The University of Texas at Tyler
School of Nursing

NURS 3303
Pathophysiology of Acute Care

Spring 2015

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Tyler Sections
MONDAY Section 001  0800 – 1045
THURSDAY Section 002  0800 – 1045
THURSDAY Section 003  1100 – 1345

** 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.
8. 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; Spring 2015—located in Blackboard under Course Information
Course Schedules: located in Blackboard under Course Information for each section/class day

TEXTBOOK:

RECOMMENDED:
CLASS PREPARATION/BLACKBOARD INFORMATION

All lecture outlines, notes, objectives and supplemental materials are found under the Unit Module tab 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 receive 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:

<table>
<thead>
<tr>
<th>Grade Calculation</th>
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</thead>
<tbody>
<tr>
<td>4 classroom exams—16% each</td>
<td>64%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>21%</td>
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<tr>
<td>On-line Quizzes</td>
<td>10%</td>
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<tr>
<td>Group Presentation</td>
<td>5%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</table>

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 10 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.**

**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.
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. An individual exam review 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.

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**

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

<table>
<thead>
<tr>
<th>Module 1 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
</tr>
</thead>
</table>
| 1. Describe common cellular adaptations and possible reasons for the occurrence of each. | 1. Cell Adaptation  
   a. healthy  
   b. pathologic  | READ: VanMeter, Chapter 1 |
| 2. Identify precancerous cellular changes. | 2. Cell Damage Mechanisms  
   a. hypoxia  
   b. free radicals  
   c. physical injury  | |
| 3. List the common causes of cell damage | 3. Necrosis  
   a. liquification  
   b. coagulative  
   c. caseous  
   d. infarction  
   e. gangrene  | |
| 4. Describe the common types of cell necrosis and possible outcomes | 4. Apoptosis and aging | |
| 5. Differentiate between apoptosis and necrosis. | | |

### Fluid, Electrolyte and Acid Base Balance

<table>
<thead>
<tr>
<th>Module 1 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
</tr>
</thead>
</table>
| 1. Explain the movement of water between body compartments. | 1. Body Water  
   a. compartments  
   b. movement  
      1. mechanisms  
      2. controls  
   c. Edema  
      1. mechanism  
      2. consequences  
   d. Dehydration  
      1. mechanism  
      2. consequences  | READ: VanMeter, Chapter 2 |
| 2. Describe the mechanism of edema. | 2. Electrolytes  
   a. Sodium  
      1. function  
      2. hyponatremia  
      3. hypernatremia  
   b. Potassium  
      1. function  
      2. hypokalemia  
      3. hyperkalemia  
   c. Calcium  
      1. function  
      2. hypocalcemia  
      3. hypercalcemia  
   d. Phosphorus  
      1. function  
      2. relationship with | Assignment: Quiz 1 |
3. Acid-Base Balance
   a. compensatory mechanisms
   b. acidosis
      1. respiratory
      2. metabolic
   c. alkalosis
      1. respiratory
      2. metabolic
   d. compensation

Inflammation, Healing and Infection

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

Congenital and Genetic Disorders

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

<table>
<thead>
<tr>
<th>Module 4 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
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</thead>
<tbody>
<tr>
<td>1. Describe the normal immune response.</td>
<td>1. Immune Response</td>
<td>READ: VanMeter, Chapter 7</td>
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<tr>
<td>2. Differentiate between cell mediated and humoral responses.</td>
<td>a. Cell mediated</td>
<td></td>
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<tr>
<td>3. Explain the methods of acquiring immunity.</td>
<td>b. Humoral</td>
<td>Assignment Quiz 3</td>
</tr>
<tr>
<td>4. Describe the mechanisms of the four types of hypersensitivity reactions and give examples of each.</td>
<td>2. Immunity</td>
<td></td>
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<tr>
<td>5. Reactions and give examples of each.</td>
<td>a. Acquisition</td>
<td></td>
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<tr>
<td>6. Discuss the mechanism of autoimmune disorders.</td>
<td>b. Types</td>
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<td>7. Explain the causes and effects of immunodeficiency.</td>
<td>1. I – hay fever</td>
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<td>8. Describe the course, effect and complications of HIV –AIDS.</td>
<td>2. II – Blood incompatibility</td>
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<td>3. III – Autoimmune Disorders</td>
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<td>4. IV – transplant rejection</td>
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<td></td>
<td>2) Categorizing Cancers</td>
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<td></td>
<td>a) staging</td>
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<td></td>
<td>b) grading</td>
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<td>c) prognosis</td>
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<td>3) Risk Factors</td>
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<td></td>
<td>a) Viral</td>
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<td></td>
<td>b) Bacterial</td>
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<td></td>
<td>c) Environmental</td>
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<td></td>
<td>4) Clinical Manifestations</td>
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## Neoplasms

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

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<tr>
<th>Module 5 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
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</thead>
<tbody>
<tr>
<td>1. Define anemia and describe the manifestations of anemia and the pathophysiology that generates them.</td>
<td>1) Blood Characteristics</td>
<td>READ: VanMeter, Chapter 10, 11</td>
</tr>
<tr>
<td>2. Compare and contrast the</td>
<td>a) Red blood cells</td>
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<td>b) White blood cells</td>
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<td>c) Platelets</td>
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<td></td>
<td>d) plasma</td>
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</table>
pathophysiology underlying iron deficiency, pernicious, and folate deficiency anemias.

3. Differentiate the leukemias by manifestations, treatment options, and prognosis.

4. Identify the causes of thrombocytopenia and its signs and symptoms related to its pathophysiology.

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

<table>
<thead>
<tr>
<th>Problems of red blood cells</th>
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</thead>
<tbody>
<tr>
<td>a) Iron deficiency anemia</td>
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<td>b) Pernicious anemia</td>
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<td>c) Sickle Cell anemia</td>
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<thead>
<tr>
<th>Problems of white blood cells</th>
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<tbody>
<tr>
<td>a) leukemia</td>
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<tr>
<th>Problems with platelets</th>
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<tbody>
<tr>
<td>a) Thrombocytopenia</td>
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Renal/Urinary Disorders

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

Cardiovascular Disorders

<table>
<thead>
<tr>
<th>Module 7 &amp; 8 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
</tr>
</thead>
</table>
| 1. Describe the principles that govern blood flow and pump function. | 1) Alterations of flow  
   a) Principles  
   b) Atherosclerosis  
   c) Ischemia vs. infarction  
   d) Aneurysm  
   e) Hypertension  
   f) Venous flow  
   i) Varicose Veins  
   ii) Deep Vein Thrombosis | Assignment  
Quiz 5 & 6 |
| 2. Discuss the factors influencing the systemic blood pressure and blood flow. | 2) Alterations in Pump  
   a) principles  
   b) impulse conduction | |
4. Discuss the physiologic effects of hypertension.

5. Describe venous flow disturbances and potential complications.

6. Discuss the factors that determine effective heart pumping functions, including dysrhythmias and structural defects.

7. Compare left and right heart failure, including causation, manifestations, treatment, and complications.

8. Identify and describe the pathophysiologic effects of shock.

c) structural defects
   i) valves
   ii) congenital defects

d) pump failure
   i) left sided
   ii) right sided

e) cardiomyopathy
f) restriction

3) Shock
   a) processes
   b) origins
      i) cardiogenic
      ii) hypovolemic
      iii) neurogenic
      iv) septic

Reproductive Disorders

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

Skin Disorders

<table>
<thead>
<tr>
<th>Module 9 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
</tr>
</thead>
</table>
| 1. Describe common skin lesions. | 1. Anatomy of Skin  
   a. Structure  
   b. Function  
   2. Inflammation  
      a. Processes and Effects  
      b. Common lesions  
   3. Cancers  
      a. Causes and effects  
      b. Conditions  
         1. Basal cell  
         2. Squamous Cell  
         3. Melanoma | READ:  
VanMeter Chapter 8, and pp, 79-85 (Burns) |
4. Thermal Injuries
   a. Causes
   b. Degree
      1. Partial Thickness
      2. Deep Partial Thickness
   c. Effects
      1. Shock
      2. Pain
      3. Infection

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**Acute Neurological Disorders**

<table>
<thead>
<tr>
<th>Module 10 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
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</thead>
</table>
| 1. Discuss causes and outcomes of increased intracranial pressure, including causes. | 1) Increased Intracranial Pressure  
   a) causes  
      i) brain trauma  
      ii) space occupying lesions  
      iii) hemorrhage  
      iv) edema  
   b) compensatory mechanisms  
   c) manifestations of ICP  
      i) early  
      ii) late  
2) Cranial blood flow  
   a) Cerebral Vascular Accident  
3) Spinal Cord Injuries  
   a) partial  
   b) transaction  
   c) neurogenic shock | READ: VanMeter, Chapter 14  
Evaluation Module 6-9  
Exam 3 |

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**Chronic Neurological Disorders**

<table>
<thead>
<tr>
<th>Module 11 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
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</thead>
</table>
| 1. Discuss causes and outcomes of seizure disorders.  
2. Explain causes and outcomes of dementias.  
3. Discuss causes and outcomes of chronic degenerative neuromuscular conditions. | 1) Seizure Disorders  
   a) Risk Factors  
   b) Neurologic alterations  
   c) Characteristics  
2) Dementias  
   a) Neurologic manifestations  
   b) Phases  
      i) Early  
      ii) late  
3) Chronic Neuromuscular Disorders  
   a) Neurotransmitters  
      i) Parkinson’s  
   b) Nerve degeneration  
      i) Multiple Sclerosis | READ: VanMeter, Chapter 14  
Assignment  
Quiz 8 |
## Pain

<table>
<thead>
<tr>
<th>Module 11 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
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</table>
| 1. Explore concepts of pain perception, modulation and clinical manifestations. | 1) Pain  
   a) transmission  
     i) reflex arcs  
     ii) sensory tracts  
   b) interpretation  
2) manifestations | READ: VanMeter, Chapter 4 |

## Musculoskeletal Disorders

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

## Respiratory Disorders

<table>
<thead>
<tr>
<th>Module 12 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
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</table>
| 1. Explain the mechanics and controls of ventilation.  
2. Discuss the pathological processes of inflammation and how it effects air movement in the lungs.  
3. Describe the mechanical changes of lung or chest trauma that interfere with air movement.  
4. Discuss the pathological processes that precipitate a change in gas exchange in the lung. | 1. Controls  
   a. Thoracic mechanics  
   b. Chemical controls  
2. Inflammation  
   a. Processes and Effects  
   b. Conditions  
   1. Asthma  
   2. Pneumonia  
   3. Tuberculosis  
   4. Lung Cancer  
3. Mechanical Alterations  
   a. Causes and effects  
   b. Conditions  
   1. Pneumothorax | READ: VanMeter, Chapter 13  
Assignment: Quiz 9 |
5. Describe the pathological mechanisms and effects of changes in pulmonary blood flow.

4. Gas Exchange Alterations
   a. Causes and Effects
   b. Conditions
      1. Cystic Fibrosis
      2. Chronic Bronchitis
      3. Emphysema
      4. Pulmonary Edema

5. Blood Flow Alterations
   a. Causes and effects
   b. Conditions
      1. Pulmonary Embolus
      2. Pulmonary Hypertension

Endocrine Disorders

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

Digestive System Disorders

<table>
<thead>
<tr>
<th>Module 15 Objectives</th>
<th>Outline</th>
<th>Preparation and Evaluation</th>
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</table>
| 1. Describe the physiologic alterations that occur in relation to infectious processes that cause gastroenteritis, hepatitis and pancreatitis. | 1) Conditions of Upper Gastrointestinal System  
   a) Gastroesophageal Reflux (GERD)  
   b) Peptic Ulcer Disease (PUD)  
   c) Gastroenteritis |
| 2. Identify the consequences of obstruction at various sites in the | | READ: VanMeter, Chapter 17 |
3. Describe the causes, manifestations, treatments, outcomes, and complications of gastritis including ulcer disease and reflux problems.


5. Discuss the similarities and differences between acute and chronic pancreatitis.

6. Discuss the pathophysiologic alterations that occur with liver failure.

<table>
<thead>
<tr>
<th>GI tract.</th>
<th>(a) Bacterial (b) viral</th>
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<tbody>
<tr>
<td>2) Conditions of Lower Gastrointestinal System</td>
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<tr>
<td>a) Inflammatory Bowel Disease</td>
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<td>b) Diverticulosis</td>
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<td>c) Bowel Obstruction</td>
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<td>3) Conditions of Accessory Organs</td>
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<tr>
<td>a) Liver</td>
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<tr>
<td>i) Hepatitis</td>
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<td>ii) Cirrhosis</td>
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<td>iii) Failure</td>
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<tr>
<td>b) Pancreatitis</td>
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<tr>
<td>c) Cholecystitis</td>
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Assignment: Quiz 10
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 _______________________________

_____________________________________________ NURS 3303
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](http://www2.uttyler.edu/mopp/documents/MOPPChapter8StudentConductandDiscipline-updated011411.pdf)

Student Signature                                         Date

Student Printed Name                                      NURS 3303

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