



COLORADO STATE UNIVERSITY
— GLOBAL —

NUR501: ADVANCED PATHOPHYSIOLOGY

Credit Hours: 3

Contact Hours: This is a 3-credit course, offered in accelerated format. This means that 16 weeks of material is covered in 8 weeks. The exact number of hours per week that you can expect to spend on each course will vary based upon the weekly coursework, as well as your study style and preferences. You should plan to spend 14-20 hours per week in each course reading material, interacting on the discussion boards, writing papers, completing projects, and doing research.

Faculty Information: Faculty contact information and office hours can be found on the faculty profile page.

COURSE DESCRIPTION AND OUTCOMES

Course Description:

In this course, graduate nursing students will focus on pathophysiology and disruptions in normal body functioning for individuals across the lifespan. Students will examine the principles of disease and health disparities resulting from genetic, environmental, and stress-related causes. Assessment findings, diagnostic testing, and interventions specific to selected health problems are examined. Students will develop critical thinking skills for pathophysiologic causes and treatments of given disease processes.

Course Overview:

This course is designed to strengthen and enhance your knowledge of the major pathophysiologic concepts. Your clinical practice will be the foundation as you scaffold new onto previous knowledge of complex disease concepts of health and disease. Each week will build on the previous week with Critical Thinking Assignments and discussion board interactions that are meant to create a robust learning environment. By the end of the course, you will gain an in-depth understanding of normal pathophysiologic process and defense, cellular function, integumentary system, musculoskeletal support/ movement, respiratory/cardiac function, oxygen transport, blood coagulation, blood flow, blood pressure, fluid/electrolyte, acid-base balance, renal/bladder function, gastrointestinal function, endocrine function, metabolism, nutrition, and neural/neurological function.

Course Learning Outcomes:

1. Apply principles related to normal anatomy and physiology of human body systems to pathophysiologic processes of common disease processes.
2. Differentiate among normal and abnormal variants of pathophysiologic and physical findings based on lifespan changes and normal anatomy and physiology.
3. Synthesize pathophysiologic knowledge with current aspects of care relating to commonly occurring diseases.

4. Incorporate current and emerging genetic/genomic evidence in advanced nursing care management plans for individuals, families, and communities.
5. Discuss clinical manifestations of selected disease processes and health-related problems across the life span.
6. Identify appropriate pharmacological and non-pharmacological treatment and management of specific health alterations.

PARTICIPATION & ATTENDANCE

Prompt and consistent attendance in your online courses is essential for your success at CSU Global Campus. Failure to verify your attendance within the first 7 days of this course may result in your withdrawal. If for some reason you would like to drop a course, please contact your advisor.

Online classes have deadlines, assignments, and participation requirements just like on-campus classes. Budget your time carefully and keep an open line of communication with your instructor. If you are having technical problems, problems with your assignments, or other problems that are impeding your progress, let your instructor know as soon as possible.

COURSE MATERIALS

Required:

Banasik, J. L., & Copstead, L. E. (2019). *Pathophysiology* (6th ed.). Elsevier. ISBN-13: 9780323354813; eISBN: 9780323510424

Suggested:

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). American Psychological Association. ISBN: 978433832161

Tools:

Shadow Health. (2019). *Advanced pharmacology*. Digital clinical experience [Software]. ISBN: 978098978886

This course uses Shadow Health for concept labs from the Advance Pathophysiology simulations. You will access your Shadow Health assignments through a single sign-on link provided in Canvas—this is the only way to correctly access your Shadow Health assignments. If at any time you have any questions or encounter any technical issues regarding the Digital Clinical Experience, please contact the Shadow Health support specialists by visiting the Learner Support Page at <https://link.shadowhealth.com/helpdesk> for contact information and hours. You may email the Learner Support team directly at support@shadowhealth.com at any time or by calling 800.860.3241.

NOTE: All non-textbook required readings and materials necessary to complete assignments, discussions, and/or supplemental or required exercises are provided within the course itself. Please read through each course module carefully.

COURSE SCHEDULE

Due Dates

The Academic Week at CSU Global begins on Monday and ends the following Sunday.

- **Discussion Boards:** The original post must be completed by Thursday at 11:59 p.m. MT and Peer Responses posted by Sunday 11:59 p.m. MT. Late posts may not be awarded points.
- **Critical Thinking:** Assignments are due Sunday at 11:59 p.m. MT.

WEEKLY READING AND ASSIGNMENT DETAILS

Module 1

Readings

- Chapters 1 & 2 in Unit 1 of *Pathophysiology*
- Chapter 7 in Unit 2 of *Pathophysiology*
- Chapters 10, 11, & 12 in Unit 3 of *Pathophysiology*

Discussion (25 points)

Critical Thinking (90 points)

Option #1: Case Study – Neoplasia

This week's Critical Thinking Assignment has two parts:

Part 1: Create your Shadow Health account and complete the student orientation.

Part 2: Create a patient-related case study on the topic of neoplasia: Utilizing the concepts covered in this module, create a patient-related case study. Please choose a client from your current or past clinical practice for the creation of the case study. Your case study should be thorough yet concise. Delineate between what is normal versus abnormal findings, and pretend you are providing a very complete report to an oncoming nurse at the end of your shift:

- Outline the case by starting with what brought the client to the hospital/clinic/urgent care. Based on the chief complaint, outline a focused assessment and what would be important to include in your report to the oncoming nurse.
- What diagnostics, labs, and any other pertinent tests were conducted on the case you are choosing to discuss? What were the findings? Are there any tests that did not get completed that you think should have? What was the outcome of this case?

Your paper should be 4-6 pages in length, not including the title and reference pages, and conform to CSU Global Writing Center. Include 4-6 scholarly references in addition to the course textbook. The CSU Global Library and Nursing Library Resources are good places to find these references. Review the rubric for specific grading criteria.

Option #2: Case Study – Infections Process

This week's Critical Thinking Assignment has two parts:

Part 1: Create your Shadow Health account and complete the student orientation.

Part 2: Create a patient-related case study on the topic of the infections process: Utilizing the concepts covered in this module, create a patient-related case study. Please choose a client from your current or past clinical practice for the creation of the case study. Your case study should be thorough yet concise. Delineate between what is normal versus abnormal findings, and pretend you are providing a very complete report to an oncoming nurse at the end of your shift:

- Outline the case by starting with what brought the client to the hospital/clinic/urgent care. Based on the chief complaint, outline a focused assessment and what would be important to include in your report to the oncoming nurses.
- What diagnostics, labs, and any other pertinent tests were conducted on the case you are choosing to discuss? What were the findings? Are there any tests that did not get completed that you think should have? What was the outcome of this case?

Your paper should be 4-6 pages in length, not including the title and reference pages, and conform to CSU Global Writing Center. Include 4-6 scholarly references in addition to the course textbook. The CSU Global Library and Nursing Library Resources are good places to find these references. Review the rubric for specific grading criteria.

Module 2

Readings

- Chapters 4, 11, & 12 in Unit 2 of *Pathophysiology*
- Chapters 51 & 52 in Unit 14 of *Pathophysiology*
- Chapters 53 in Unit 15 of *Pathophysiology*

Discussion (25 points)

Critical Thinking (90 points)

Option #1: Shadow Health – Cells, Genes, and Tissues and Common Alterations

Sign in to Shadow Health and complete the Cells, Genes, and Tissues and Common Alterations concept lab.

After completing the assigned clinical exercise, complete and submit the following:

- Take a screenshot that verifies exercise completion.
- Reflect on your learning from the clinical exercise. Your written reflection should, at minimum, respond to the following questions:
 - What are your key learnings or takeaways from this clinical exercise?
 - How does this learning relate to information presented in the course textbook? Cite and reference support from Banasik and Copstead (2019).
 - How do these concepts or skills build on your prior experience?

- What is the significance of these concepts or skills and how will they inform your professional practice?

Your paper should be 1-2 pages in length (not including title and reference pages), supported by the textbook, and must conform to the CSU Global Writing Center. Ensure that both your screenshot and the paper are attached before you submit the assignment and review the rubric for specific grading criteria.

Module 3

Readings

- Chapters 18, 19, & 20 in Unit 5 of *Pathophysiology*
- Chapters 21, 22, & 23 in Unit 6 of *Pathophysiology*

Discussion (25 points)

Critical Thinking (90 points)

Option #1: Shadow Health – The Respiratory System and Common Alterations

Sign into Shadow Health and complete the Cells, Genes, and Tissues and Common Alterations concept lab.

After completing the assigned clinical exercise, complete and submit the following:

- Take a screenshot that verifies exercise completion.
- Reflect on your learning from the clinical exercise. Your written reflection should, at minimum, respond to the following questions:
 - What are your key learnings or takeaways from this clinical exercise?
 - How does this learning relate to information presented in the course textbook? Cite and reference support from Banasik and Copstead (2019).
 - How do these concepts or skills build on your prior experience?
 - What is the significance of these concepts or skills and how will they inform your professional practice?

Your paper should be 1-2 pages in length (not including title and reference pages), supported by the textbook, and must conform to the CSU Global Writing Center. Ensure that both your screenshot and the paper are attached before you submit the assignment and review the rubric for specific grading criteria.

Module 4

Readings

- Chapters 13, 14, 15, & 16 in Unit 4 of *Pathophysiology*

Discussion (25 points)

Critical Thinking (90 points)

Option #1: Shadow Health – The Cardiovascular System and Common Alterations

Sign into Shadow Health and complete the Cardiovascular System and Common Alterations concept lab.

After completing the assigned clinical exercise, complete and submit the following:

- Take a screenshot that verifies exercise completion.
- Reflect on your learning from the clinical exercise. Your written reflection should, at minimum, respond to the following questions:
 - What are your key learnings or takeaways from this clinical exercise?
 - How does this learning relate to information presented in the course textbook? Cite and reference support from Banasik and Copstead (2019).
 - How do these concepts or skills build on your prior experience?
 - What is the significance of these concepts or skills and how will they inform your professional practice?

Your paper should be 1-2 pages in length (not including title and reference pages), supported by the textbook, and must conform to the CSU Global Writing Center. Ensure that both your screenshot and the paper are attached before you submit the assignment and review the rubric for specific grading criteria.

Module 5

Readings

- Chapters 24 & 25 in Unit 7 of *Pathophysiology*

Discussion (25 points)

Portfolio Milestone (100 points)

Option #1: Patient-Related Case Study/Purposeful Reading

Review the Portfolio Project options in Module 8 before selecting which milestone option you will complete. If you choose to complete Option #1, you must complete Option #1 of the Portfolio Project.

For this option, create a patient-related case study on the topic of cardiac function utilizing the concepts covered in this module. Choose a client from your current or past clinical practice for the creation of the case study (the client you choose will be the basis of your portfolio project/purposeful reading). Your case study should be thorough, yet concise. Delineate between normal versus abnormal findings, and pretend you are providing a very complete report to an oncoming nurse at the end of your shift:

- **Purposeful reading:** Locate one nursing article from a scholarly journal (published within the last five years) that informs the client in your case study. Critique the article and highlight important points that pertain to your chosen client. Incorporate this information throughout your submission and support your critique with additional research and scholarly support.

- **Case outline:** Outline the case by starting with what brought the client to the hospital/clinic/urgent care. Based on the chief complaint, outline a focused assessment and what would be important to include in your report to the oncoming nurse.
- **Case details, findings, and outcomes:** What diagnostics, labs, and any other pertinent tests were conducted on the case you are choosing to discuss? What were the findings? Are there any tests that did not get completed that you think should have? What was the outcome of this case?

Your paper should be 2-3 pages in length (not including title and reference pages) and conform to CSU Global Writing Center. Include at least three scholarly references in addition to the course textbook. The CSU Global Library and Nursing Library Resources are good places to find these references. Review the rubric for specific grading criteria.

Option #2: Nursing Grand Rounds Presentation

Review the Portfolio Project options in Module 8 before selecting which milestone option you will complete. If you choose to complete Option #2, you must complete Option #2 of the Portfolio Project. For this option, choose from one of the following topics (the topic you choose will be the basis of your Portfolio Project):

- Autoimmune Disorders
- Cardiac Dysfunctions
- Asthma
- Pneumonia
- Chronic Obstructive Pulmonary Disease (COPD)
- Popular Disorders in the Press (Coronavirus, Influenza A or B, etc.)

Once you have chosen your topic, create a 10-slide presentation that:

- Introduces yourself and your chosen topic.
- Includes one slide for each content area outlined in the Grand Rounds Slide Outline. (Do not include more than the required number of content slides.)
- Includes brief bullets of information related to the content slide (Slides 2-9).
- Uses the notes section to add additional information.
- Incorporates professional and engaging slide design.

Grand Rounds Slide Outline:

Slide 1 - Title Slide

- Your name
- Chosen topic
- Institution's Affiliation

Slide 2 - Pathophysiology of Disease

- Etiology of disease process

Slide 3 - Pathophysiology of Disease

- Pathogenesis of disease process

Slide 4 - Epidemiological Considerations

- Impacts of age and gender

Slide 5 – Lifestyle consideration, and geographic location

- Socioeconomic factors

Slide 6 – Evidence-based Nursing Plan of Care

- Identify the healthcare setting/facility-e.g., acute care, rehab, long-term care, mental health facility

Slide 7 -Admission

- Multiple Healthcare Settings
- Access to healthcare

Slide 8 – Holistic care with prevention

- Screening tools
- Preventative care

Slide 9 - Evidence-based Nursing Plan of Care-Discharge and Transition

- Patient Education

Slide 10 - Reference Slide

- Peer-reviewed journal, must be from an authoritative website such as the CDC, NIH, Healthy People 2020, etc. (you may use articles provided in this course)

For tips on how to create a quality presentation, review the Sample Presentation provided by CSU Global. Your presentation should be supported with a minimum of three references (<5 years) from scholarly sources and formatted to conform to the CSU Global Writing Center. The CSU Global Library and Nursing Library Resources are good places to find these references. Review the rubric for specific grading criteria.

Module 6

Readings

- Chapters 27, 28, & 29 in Unit 8 of *Pathophysiology*
- Chapters 31, 33, & 34 in Unit 9 of *Pathophysiology*

Discussion (25 points)

Critical Thinking (90 points)

Option #1: Shadow Health – The Gastrointestinal System and Common Alterations

Sign into Shadow Health and complete the Gastrointestinal System and Common Alterations concept lab.

After completing the assigned clinical exercise, complete and submit the following:

- Take a screenshot that verifies exercise completion.
- Reflect on your learning from the clinical exercise. Your written reflection should, at minimum, respond to the following questions:
 - What are your key learnings or takeaways from this clinical exercise?
 - How does this learning relate to information presented in the course textbook? Cite and reference support from Banasik and Copstead (2019).
 - How do these concepts or skills build on your prior experience?
 - What is the significance of these concepts or skills and how will they inform your professional practice?

Your paper should be 1-2 pages in length (not including title and reference pages), supported by the textbook, and must conform to the CSU Global Writing Center. Ensure that both your screenshot and the paper are attached before you submit the assignment and review the rubric for specific grading criteria.

Module 7

Readings

- Chapters 39, 40, 41, & 42 in Unit 11 of *Pathophysiology*

Discussion (25 points)

Module 8

Readings

- Chapters 43, 44, 45, & 47 in Unit 12 of *Pathophysiology*

Discussion (25 points)

Portfolio Project (250 points)

Option #1: Purposeful Reading

For this Portfolio Project, you will select articles and dissect the contents through purposeful reading. This will help you develop skills in utilizing true evidence-based research to guide clinical practice and will require you to critique and evaluate journal articles at the graduate level.

Complete the following steps to conduct your purposeful reading and critique:

1. Select five peer-reviewed journal articles:
 - a. Article 1: The first article will pertain to the case study assigned in Module 5. Although you applied this first article to your Portfolio Project Milestone in Module 5, you will now shift the focus to purposeful reading for the sake of truly dissecting the contents of the articles.

- b. Articles 2-5: The remaining four articles should relate to a clinical nursing problem and one of the systems covered in this course (Modules 1-7). Your articles must have been published within the last five years in a nursing education or nursing-related journal. The CSU Global Library and Nursing Library Resources are good places to find these references.
2. After selecting your articles, highlight and make comments throughout each article. This will challenge you to read purposefully and to pose questions and offer margin critiques as you read.
3. Utilizing all the information that you gained from the articles, write a scholarly paper that includes the following:
 - a. Determine the philosophical stance of each author and cite the evidence that supports your claim.
 - b. Identify any conceptual and theoretical elements in each article.
 - c. Identify any empirical elements in each article.
 - d. As you annotate the article, identify concepts of systems theory, such as the article's identification of an individual, unit, and/or organizational nursing care.
 - e. Identify any theory the author refers to or utilizes as the foundation of the article.

Note: These key elements will commonly be found in the introduction/background as well as the discussion/conclusion sections of the article. Otherwise, they may be found in the methods section or the instrument measurement section.

You may use the Purposeful Reading Template to complete this assignment.

Your paper should be 10-12 pages in length (not including title and reference pages) and conform to CSU Global Writing Center. Include citations and references for the five articles selected in addition to the course textbook. Review the rubric for specific grading criteria.

Option #2: Nursing Grand Rounds

For this Portfolio Project, you will select one of the following topics. (This selection will be made as part of the Portfolio Project Milestone in Module 5.)

- Autoimmune Disorders
- Cardiac Dysfunctions
- Asthma
- Pneumonia
- Chronic Obstructive Pulmonary Disease (COPD)
- Popular Disorders in the Press (Coronavirus, Influenza A or B, etc.)

You will be presenting on the topic you have selected in a Nursing Grand Round through which you will share evidenced-based learning and practices intended to improve patient care and to promote nursing professional development.

In Module 5 you will draft Slides 1-10 as part of the Portfolio Project Milestone. These slides must:

- Introduce yourself and your chosen topic.

- Include one slide for each content area outlined in the Grand Rounds Slide Outline. (Do not include more than the required number of content slides.)
- Include brief bullets of information related to the content slide (Slides 2-9).
- Use the notes section to add additional information.
- Incorporate professional and engaging slide design.

To complete this project, you will then build upon your work from Module 5 and finalize a 14-slide presentation with voiceover. Your final presentation must:

- Include 14 slides as outlined in the Grand Rounds Outline. You should have one slide for each content area.
 - Include brief, bullets of information related to the content slide.
 - Include APA citations as support for the information presented.
 - Incorporate feedback provided by your instructor for your prior submission of Slides 1-10.
 - Do not include more content slides with exception of additional reference slides as needed.
- Design the slides to be both professional and engaging.
- Include voiceover for all slides with exception of the reference slide(s). The voiceover portion must provide greater detail for each slide's content.
 - Introduce yourself and your chosen topic using voiceover on Slide 1.
 - You may leave the extra content in the notes section (from the Portfolio Project Milestone in Module 5), but this content must now be covered in the voiceover.
 - Record the presentation using Screencast-O-Matic. This free tool allows you to record your screen (your presentation!) while you verbally present. Please include yourself in the recording using a webcam overlay. With this tool, you are limited to 15 minutes, so practice and plan ahead.
 - After you have finished recording, upload your recording to YouTube.
- Submit the link to your video along with your presentation file.

Grand Rounds Slide Outline:

Slide 1 - Title Slide

- Your name
- Chosen topic (from Module 5)
- Institution's Affiliation

Slide 2 - Pathophysiology of Disease

- Etiology of disease process

Slide 3 - Pathophysiology of Disease

- Pathogenesis of disease process

Slide 4 - Epidemiological Considerations

- Impacts of age, gender, socioeconomic factors, lifestyle considerations, and geographic location

Slide 5 - Evidence-based Nursing Plan of Care-Admission (Multiple Healthcare Settings)

- Identify the healthcare setting/facility-e.g., acute care, rehab, long-term care, mental health facility
- Consider diagnostics and lab values
- Screening tools
- Holistic care with prevention

Slide 6 - Evidence-based Nursing Plan of Care-Discharge and Transition

- Patient Education
- Consider discharge needs

Slide 7- Interdisciplinary Collaboration and Challenges

- What members of the interdisciplinary team need included-Why?
- Consider the patient and family
- Consider post-discharge and community care needs

Slide 8 - Cultural and Genetic Considerations and Challenges

- What cultural and/or genetic considerations or challenges does this disease process present?
- Provide supportive rationale

Slide 9 - Application to Current Practice

- How has completing this assignment impacted your nursing current practice?
- What will you take away?

Slide 10-Discharge

- Consider discharge needs
- Consider post-discharge and community care need

Slide 11- Interdisciplinary Collaboration and Challenges

- What members of the interdisciplinary team need included-Why?
- Consider the patient and family

Slide 12 - Cultural and Genetic Considerations and Challenges

- What cultural and/or genetic considerations or challenges does this disease process present?
- Provide supportive rationale

Slide 13 - Application to Current Practice

- How has completing this assignment impacted your nursing current practice?
- What will you take away?

Slide 14 - Reference Slide

- If not from a peer-reviewed journal, must be from an authoritative website such as the CDC, NIH, Healthy People 2020, etc. (You may use articles provided in this course.)

Your presentation should be supported with a minimum of 5 references (<5 years) from scholarly sources and formatted to conform to the CSU Global Writing Center. The CSU Global Library and Nursing Library Resources are good places to find these references. Review the rubric for specific grading criteria.

COURSE POLICIES

Grading Scale	
A	95.0 – 100
A-	90.0 – 94.9
B+	86.7 – 89.9
B	83.3 – 86.6
B-	80.0 – 83.2
C+	75.0 – 79.9
C	70.0 – 74.9
D	60.0 – 69.9
F	59.9 or below

Graduate Course Grading	
20%	Discussion Participation
45%	Critical Thinking Assignments
35%	Final Portfolio Project

IN-CLASSROOM POLICIES

For information on late work and incomplete grade policies, please refer to our [In-Classroom Student Policies and Guidelines](#) or the Academic Catalog for comprehensive documentation of CSU Global institutional policies.

Academic Integrity

Students must assume responsibility for maintaining honesty in all work submitted for credit and in any other work designated by the instructor of the course. Academic dishonesty includes cheating, fabrication, facilitating academic dishonesty, plagiarism, reusing /re-purposing your own work (see CSU Global Library page for Citing & APA Resources and Avoiding Common Plagiarism Mistakes for percentage of repurposed work that can be used in an assignment), unauthorized possession of academic materials, and unauthorized collaboration. The CSU Global Library provides information on how students can avoid plagiarism by understanding what it is and how to use the Library and Internet resources.

Citing Sources with APA Style

All students are expected to follow APA format for all assignments. For details, please review the APA guidelines within the CSU Global Writing Center. A link to this resource should be provided within most assignment descriptions in your course.

Disability Services Statement

CSU Global is committed to providing reasonable accommodations for all persons with disabilities. Any student with a documented disability requesting academic accommodations should contact the Disability Resource Coordinator at 720-279-0650 and/or email ada@CSUGlobal.edu for additional information to coordinate reasonable accommodations for students with documented disabilities.

Netiquette

Respect the diversity of opinions among the instructor and classmates and engage with them in a courteous, respectful, and professional manner. All posts and classroom communication must be conducted in accordance with the student code of conduct. Think before you push the Send button. Did you say just what you meant? How will the person on the other end read the words?

Maintain an environment free of harassment, stalking, threats, abuse, insults or humiliation toward the instructor and classmates. This includes, but is not limited to, demeaning written or oral comments of an ethnic, religious, age, disability, sexist (or sexual orientation), or racist nature; and the unwanted sexual advances or intimidations by email, or on discussion boards and other postings within or connected to the online classroom. If you have concerns about something that has been said, please let your instructor know.