# BIOL 2340 Pathophysiology (online)

SUL ROSS STATE UNIVERSITY Spring 2025

**INSTRUCTOR:** Mrs Jena Carey

Email: <u>jena.carey@sulross.edu</u> *PLEASE USE COURSE NUMBER IN SUBJECT LINE!* Office Hours: M-R 8:30-9:00/2-3; Friday by appointment only; Office: WSB 220

#### 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.

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

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: <a href="https://dc.etsu.edu/cgi/viewcontent.cgi?article=1002&context=etsu-oer">https://dc.etsu.edu/cgi/viewcontent.cgi?article=1002&context=etsu-oer</a>
  - a. This is found linked on our Blackboard page under course resources
- 2. Pagana, Kathleen, Pagana, D, and Pagana, Theresa. *Mosby's Diagnostic and Laboratory Test Reference*, 13e. ISBN: 9780323399579, ISBN-10: 0323399576

#### **GRADING POLICY:**

Student Reflection	50
Disease Concept Maps  Disease Analysis	100
Module Assignments (including Case Studies)	
GRIT/Learner Test	25
Student Introduction	25

- Module 1: Chp 1-5 14 Jan-1 Feb
- Module 2: Chp 6-11 3Feb-22 Feb
- Module 3: Chp 12-17 24 Feb- 15 Mar
- Module 4: Chp 18-21 24 Mar-12 Ap
- Module 5: Chp 22-24; 14 Ap-3 May

**MODULES.** The course consists of five MODULES, each approximately three weeks long. Students will be responsible 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 (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!

#### 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).

#### **COMMUNICATIONS:**

- Announcements Check announcements each time you log onto the course.
- Course email Check SRSU student email frequently for communications and make sure that your email address is current. The instructor will respond to inquiries and comments within 48 hours Monday-Friday. Please make sure to include the course number in your subject line and use professional dialogue.
- **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 via your Sul Ross student email. Messages received on the weekends or holidays will be answered by the next working day.

## **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. latrogenic 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.

#### 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 in order 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 hours 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.

Week	Week of	Tentative Topic- Make sure to check Blackboard for due dates
	Date	of assingments!
1	12 Jan	Intro to Course & Module 1 Ch 1 Health & Disease, Ch 2
		Cellular Pathology
2	19 Jan	Ch 2 Cellular Pathology, cont., Ch 3 Disorders of the immune
		System
3	26 Jan	Ch 4 Infectious Disease, Ch 5 Neoplasia
4	2 Feb	Module 2 Ch 6 Disorders of Fluid, Electrolyte & Acid-Base
		Balance, & Blood Flow, Ch 7 Disorders of Blood
		Cells
5	9 Feb	Ch 8 Disorders of Blood Vessels, Ch 9 Disorders of the Heart
6	16 Feb	Ch 10 Disorders of the Respiratory Tract, Ch 11 Disorders of
		the GI Tract;
7	23 Feb	Module 3 Ch 12 Disorders of the Liver and Biliary Tract, Ch 13
		Disorders of the Pancreas
8	2 Mar	Ch 14 Disorders of the Endocrine Glands
9	9 Mar	Ch 15 Disorders of the Urinary Tract; Ch 16 Disorders of the
		Male Genitalia; Ch 17 Disorders of the Female Genitalia &
		Breast
10	16 Mar	SPRING BREAK!- Take a much needed break!!
11	23 Mar	Module 4 Ch 18 Disorders of the Bone, Joints, & Skeletal
12	30 Mar	Ch 19 Disorders of the Nervous System
13	6 Ap	Ch 20 Disorders of the Senses; Ch 21 Disorders of the Skin
14	13 Ap	Module 5 Ch 22 Congenital and Childhood Disorders
15	20 Ap	Ch 23 Disorders of Daily Life
16	27 Ap	Ch 24 Aging, Stress, Exercise, and Pain
17	4 May	Dead Week- Please make sure all assignments are submitted

Studying: As a general rule, students should spend 2-3 hours studying for every 1 hour of lecture material. So, for this class, you need to allocate 5-7.5 hours per week to study the lecture material. <u>I HIGHLY RECOMMEND</u>

<u>READING BEFORE LECTURE</u>. You have been given the tentative schedule- please review it and read material beforehand. I recommend reading your notes in conjunction with reading the relevant textbook chapters.

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 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. Discussion Boards are public, and the University archives all materials. Do not post anything too personal, as all students in the class and your instructor will see what you write.
  - a. Keep the messages you post to the Discussion Board relevant to the course and assignment and provide a rationale, including references as appropriate, to support your point of view.
  - b. Avoid duplication. Read the previous discussions before you comment or ask a question, as the information may have already been covered.
  - c. When posting a response, make sure that you identify the post to which you are responding.
  - d. If the topic you plan to address is already covered under an existing thread, do not start a new thread.
  - e. When responding to a specific comment, quote only the relevant part of the comment and stay focused on the assignment.
  - f. Try not to lurk, meaning you are just reading and not participating.
  - g. The phrase "I agree with (name)/ (everyone)" will not be sufficient for response. Please give details to your agreement in detail, but also give your point of view
- 6. Quality of online communications/postings is important.
  - a. It is not acceptable to present work or ideas of others as your own. Use APA format when you quote directly from a source; use quotation marks and provide the original author's name, year, and page or location in the body of the narrative. When you paraphrase a source—using your own words to explain your understanding of another's ideas or work—provide author and year in the body of the narrative. At the end of the posting provide the complete reference using APA format.
  - b. If the posting is going to be long, use paragraphs.
  - c. Do not overuse acronyms and abbreviations like you use in text messaging. Some participants may not be familiar with acronyms and abbreviations.
  - d. Just as you would proofread a formal paper, before posting
    - i. Read what you have written for content;
    - ii. Rethink what you have written for tone;
    - iii. Reread what you have written for organization and coherence; and
    - iv. Revise what you have written for grammar, punctuation, and mechanics.
    - v. Once you submit your work, discussion, or e-mail, you cannot change what you have written.

- 7. Do not send large files, since someone in your class may have a relatively slow internet connection or limited server capacity.
- 8. Be sure to use a reliable computer security system with functioning anti-virus software. Check for viruses when sending and sharing files.
- 9. 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.

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

## **ADA Statement**

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director or Ronnie Harris, LPC, Counselor, at 432-837-8203 or email <a href="mailto:mschwartze@sulross.edu">mschwartze@sulross.edu</a> or <a href="mailto:ronnie.harris@sulross.edu">ronnie.harris@sulross.edu</a>. RGC students can also contact Alejandra Valdez, at 830-758-5006 or email <a href="mailto:alejandra.valdez@sulross.edu">alejandra.valdez@sulross.edu</a>. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

## **Required Student Responsibilities**

All full-time and part-time students are responsible for familiarizing themselves with the <u>Student Handbook</u> and the <u>Undergraduate & Graduate Catalog</u> and for abiding by the <u>University rules and regulations</u>. Additionally, students are responsible for checking their Sul Ross email as an official form of communication from the university. Every student is expected to obey all federal, state and local laws and is expected to familiarize themselves with the requirements of such laws.

#### **SRSU Distance Education**

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 a 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 located in the student handbook.

## Counseling

Sul Ross has partnered with TimelyCare where all SR students will have access to nine free counseling sessions. You can learn more about this 24/7/365 support by visiting Timelycare/SRSU. The SR Counseling and Accessibility Services office will continue to offer in-person counseling in Ferguson Hall room 112 (Alpine campus), and telehealth Zoom sessions for remote students and RGC students.

#### Libraries

The Bryan Wildenthal Memorial Library and Archives of the Big Bend in Alpine offer FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, <a href="library.sulross.edu/">library.sulross.edu/</a>. Off-campus access requires logging in with your LobolD and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (<a href="srsulibrary@sulross.edu">srsulibrary@sulross.edu</a>), or by phone (432-837-8123).

No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting <a href="mailto:library.sulross.edu/find-and-borrow/texshare/">library.sulross.edu/find-and-borrow/texshare/</a> or ask a librarian by emailing <a href="mailto:srsulibrary@sulross.edu">srsulibrary@sulross.edu</a>.

Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL), ScanIt, and Direct Mail to get materials delivered to you at home or via email.

## **Academic Integrity**

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden. Students should also avoid using open AI sources *unless permission is expressly given* for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

# Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference.

# Supportive Statement~

I aim to create a learning environment for my students that supports various perspectives and experiences. I understand that health concerns or even unexpected life events may impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.