

SUL ROSS STATE UNIVERSITY Spring 2023

## **BIOL 2340 Pathophysiology (Web-Delivered 3 credits)**

**INSTRUCTOR:** Ms. Anne Marie Hilscher

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**Office Hours (WSB 220):** M 8:30-11:00; T 8:30-9:30; W 8:30-11:00 & 1-3; R 8:30-9:30 & 2-3; F and online by appt.

**CLASS WEBSITE:** [HTTP://SULROSS.BLACKBOARD.COM](http://SULROSS.BLACKBOARD.COM)

### **COURSE DESCRIPTION:**

This online course builds on knowledge obtained in anatomy and physiology courses which provides information related to basic pathological processes that underlie diseases commonly found in clinical practice. The basics of each pathological process are explained and illustrated by exploration of common diseases caused by that pathological process. Introduction of selected pathophysiologic concepts across the life span will be initiated in this course with emphasis on diagnostic data related to the concept.

### **TEXTBOOK. *REQUIRED\*\****

McConnell, Thomas H. *The Nature of Disease: Pathology for Health Professions, 2e.*

**ISBN:** 9781609133696, **ISBN-10:** 1609133692

### **OPTIONAL, *NOT Required.***

1. Essential Notes on Pathophysiology for Advanced Practice Nurses:  
<https://dc.etsu.edu/cgi/viewcontent.cgi?article=1002&context=etsu-oe>
2. Pagana, Kathleen, Pagana, D, and Pagana, Theresa. *Mosby's Diagnostic and Laboratory Test Reference*, 13e. **ISBN:** 9780323399579, **ISBN-10:** 0323399576

**COURSE LEARNING OBJECTIVES.** Upon completion of assignments in this course, the student will:

1. Demonstrate understanding of pathological processes and how these changes produce disease.
2. Differentiate the following types/categories of disease/pathology that provide the basis for planning and implementing health care including:
  1. Inherited or Familial Diseases
  2. Congenital Diseases
  3. Toxic Diseases
  4. Inflammation
  5. Infectious Diseases
  6. Traumatic Diseases
  7. Degenerative Diseases
  8. Allergic Diseases
  9. Autoimmune Diseases
  10. Neoplastic Diseases
  11. Nutritional Diseases
  12. Metabolic Diseases
  13. Molecular Diseases
  14. Psychosomatic Diseases
  15. Factitious Disease
  16. Iatrogenic Disease
3. Relate disease clinical referents/signs and symptoms to laboratory findings and to their underlying pathology.
4. Use knowledge of genetic inheritance, environment, lifestyle choices and other identified antecedents/risk factors that contribute to disease development.

5. Recognize the presence and effects of compensatory mechanisms in response to major pathological alterations.
6. Apply knowledge of variables affecting the healing process in tissues and organ systems to management of common diseases and injuries.
7. Describe best safety practices to assure accuracy of obtaining diagnostic data required to identify the disease process and the magnitude/extent of the disease.
8. Differentiate between life span changes that occur with selected pathophysiologic concepts.

## **COURSE CONTENT:**

**STUDENT INTRO (25 points).** Each student will introduce themselves to the class via the Discussion Board.

**MODULES.** The course consists of five MODULES, each approximately three weeks long. Students will be responsible for readings, assignments, and case studies in each module. Additional resources may be placed in each folder. Content items will include the following:

- **READINGS.** Students are expected to read all the selected passages each week.
- **MODULE ASSIGNMENTS (5 @ 60 points each).** Assignments consist of questions (50 points) related to all the module readings, as well as a Case Study (10 points). The major focus for each case will relate to anatomical and physiological changes that occur during the disease and may include diagnostic data that reflect the condition. Students will answer the questions related to the case, and points will be awarded based on the quality of the contribution, not necessarily the quantity of words.
- **MODULE DISEASE CONCEPT MAPS (10 @ 10 points each).** Students will choose two diseases presented in each module and complete a concept map for each disease. A template will be provided.

**DISEASE ANALYSIS RESEARCH PAPER (100 points).** Your major written assignment for this course is a professional paper related to an analysis for your selected pathophysiologic concept. You will select one age group to research and present pertinent information in that category. That age group can be infant (birth to 1 year of age); early childhood (1 year to 6 years of age); late childhood (6 years to puberty); adolescence; adult; and or the geriatric patient. ***The paper must be a minimum of six pages without the bibliography.*** Detailed information will be provided on Blackboard. Don't wait until the last minute to start!

**STUDENT REFLECTION (25 points).** Reflective writing is different from most other forms of academic writing because it does not require that you cite sources. This type of writing provides an opportunity to express *what* you think and *how* and *why* you think that way. In this final assignment, you will demonstrate an understanding of class content in a coherent, honest, and personal short essay. Details will be provided near the end of the semester.

## **GRADING POLICY:**

Student Introduction	25
Module Assignments (including Case Studies)	300
Disease Concept Maps	100
Disease Analysis Research Paper	100
Student Reflection	25
<b>TOTAL</b>	<b>550</b>

## **CLASS SCHEDULE:**

Week One: January 18-20

Intro to Course & Module 1 Ch 1 Health & Disease, Ch 2 Cellular Pathology

Week Two: January 23-27

Module 1 Ch 2 Cellular Pathology, cont., Ch 3 Disorders of the immune System

*Student Intro due 01/27 by midnight*

Week Three: January 30-February 03

Module 1 Ch 4 Infectious Disease, Ch 5 Neoplasia

*Module #1 Assignment and Disease Concept Maps due 02/03*

Week Four: February 06-10

Module 2 Ch 6 Disorders of Fluid, Electrolyte & Acid-Base Balance, & Blood Flow, Ch 7 Disorders of Blood Cells

Week Five: February 13-17

Module 2 Ch 8 Disorders of Blood Vessels, Ch 9 Disorders of the Heart

*Disease Analysis Research Topic due (via email to your instructor) 02/17*

Week Six: February 20-24

Module 2 Ch 10 Disorders of the Respiratory Tract, Ch 11 Disorders of the GI Tract;

*Module #2 Assignment and Disease Concept Maps due 02/24*

Week Seven: February 27-March 03

Module 3 Ch 12 Disorders of the Liver and Biliary Tract, Ch 13 Disorders of the Pancreas

Week Eight: March 06-10

Module 3 Ch 14 Disorders of the Endocrine Glands

**Week Nine: March 13-17 SPRING BREAK**

Week Ten: March 20-24

Module 3 Ch 15 Disorders of the Urinary Tract; Ch 16 Disorders of the Male Genitalia

*Module #3 Assignment and Disease Concept Maps due 03/24*

Week Eleven: March 27-31

Module 4 Ch 17 Disorders of the Female Genitalia & Breast

Week Twelve: April 03-07

Module 4 Ch 18 Disorders of the Bone, Joints, & Skeletal Muscle, Ch 19 Disorders of the Nervous System

Week Thirteen: April 10-14

Module 4 Ch 20 Disorders of the Senses, Ch 21 Disorders of the Skin

*Module #4 Assignment and Disease Concept Maps due 04/14*

Week Fourteen: April 17-21

Module 5 Ch 22 Congenital and Childhood Disorders

*DISEASE ANALYSIS RESEARCH PAPER DUE 04/21*

Week Fifteen: April 24-28

Module 5 Ch 23 Disorders of Daily Life, Ch 24 Aging, Stress, Exercise, and Pain

Week Sixteen May 01-05

Module 5 Ch 24 Aging, Stress, Exercise, and Pain, cont.

*Module #5 Assignment and Disease Concept Maps due 05/05*

Week Seventeen May 08-12

*Final Student Reflection due Friday, 05/12, by 11:59 PM*

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### **STUDENTS IN THIS COURSE ARE EXPECTED TO:**

1. Complete weekly assignments with current and relevant data. Unit objectives, weekly assignments, and relevant resources will be placed in a weekly folder.
2. Read textbook assignments and utilize other resources in your weekly folder to acquire information that will assist the learning process.
3. Demonstrate learning behavior, application of knowledge in case studies and class discussion, interpersonal skills, teamwork skills, appropriate writing skills and professional communication when completing course requirements.
4. Web courses (offered online) are not self-paced and require considerable work to meet requirements. Students should be prepared to devote approximately 12 hours per week to accomplish the work required for a 3-hour class (i.e., student should devote approximately the same study time for an online course as would be spent in a regular class with outside work requirements—a measure generally calculated at 3 hours outside work for each hour in class.) Students **MUST** have a reliable high-speed internet connection available on a regular basis for course work and other assignments whenever University computer laboratories are not open.

### **RULES OF NETIQUETTE:**

The term “netiquette” refers to written and unwritten rules regarding appropriate communication on the Internet. It applies primarily to interactions on the course Discussion Board, individual and group assignments, and e-mail communications.

1. Help create a community of scholars by encouraging a cooperative win-win attitude in which all members of the class are willing to work together, each contributing in their own way.
2. Be courteous and respectful to students and faculty in the course.
  - a. There is a difference between making a statement that is a critical appraisal of an idea and criticizing someone for their point of view.
  - b. Be careful with the tone of what you are communicating, as with sarcasm and subtle humor; one person’s joke may be another person’s insult.
  - c. Do not use all caps in the message box (it is considered shouting).
  - d. Do not use language that is inappropriate for a classroom setting or prejudicial in regard to gender, race, or ethnicity.

3. Be helpful and be sure to do your part in an online class or in group work so that assignments can be completed according to the course schedule.
4. Common courtesy and good manners, along with the use of proper grammar, sentence structure, and correct spelling, are essential when taking an online course.
  - a. Use meaningful titles in the Subject line. For e-mail, include the course number.
  - b. Use the person's name you are addressing as a greeting in the first line of the message. This helps ensure that you are writing to the intended person (group).
  - c. Close the posting by writing your full name at the end of the message.
5. Do not send large files, since someone in your class may have a relatively slow internet connection or limited server capacity.
6. Be sure to use a reliable computer security system with functioning anti-virus software. Check for viruses when sending and sharing files.
7. Be patient if you do not get an immediate response to your postings, as others may be on a different schedule. If it is urgent, contact other students or faculty by e-mail.

#### **COMMUNICATIONS:**

- **Announcements** – Check announcements each time you log onto the course.
- **Course email** – Check course email frequently for communications and make sure that your email address is current. The instructor will respond to inquiries and comments within 24 hours Monday-Friday.
- **Use of technology:** If you have any technical questions, problems, or concerns with Blackboard, do not spend more than 15 minutes on any technical problems. Seek help immediately. Contact 24-7 Help Desk at: 1-888-837-2882 and/or techassist@sulross.edu.
- **Responses to emails and course postings:** Please respond to faculty requests and/or communications within 24 hours. Use course or Sul Ross email. Messages received on the weekends or holidays will be answered by the next working day.
- **Writing and use of APA:** All written assignments and bulletin board postings will be submitted using the American Psychological Association (APA) Guidelines, as indicated by faculty.  
<http://owl.english.purdue.edu/owl/resource/560/01>

#### **MARKETABLE SKILLS FOR THE DEPARTMENT OF NURSING**

The following marketable skills and dissemination plan has been submitted to the Texas Higher Education Board after approval from Assistant Vice President for Institutional Effectiveness at Sul Ross State University:

Students will:

1. develop inquiry skills to evaluate situations (Sense of Inquiry);
2. develop communication skills to evaluate situations (Communication Skills);
3. develop research skills to promote their lifelong learning (Continuous Lifelong Learning); and
4. comport themselves verbally and visually in a professional manner (Professionalism).

## **GENERAL CAMPUS REGULATIONS AND CONDUCT:**

**Academic Honesty Policy:** The University expects all students to engage in all academic pursuits in a manner that is beyond reproach and to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. The University may initiate disciplinary proceedings against a student accused of any form of academic dishonesty, including but not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials. Academic Dishonesty includes:

1. Copying from another student's test paper, laboratory report, other report, or computer files, data listings, and/or programs, or allowing another student to copy from same.
2. Using, during a test, materials not authorized by the person giving the test.
3. Collaborating, without authorization, with another person during an examination or in preparing academic work.
4. Knowingly, and without authorization, using, buying, selling, stealing, transporting, soliciting, copying, or possessing, in whole or in part, the contents of a non-administered test.
5. Substituting for another student; permitting any other person, or otherwise assisting any other person to substitute for oneself or for another student in the taking of an examination or test or the preparation of academic work to be submitted for academic credit.
6. Bribing another person to obtain a non-administered test or information about a non-administered test.
7. Purchasing or otherwise acquiring and submitting as one's own work any research paper or other writing assignment prepared by an individual or firm. This section does not apply to the typing of a rough and/or final version of an assignment by a professional typist.
8. "Plagiarism" means the appropriation and the unacknowledged incorporation of another's work or idea in one's own written work offered for credit.
9. "Collusion" means the unauthorized collaboration with another person in preparing written work offered for credit.
10. "Abuse of resource materials" means the mutilation, destruction, concealment, theft or alteration of materials provided to assist students in the mastery of course materials.
11. "Academic work" means the preparation of an essay, dissertation, thesis, report, problem, assignment, or other project that the student submits as a course requirement or for a grade.

All academic dishonesty cases may be first considered and reviewed by the faculty member. If the faculty member believes that an academic penalty is necessary, he/she may assign a penalty, but must notify the student of his/her right to appeal to the Department Chair, the Associate Provost/Dean, and eventually to the Provost and Vice President for Academic Affairs before imposition of the penalty. At each step in the process, the student shall be entitled to written notice of the offense and/or the administrative decision, an opportunity to respond, and an impartial disposition as to the merits of his/her case.

In the case of flagrant or repeated violations, the Vice President for Academic Affairs may refer the matter to the Dean of Students for further disciplinary action. No disciplinary action shall become effective against the student until the student has received procedural due process except as provided under Interim Disciplinary Action.

**SRSU Distance Education Statement.** Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are in the student handbook.

**ADA Statement:** Any student who because of a disability, may require special arrangements to meet the course requirements should contact the instructor as soon as possible to make necessary arrangements. If an accommodation is needed, students must present their accommodation letter, obtained from Accessibility Services, as soon as possible. Please note that instructors are not permitted to provide classroom accommodations to a student until the appropriate verification has been received. Accessibility Services is in Ferguson Hall room 112. You can make an appointment by calling Mary Schwartze Grisham at 432 837-8203.

**SRSU Library Services.** The Sul Ross Library offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, [library.sulross.edu](http://library.sulross.edu). Off-campus access requires your LoboID and password. Check out materials using your photo ID. Librarians are a tremendous resource for your coursework and can be reached in person, by email ([srsulibrary@sulross.edu](mailto:srsulibrary@sulross.edu)), or phone (432-837-8123).