristics | **READ:**<br>VanMeter, Chapter 14<br><br>**Assignment**<br>Quiz 8 |

| | | |
|---|---|---|
| 3. Discuss causes and outcomes of chronic degenerative neuromuscular conditions. | 2) Dementias<br>a) Neurologic manifestations<br>b) Phases<br>i) Early<br>ii) late<br>3) Chronic Neuromuscular Disorders<br>a) Neurotransmitters<br>i) Parkinson's<br>b) Nerve degeneration<br>**i)** Multiple Sclerosis | |

## Pain

| Module 12 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Explore concepts of pain perception, modulation and clinical manifestations. | 1) Pain<br>a) transmission<br>i) reflex arcs<br>ii) sensory tracts<br>b) Interpretation<br>2) manifestations | **READ:**<br>VanMeter, Chapter 4 |

## Respiratory Disorders

| Module13 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Explain the mechanics and controls of ventilation.<br>2. Discuss the pathological processes of inflammation and how it effects air movement in the lungs.<br>3. Describe the mechanical changes of lung or chest trauma that interfere with air movement.<br>4. Discuss the pathological processes that precipitate a change in gas exchange in the lung.<br>5. Describe the pathological mechanisms and effects of changes in pulmonary blood flow. | 1. Controls<br>a. Thoracic mechanics<br>b. Chemical controls<br>2. Inflammation<br>a. Processes and Effects<br>b. Conditions<br>1. Asthma<br>2. Pneumonia<br>3. Tuberculosis<br>4. Lung Cancer<br>3. Mechanical Alterations<br>a. Causes and effects<br>b. Conditions<br>1. Pneumothorax<br>2. Chest wall trauma<br>4. Gas Exchange Alterations<br>a. Causes and Effects<br>b. Conditions<br>1. Cystic Fibrosis<br>2. Chronic Bronchitis<br>3. Emphysema<br>4. Pulmonary Edema<br>5. Blood Flow Alterations | **READ:**<br>VanMeter, Chapter 13<br><br>**Assignment:**<br>Quiz 9 |

| | | |
|---|---|---|
| | a. Causes and effects<br>b. Conditions<br>1. Pulmonary Embolus<br>2. Pulmonary Hypertension | |

## Endocrine Disorders

| Module 14 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Discuss the regulation of hormone secretion by positive and negative feedback loops.<br>2. Compare and contrast Type 1 and Type 2 diabetes mellitus.<br>3. Describe the degenerative complications of diabetes mellitus.<br>4. Describe the condition of alterations in ADH on body function.<br>5. Discuss the effects of thyroid hormone and effects of alterations on the metabolism.<br>6. Discuss the role of corticosteroids in body function and changes when levels are altered.<br>7. Discuss the functions of aldosterone on body functions. | 4) Hormonal control<br>a) Feedback loops<br>b) Target cell receptors<br>5) Pancreas - Insulin<br>a) Diabetes Mellitus, type 1<br>b) Diabetes Mellitus, type 2<br>c) Complications<br>6) Pituitary – Antidiuretic Hormone<br>a) SIADH<br>b) Diabetes Insipidus<br>7) Thyroid – thyroxine<br>a) Hyperthyroid (Graves)<br>b) Hypothyroid (Myxedema)<br>8) Adrenal -<br>a) Corticosteroids<br>i) Too much<br>ii) Too Little<br>b) Aldosterone<br>i) Too much<br>ii) Too little | **READ:**<br>Gould, Chapter 16<br><br>**Evaluation Module 10-14**<br>Exam 4 |

## Digestive System Disorders

| Module 15 Objectives | Outline | Preparation and Evaluation |
|---|---|---|
| 1. Describe the physiologic alterations that occur in relation to infectious processes that cause gastroenteritis, hepatitis and pancreatitis.<br>2. Identify the consequences of obstruction at various sites in the GI tract.<br>3. Describe the causes, manifestations, treatments, outcomes, and complications of gastritis including ulcer disease and reflux problems.<br>4. Describe inflammatory bowel diseases-- ulcerative colitis and | 1) Conditions of Upper Gastrointestinal System<br>a) Gastroesophageal Reflux (GERD)<br>b) Peptic Ulcer Disease (PUD)<br>c) Gastroenteritis<br>(a) Bacterial<br>(b) viral<br>2) Conditions of Lower Gastrointestinal System<br>a) Inflammatory Bowel Disease<br>b) Diverticulosis<br>c) Bowel Obstruction<br>3) Conditions of Accessory Organs<br>a) Liver | **READ:**<br>VanMeter, Chapter 17<br><br>**Assignment:**<br>Quiz 10 |

| | | |
|---|---|---|
| Crohn's disease—and diverticular disease.<br>5. Discuss the similarities and differences between acute and chronic pancreatitis.<br>6. Discuss the pathophysiologic alterations that occur with liver failure. | i) Hepatitis<br>ii) Cirrhosis<br>iii) Failure<br>b) Pancreatitis<br>c) Cholecystitis | |

**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 _____ Course NURS 3303

**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®, Flicker®, Friendstar®, Classmates.com®, LinkedIn®, Xanga®, Bebo®, etc. (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

## 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/MOPPChapter8StudentConductandDiscipline-updated011411.pdf

_____ _____
Student Signature Date

_____ NURS 3303
Student Printed Name Course Number

Approved: UG Studies: 5/11

## AUDIO/VIDEO-RECORDING AGREEMENT

I have been given permission to audio record the following class, **NURS 3303**.

I understand that, the recordings are for **my personal studies *only***. I realize that lectures recorded **may not be shared** with other people without the written consent of the faculty member. I also understand that recorded lectures may not be used in any way against the faculty member, other lecturer, or students whose classroom comments are recorded as part of the class activity.

I am aware that the information contained in the recorded lectures is protected under federal copyright laws and may not be published or quoted without the expressed consent of the lecturer and without giving proper identity and credit to the lecturer. I agree to abide by these guidelines with regard to any lectures I record while enrolled as a student at The University of Texas at Tyler.

Due to the confidential nature of some course content, I agree to provide written documentation of the erasure of any recordings made during the current semester. Failure to return this written documentation to the faculty by the date of the final examination will result in a grade of "I" (Incomplete).

_____ _____
Signature of Student Date

_____
Signature of Witness

_____
Title of Witness

If a student records a course they must and sign and agree to the terms of this policy