

# **COURSE SYLLABUS**

**BIOL 2404 (4:3:2)**

<p><b>ANATOMY &amp; PHYSIOLOGY: PATHOPHYSIOLOGY</b></p>
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**BIOLOGY DEPARTMENT**

**ONLINE COURSE**

**SOUTH PLAINS COLLEGE**

**FALL 2021**

## Course Syllabus

COURSE: BIOL 2404 (4:3:2) Anatomy and Physiology: Pathophysiology

SEMESTER: Fall 2021

Name	Phone Number	Email	Office	Hours
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### I. GENERAL COURSE INFORMATION:

#### A. COURSE DESCRIPTION

This online course, **which is a non-lab science course**, will provide an in-depth introduction to basic concepts and fundamental principles of human pathophysiology for advanced undergraduate students. This course will evaluate the study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content is specialized to follow the classical division between general pathology and systemic pathology. The aim of the course is to provide the student with a systematic approach for understanding disease and rational therapeutic design. Pathophysiology bridges basic science and clinical practice with an emphasis on integrated mechanistic understanding of the molecular, structural, and functional alterations in cells, tissues, and organ systems that underlie human disease.

This course is an online course meaning Blackboard will be utilized predominantly for content and communication. The student is expected to check the Blackboard course frequently (as in every day) to check for new messages, access content, get assignment postings, take quizzes, and view changes to the calendar, schedule or content should this become necessary.

If you are having difficulty accessing or using any components of Blackboard please use the following contact information. For specific help email Brooke Walker at [bawalker@southplainscollege.edu](mailto:bawalker@southplainscollege.edu) or call 806-716-2180. For an email address that reaches everyone in the Instructional Technology department, please use [blackboard@southplainscollege.edu](mailto:blackboard@southplainscollege.edu).

#### B. STUDENT LEARNING OUTCOMES

Upon successful completion of this course, students will:

1. Identify the essential features of basic disease processes.
2. Interpret the clinical manifestations of specific diseases in terms of etiology and pathogenesis.
3. Describe the relationship between normal anatomy and physiology and alterations produced by disease.
4. Recognize basic pathophysiologic concepts.
5. Describe the impact of health promotion, disease prevention, and risk reduction on selected pathologies.

C. ACADEMIC INTEGRITY

Refer to the SPC student nursing handbook. Refer to the “Honesty Policy” located in the student handbook and appendix for examples of plagiarism. Violations of the honesty policy include cheating during testing, plagiarizing another’s work, and falsifying records will result in failure of the course.

II. SPECIFIC COURSE/INSTRUCTOR REQUIREMENTS:

A. TEXTBOOKS AND OTHER MATERIALS

**Required Resources**

Electronic Only Package (ebook):

Huether, S.E. & McCance, K.L. (2019). *Pathophysiology Online for Understanding Pathophysiology* (7<sup>th</sup> ed.), St. Louis: Mosby. (Evolve website) ISBN: 9780323890946

**OR**

Printed Package:

Huether, S.E., & McCance, K.L. (2019). *Understanding Pathophysiology* (7<sup>th</sup> ed.), St. Louis: Mosby. ISBN: 9780323890953

**Recommended Resources**

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7<sup>th</sup> ed.), Washington, DC: Author. ISBN: 9781433832178

Houghton, P., & Houghton, T. (2009). *APA: The easy way* (2<sup>nd</sup> ed.). XanEdu. ISBN: 9780923568962

Huether, S.E. & McCance, K.L. (2016). *Evolve Resources for Understanding Pathophysiology* (6<sup>th</sup> ed.), St. Louis: Mosby.  
Course ID: 155701\_global\_0001 (FREE WITH BOOK PURCHASE)

\*\*Text should be carried at your local bookstore but may be cheaper online at sites such as Ebay or Amazon. Be cautious in buying used online resources, there are times that the codes from the books may have been activated already. This would require you to purchase a new online resource code.

## B. ASSIGNMENTS

### **Evolve Online Modules:**

This course has been developed utilizing online modules. Students need to register for the online portion of this course by going to the website:

<http://evolve.elsevier.com/enrollcourseid>. The course ID is:

**161067\_hhalford3\_1003**. It is less expensive to buy the code as a package when purchasing the textbook, rather than buying them separate online. The modules offer a variety of learning activities, which are very helpful in explaining difficult material. The modules, pretests, and module exams are found under the McCance-Huether “course content”. The modules are helpful in narrowing important pathophysiology and the text further explains the same information.

### **Evolve Module Exams:**

Student will be required to complete each module exam listed on the class schedule for **544 points, or 32 points each** of the final grade. Module exams vary in the number of questions; however, the student will receive 2 minutes per question to complete the exam. Exams are located in the Evolve online portion of the course, not Blackboard. Pretests are located in the Evolve online material and are required before completion of the module exam. Module examinations will be open-book and taken from the student’s home or preferred location and are due to be completed by the dates listed on the class schedule. These exams are not to be done in groups, but individually. Once entered the student must finish the exam in one setting; if a student exits the exam it will automatically submit. It is the student’s responsibility to notify the facilitator if technical difficulty occurs during the examination immediately through SPC email. **Without proper notification within 24 hours of exam completion, access will not be granted, and possible questions missed will not be reviewed.** During the exam NEVER click the Back or Forward. If the screen freezes the student may try the Refresh button or log out and immediately back into Evolve. Let the screen resolve when saving an answer before clicking next. Exam reviews are not permitted for this course. There are no “dropped” grades in this course.

### **Policy on Exam Administration:**

Exams will be administered according to the schedule set by the course facilitator documented in the course syllabus. Any changes to the exam schedule will be at the discretion of the course facilitator.

To better prepare the student for the licensure exam testing format, unit, and comprehensive exams will be administered as follows:

- Questions will be given to the student one at a time.
- The student must answer and save the answer before going to the next question.
- The student will not be allowed to return to previous questions.
- Any question not saved by the student will be marked wrong.
- There are no “dropped” grades in this course.

### **Evolve Module Pretests:**

The student will be required to complete Evolve module pretests accounting for **255 points, or 15 points each** of the final grade. Module pretests vary in the number of questions. The student will receive **unlimited time and attempts** to complete the assigned pretest. The pretests are open book and are not to be done in groups, but individually. Students must finish the pretest in one sitting once entered. The last attempt is the only graded attempt. It is the student's responsibility to notify the facilitator if technical difficulty occurs immediately through SPC email.

### **Concept Map:**

Concept mapping is a diagrammatic method of teaching and learning that allows students to conceptualize relationships between risk factors, disease process, and clinical manifestations of the disease, diagnostic procedures, and interventions for treatment of the disease process. Each student will complete one concept map accounting for **121 points** of the final course grade. Each student will be allowed to choose one topic for the concept map to develop a complete and thorough concept map of a disease process. Students may find the concept map assignment topic list, example of concept mapping, and a rubric template on Blackboard under Course Content, Concept mapping. This assignment is due by the dates listed on the class schedule to the assignment drop box located on the left-hand column of your Blackboard tool bar.

**Failure to upload the final concept map to the assignment link will result in a 10-point deduction each day late up to 3 days. After three days past the due date the student will receive a zero for the assignment.**

**Discussion Board Forum:**

Students will be required to complete one discussion board forum accounting for **80 points** of the course grade. Students may select any question to post the initial response as long as the total number of entries has not been met, see Discussion Board Forum Module for more information. Students may find the grading rubric on Blackboard under Course Content, Discussion Board Forum module. This assignment is due by the dates listed on the class schedule in the syllabus. Failure to complete the discussion board by the due dates will result in a zero. There are no makeups for discussion boards as this is an interactive assignment with peers and must be completed during the assigned time frame. It is the student's responsibility to locate the discussion forum in blackboard; if a student is unable to view the forum the student should notify the course facilitator on the first day of the forum and notify information technology.

**Late Assignments and Extra Credit:**

Work is due on the assigned dates and times in Central Standard Time (CST).

**Late work will have a 10-point penalty each day late up to 3 days. After three days past the due date the student will receive a zero for the assignment.**

Students should contact faculty prior to the due date and time if they anticipate material will be late. Please note that contacting faculty will not guarantee the receipt of an extension for the assignment. Due to the time constraints within this course, allowances for extra credit assignments or resubmissions of an assignment will be handled on a case-by-case basis and at the course facilitator's discretion. Please allow enough time for preparation and submission of each assignment prior to the scheduled due date.

C. GRADING POLICY

The grade for this course will be determined upon completion of the following components:

Evolve Module Exams (17 at 32 points each)	544 points
Evolve Module Pretest (17 at 15 points each)	255 points
Discussion Board Forum	80 points
Concept Map	121 points
Total	1000 points

Course grades are based on the following scale:  
 A= 90-100% (900 – 1000 points) Excellent  
 B= 80-89.9% (800 – 899 points) Good  
 C= 70-79.9% (700 – 799 points) Average  
 D= 60-69.9% (600 – 699 points) Below Average  
 F= below 59% (590 points and below) Below Failing

#### D. CIVILITY

While there are no classroom meetings for this course, students are expected to demonstrate respect and civility towards faculty and other students in an online environment. Students are expected to assist in maintaining a virtual classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain information from the learning environment; students are prohibited from engaging in any form of distraction, disrespect, inappropriate language or behavior in online interactions. Inappropriate behavior in the virtual classroom will be dealt with by the course faculty on an individual basis. **Please use the faculty email as the primary source of communication.** There are no office hours for this course.

### III. COURSE OUTLINE & SCHEDULE OF ASSIGNMENTS

**\*\* As a general rule the course weeks begin on Mondays and end on Sundays. Pretests for the week are due on Saturdays and the posttest will be due on the following Sunday to allow ample time to study. You are responsible for following the calendar of assignments as laid out below \*\***

Class Dates	Class Topics	Readings/Assignments
Week 1 August 30 <sup>th</sup>	<ul style="list-style-type: none"> <li>Cellular Biology</li> <li>Review syllabus and register for online Evolve modules</li> </ul>	Huether and McCance: Chapter 1
Week 2 September 6 <sup>th</sup>	<ul style="list-style-type: none"> <li>Genes &amp; Genetic Diseases</li> <li>Altered Cellular &amp; Tissue Biology</li> </ul>	Huether and McCance: Chapters 2, 4 Evolve Modules: 1, 2 <b>Pretests: 1, 2 Due 9/11 by 2359</b>
Week 3 September 13 <sup>th</sup>	<ul style="list-style-type: none"> <li>Discussion Board Forum in Blackboard</li> <li>Epigenetics &amp; Disease</li> <li>Fluids &amp; Electrolytes, Acids &amp; Bases</li> <li>Innate Immunity: Inflammation &amp; Wound Healing</li> </ul>	Huether and McCance: Chapters 3, 5, 6 Evolve Modules: 3, 4 <b>Pretests: 3, 4 Due 9/18 by 2359</b> <b>DB Forum Initial Post Due 9/15 by 2359</b> <b>Module Exams: 1, 2 Due 9/19 by 2359</b>

Week 4 September 20 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Adaptive Immunity</li> <li>• Infection and Defects in Mechanisms of Defense</li> <li>• Stress and Disease</li> </ul>	Huether and McCance: Chapters 7, 8, 9, 10 Evolve Modules: 5, 6, and 7 <b>Pretests: 5, 6, and 7 Due 9/25 by 2359</b>  <b>DB Response to Peers Due 9/22 by 2359</b>  <b>Module Exams: 3, 4 Due 9/26 by 2359</b>
Week 5 September 27 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Biology of Cancer</li> <li>• Cancer Epidemiology</li> <li>• Cancer in Children &amp; Adolescents</li> </ul>	Huether and McCance: Chapters 11, 12, 13 Evolve Module: 8 <b>Pretest: 8 Due 10/2 by 2359</b>  <b>Module Exams: 5, 6, and 7 Due 10/3 by 2359</b>
Week 6 October 4 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Concept Map Assignment</li> </ul>	<b>Concept Map Due 10/10 by 2359</b>
Week 7 October 11 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Structure &amp; Function of the Neurologic System</li> <li>• Pain, Temperature, Sleep, &amp; Sensory Function</li> <li>• Alterations in Cognitive Systems, Cerebral Hemodynamics, &amp; Motor Function</li> <li>• Disorders of the Central &amp; Peripheral Nervous Systems &amp; Neuromuscular Junction</li> <li>• Alterations of Neurologic Function in Children</li> </ul>	Huether and McCance: Chapters 14, 15, 16, 17, and 18 Evolve Module: 9 <b>Pretest: 9 Due 10/16 by 2359</b>  <b>Module Exam: 8 Due 10/17 by 2359</b>
Week 8 October 18 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Mechanisms of Hormonal Regulation</li> <li>• Alterations of Hormonal Regulation</li> <li>• Structure and Function of the Hematologic System</li> <li>• Alteration of Hematologic Function</li> <li>• Alteration of Hematologic Function in Children</li> </ul>	Huether and McCance: Chapters 19, 20, 21, 22, 23, and 24 Evolve Modules: 10, 11 <b>Pretests: 10, 11 Due 10/23 by 2359</b>  <b>Module Exam: 9 Due 10/24 by 2359</b>



Week 9 October 25 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Structure &amp; Function of the Cardiovascular &amp; Lymphatic System</li> <li>• Alterations of Cardiovascular Function</li> <li>• Alterations of Cardiovascular Function in Children</li> </ul>	Huether and McCance: Chapters 25, 26, and 27 Evolve Module: 12 <b>Pretest: 12 Due 10/30 by 2359</b> <b>Module Exams: 10, 11 Due 10/31 by 2359</b>
Week 10 November 1 <sup>st</sup>	<ul style="list-style-type: none"> <li>• Structure &amp; Function of the Pulmonary System</li> <li>• Alterations of Pulmonary Function</li> <li>• Alterations of Pulmonary Function in Children</li> </ul>	Huether and McCance: Chapters 28, 29, 30 Evolve Module: 13 <b>Pretest: 13 Due 11/6 by 2359</b> <b>Module Exam: 12 Due 11/7 by 2359</b>
Week 11 November 8 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Structure &amp; Function of the Renal &amp; Urologic System</li> <li>• Alterations of Renal &amp; Urinary Tract Function</li> <li>• Alterations of Renal &amp; Urinary Tract Function in Children</li> </ul>	Huether and McCance: Chapters 31, 32, and 33 Evolve Module: 14 <b>Pretest: 14 Due 11/13 by 2359</b> <b>Module Exam: 13 Due 11/14 by 2359</b>
Week 12 November 15 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Structure &amp; Function of the Reproductive System</li> <li>• Alterations of the Female Reproductive System</li> <li>• Alterations of the Male Reproductive System</li> </ul>	Huether and McCance: Chapters 34, 35, 36 Evolve Module: 15 <b>Pretest: 15 Due 11/20 by 2359</b> <b>Module Exam: 14 Due 11/21 by 2359</b>
Week 13 November 22 <sup>nd</sup>	Thanksgiving Holiday – Enjoy Time with Your Family!	
Week 14 November 29 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Structure &amp; Function of the Digestive System</li> <li>• Alterations of Digestive Function</li> <li>• Alterations of Digestive Function in Children</li> </ul>	Huether and McCance: Chapters 37, 38, and 39 Evolve Module: 16 <b>Pretest: 16 Due 12/4 by 2359</b> <b>Module Exam: 15 Due 12/5 by 2359</b>

Week 15 December 6 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Structure &amp; Function of the Musculoskeletal System</li> <li>• Alterations of Musculoskeletal System</li> <li>• Alterations of Musculoskeletal System in Children</li> <li>• Structure, Function, &amp; Disorders of the Integument</li> <li>• Alterations of the Integument in Children</li> </ul>	Huether and McCance: Chapters 40, 41, 42, 43, and 44 Evolve Module: 17 <b>Pretest: 17 Due 12/11 by 2359</b> <b>Module Exam: 16 Due 12/12 by 2359</b>
Week 16 December 13 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Study for Exam</li> </ul>	<b>Module Exam: 17 <u>Due 12/15 by 2359 (To Account for Final Grade Submission)</u></b>
<b>** Schedule is subject to change at instructor's discretion.</b>		

#### IV. ACCOMMODATIONS

##### 4.1.1.1. Diversity Statement

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

##### 4.1.1.2. Disabilities Statement

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

##### 4.1.1.3 Non-Discrimination Statement

South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

##### 4.1.1.4 Title IX Pregnancy Accommodations Statement

If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To [activate](#) accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange

accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email [cgilster@southplainscollege.edu](mailto:cgilster@southplainscollege.edu) for assistance.

## **V. CAMPUS CONCEALED CARRY**

### **4.1.1.5 Campus Concealed Carry Statement**

Texas Government Code 411.2031 et al. authorizes the carrying of a concealed handgun in South Plains College buildings by individuals and in accordance with Texas Government Code 411.209 (a). All holders of a valid Texas License to Carry may carry on their person a handgun that is concealed in accordance with Texas Penal Code 46.03 (a-2). Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy. Individuals may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at:

<https://www.southplainscollege.edu/campuscarry.php>. Concealed Carry (Also Known as Campus Carry) FAQs. What is Senate Bill 11, sometimes known as Campus Carry? Texas Senate Bill 11 allows for the carrying of concealed handguns on Texas public institution campuses by individuals holding a valid Texas License to Carry (LTC) or Concealed Handgun License (CHL). Report violations to the College Police Department at 806-716-2396 or 9-1-1.