# Valencia College School of Allied Health

# BS Cardiopulmonary Sciences Program BS Radiologic and Imaging Sciences Program

# HSC 4555 PATHOPHYSIOLOGIC MECHANISMS CRNs 21920 & 23645

#### **SYLLABUS-SPRING 2024**

**Instructor:** Sharon Shenton, MA, RRT-ACCS, RRT-NPS

Office: AHS 115 and Virtual

**Phone:** 407-582-5816

Email: sshenton@valenciacollege.edu and Canvas Inbox

Student Engagement Hours: Virtual via email, Zoom and in person by appointment.

Monday & Wednesday, 1:00 pm - 3:00 pm Tuesday & Thursday, 10:00 am - 12:00 pm

Friday, 10:00 am - 12:00 pm

## **COURSE INFORMATION**

**Course Title:** Pathophysiologic Mechanisms

**Credit Hours:** 3 credits

Pre-requisite: Admission to BS Cardiopulmonary Sciences or BS Radiologic and Imaging Sciences

Program

**Refund of Fees:** The Drop/Refund deadline for this course is January 16, 2024

**Instructional Method:** Canvas Online Learning

Meeting days/times/location: This is an instructor-facilitated online course in Canvas learning management system. All learning activities, discussions, assignments, and tests are completed online in Canvas. There is 24/7 access to the course, and students are expected to plan their own schedule to complete the readings, learning activities and assignments within the deadlines indicated. There are no required class meetings on campus. The expected time commitment for this 3-credit online course is a minimum of 9 hours of student work and online participation.

**Course Description:** A rich appreciation of the characteristics and manifestations of diseases caused by alterations or injury to the structure or function of the body are essential to the respiratory care and cardiovascular technologist professional. The in-depth study of pathophysiology allows the professional to communicate better with other health care professionals, including physicians and scientists, as well as with the patient, for the history and physical assessment.

#### **Course Outcomes:**

- Discuss predictive factors influencing health and the development of disease, including genetics, lifestyle, age, and environment.
- Outline how the body responds to hereditary, lifestyle and environmental influences on health.
- Understand and explain the pathophysiology of the major body systems.
- Describe clinical manifestations of disease processes across the lifespan.

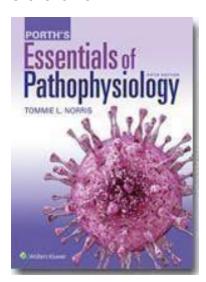
**Valencia College Core Competencies:** Valencia faculty have defined four interrelated competencies (Think, Value, Communicate, Act) that prepare students to succeed in the world community. These competencies are outlined in the College Catalog and include:

- 1. Think-think clearly, and creatively, analyze, synthesize, integrate, and evaluate in the many domains of human inquiry.
- 2. Value- make reasoned judgments and responsible commitments.
- 3. Communicate- communicate with different audiences using varied means.
- 4. Act- act purposefully, effectively, and responsibly.

In this course, through reading, self-assessment and discussion, and other learning activities, you will further develop your mastery of those competencies.

## **Required Textbook:**

Porth's Essentials of Pathophysiology, 5th edition, Author: Tommie L Norris, Published by Wolters Kluwer, Nov. 2019, ISBN: 9781975107192



**Additional Handouts, Readings and Learning Resources:** Additional learning resources will be provided within Canvas by the instructor; Internet-based learning resources and research may also be assigned.

**Library Resources:** There are a multitude of Valencia Library services available to students; the following services as well as many others can be found at:

- **Borrowing and Circulation**. Students can borrow books from the library; there are also many eBooks available online.
- **Reference Services**. Reference librarians are available to help students. This is a free service on campus to help students with research, located at the library 2<sup>nd</sup>floor reference desk.
- Online Resources. Most research can be done from home, as many resources and help from librarians, are also available online.
- **Free Skillshops**. The Library's Computer Access Lab offers many free, 1-hr workshops on all types of computer software, including Microsoft Office products, Canvas, and Windows.
- **Ask-a-Librarian E-mail, Chat and Texting.** Students can contact a Florida librarian with research questions using this statewide service with extended hours.

Online Participation/ Attendance Expectations: For online courses, attendance is determined by consistency in logging in and accessing the course content and completing discussion posts and assignments according to the schedule. According to Valencia policy, students who do not engage in an "academically related activity" during the first week of class will be dropped as a "No-Show". There will be a specific assignment to address this requirement posted in Canvas.

Questions and communication regarding course content should be posted under the specified discussion topic in Canvas. The instructor is available for help via email or by telephone, and via online meetings scheduled at a designated time. Students are encouraged to seek assistance from the instructor as needed. Students are expected to check Canvas and their Atlas email for important communication and updates on a regular basis, and at a minimum of every other day. Failure to participate in online activities and complete discussion posts and assignments due to computer error is not considered to be an acceptable excuse. Technical communication issues that may be experienced by the student should be documented, e.g. copy emails, save screen shots, etc. and communicated to the instructor immediately.

**Note:** Just logging into the course does NOT count as attendance. For the instructor to document that you are in the class and actively participating, you must submit the first assignment by the scheduled due date, during Week 1, and continue to stay engaged in the course throughout the entire semester.

Resources and Technical Requirements for Online Courses: To participate in online courses, students must have access to a computer with reliable internet access. Valencia offers many online resources to help students with the online learning environment. "Getting Started Online, Valencia 101" is a great place to start. Steps needed to determine computer system requirements and browser compatibility, as well as tutorials and strategies for online learning using the Canvas learning system, are all available at: Learning Technology Resources. Additional Canvas resources are available at: Canvas Resources.

#### **IMPORTANT VALENCIA DATES \***

Classes Begin	January 8, 2024
Graduation Application Deadline	February 2, 2024
Withdrawal Deadline	March 15, 2024
Final Exam Week	April 22 – April 24, 2024, as scheduled
Holidays – College Closed	January 15, 2024 (MLK Day)
	March 18 – 24, 2024 (Spring Break)

<sup>\*</sup>The Valencia College Calendar can be accessed at: Valencia Calendar

### **ASSESSMENT**

The final course grade will be determined from a combination of online assessments:

Weekly Chapter Quizzes	15%
Weekly Discussion Posts	10%
Case Studies	15%
Exams I, II, II	20 % each Exam

# **GRADING SCALE & WEEKLY SCHEDULE OF TOPICS**

A	93-100%
В	85-92%
С	76-84%
D	69-75%
F	Below 69%

Week	Dates	Topic
		Concepts of Health and Disease and Cell Function and
1 Jan 8 - Jan 13	Growth; Chapters 1 and 3, (Review Chapter 2)	
		(Review Chapters are not included on Quizzes and Exams)
	Cell Function and Growth	
2	Jan 14 – Jan 20	Chapters 5 and 6, (Review Chapter 4)
	Disorders of Integrative Function	
3	Jan 21 – Jan 27	Chapters 7 and 8
		Infection, Inflammation and Immunity
4	Jan 28 – Feb 3	Chapters 9 and 10
	Infection, Inflammation, and Immunity,	
5	Feb 4 – Feb 10	Chapters 11 and 12
	EXAM I – February 13, 14, 15	
6	6 Feb 11 – Feb 17	Chapters: 1, 3, 5, 6,7, 8,9,10, 11, 12
		New Material: (Not on Exam I) Disorders of Neural
		Function, Chapters 15 and 16, (Review Chapter 13)
		Disorders of the Hematopoietic System
7	Feb 18 – Feb 24	Chapters 21 and 22
		Disorders of the Hematopoietic System
8	Feb 25 – Mar 2	Chapters 23 and 24
0	NA 2 NA 0	Disorders of Cardiovascular Function Chapters 26 and 27
9	Mar 3 – Mar 9	(Review Chapter 25)
10	10	EXAM II- March 12, 13, 14
10	Mar 10 – Mar 16	Chapters 15, 16, 21, 22, 23, 24, 26,27
		New Material: (Not on Exam II) Disorders of Respiratory
		Function, Chapters 30 and 31
11	Mar 17 – Mar 23	Spring Break
		Disorders of Renal Function
12	Mar 24 – Mar 30	Chapters 33 and 35, (Review Chapter 32)
		Disorders of Gastrointestinal Function,
13	Mar 31 – Apr 6	Chapters 37 and 38, (Review Chapter 36)
		Disorders of Endocrine Function, Chapter 41,
14	Apr 7 – Apr 13	(Review Chapter 40)
		Disorders of Musculoskeletal Function Chapters
15	Apr 14– Apr 20	48 and 50, (Review Chapter 47)
16 Apr 21 – Apr 27		
	Apr 21 – Apr 27	EXAM III- April 23, 24, 25
		Chapters 30, 31, 33, 35, 37, 38, 41, 48, 50

Weekly Chapter Quizzes: Each Learning Module will include multiple-choice assessments based on the textbook chapter(s) assigned. The purpose of these quizzes is to allow you an opportunity to think about the module content and enhance your learning by answering related questions. You can complete each quiz up to 2 times and your highest score will be recorded as your grade. It is recommended that take advantage of both attempts and utilize the quizzes as a tool to practice answering questions and to assess whether you have mastered the module content. Correct answers become available after the second attempt.

**Discussion Posts:** Several of the modules will have discussion post assignments. The goal of these discussions is to share information with your classmates about something interesting that you have learned that week as well as what you may still have a question about.

**Case Studies:** There are several brief Case Study assignments throughout the course. These are written assignments related to chapter content and patient management, with specific guidelines provided in the Weekly Learning Modules.

**Exams:** There will be three (3) Exams in this course, and each will be administered online in Canvas using Honorlock remote proctor testing, which requires a webcam and microphone. Students will be expected to have a webcam prior to Exam I. Exams will be made available for a specified three-day period. There is no flexibility in the published exam dates. Students will select a two-hour window on one of the specified dates to complete the exam. No outside resources or assistance may be utilized in completing the exams. A stable internet is required, and exams cannot be taken on a phone, tablet, or other mobile device. Academic integrity policies are expected to be followed. There will be only one attempt for these exams. The printing and/or distribution of any quiz or exam items are strictly prohibited.

**Exam Schedule:** All Exam dates are announced at the start of the semester and students are expected to plan their schedules accordingly. There is generally no flexibility with these dates, except under rare and extenuating circumstances that have been discussed and approved in advance. Exams will not be re-scheduled due to work schedules or vacations.

Completed exams will not be routinely made available for review by the student; however, this may be scheduled by contacting the instructor via phone or e-mail. The printing and/or distribution of any quiz or exam items are strictly prohibited.

**Assignments / Discussion Posts:** Weekly Learning module assignments include:

- Reading the assigned chapters (usually two).
- Reviewing the Power Point lectures and learning materials provided in the module.
- Completing multiple-choice Chapter Quizzes.
- Participation in a class discussion about chapter content.
- Select Case Study assignments.

The deadlines and instructions for all quizzes, assignments and discussion posts are described in detail in Canvas.

**Work Missed:** Students must complete course assignments and activities according to their weekly due dates. Discussion posts are generally due no later than midnight on each Friday, and comments on other student's discussion posts are due no later than midnight on the following Monday. The specific deadlines for all assignments, guizzes and discussion posts are listed in the Weekly Learning Modules.

Late assignments may be accepted, at the discretion of the instructor, and should be submitted within one week of the due date, with a 10% penalty. Students who are chronically late and miss excessive assignments may lose this privilege. Extenuating circumstances that interfere with completing course requirements, such as death of a family member, immediate family medical emergency should be discussed with the instructor any may require documentation.

**Extra Credit Policy:** Optional Journal Articles are provided at the end of each Learning Module. These articles may be reviewed for extra credit points. Specific details on the requirements for this writing assignment are provided in Canvas. Extra points may also be given for exceptional discussion and case study submissions.

Withdrawal Deadline and Policy: According to Valencia College policy: "A student who withdraws from class before the withdrawal deadline of March 15, 2024, will receive a grade of "W." It is the student's own responsibility to withdraw before the withdrawal deadline. A student is not permitted to withdraw from class after the withdrawal deadline; if you remain in the class after the withdrawal deadline, you will receive a grade of A, B, C, D, F or I, based on work completed. An "I" grade will only be assigned under extraordinary circumstances that occur near the end of the semester. If you receive an "I", the work missed must be made up during the following semester, at which time you will get an A, B, C, D or F. Failure to make up the work during the following semester will result in you getting a grade of "F" in the course. Any student who withdraws from this class during a third or subsequent attempt in this course will be assigned a grade of "F."

If a student does not meet the online participation and attendance requirements described in the syllabus, the faculty member is permitted to withdraw a student from their class up to the beginning of the final exam period. If withdrawn by the instructor, your transcript will reflect a "W" and this will count as one attempt for this course. If you have decided not to complete this course, it is better for you to drop the course yourself during the Add/Drop period to avoid negative consequences. During a first or second attempt in the same course at Valencia, if you withdraw, or are withdrawn by the professor, you will receive a W (Withdrawn). You will not receive credit for the course, and the W will not be calculated in your grade point average; however, the enrollment will count in your total attempts in the specific course.

**Note**: Students on financial aid should consult an advisor or counselor before withdrawing from a course; there may be financial implications to the student which he or she must know about to make an informed decision before withdrawing from a course. Students with certain forms of scholarships who withdraw or are withdrawn from a class must pay the college for the cost of the class. Other scholarship sponsors may also require repayment.

#### ADDITIONAL CLASSROOM INFORMATION

**Faculty/Student Communication:** Valencia College is committed to providing each student with a quality educational experience. Faculty members have set high standards of instruction for themselves and for you. If you have a problem in a class, your first step is to talk to your instructor. If you are still dissatisfied, you may talk with the academic dean of the division. We are committed to working together to resolve any issues that may arise.

**Expected Student Conduct:** By enrolling at Valencia College, the student assumes responsibility for becoming familiar with and abiding by the general rules of conduct. The primary responsibility for managing the online classroom environment rests with the faculty. Violation of any online classroom or Valencia rules may lead to disciplinary action up to and including expulsion from Valencia. Disciplinary action could include being withdrawn from class, disciplinary warning, probation, suspension, expulsion, or other appropriate and authorized actions. You will find the Student Code of Conduct in the current Valencia Student Handbook.

**Academic Integrity:** As healthcare professionals you are expected to adhere to and maintain the highest standards of academic integrity and professional and ethical conduct. Unless otherwise stated, all assignments, quizzes and exams are to be completed individually by each student enrolled. You may not communicate with other students during completion of a quiz or examination. You are expected to submit only your own original work and not cheat by giving answers to others or taking them from anyone else. According to the Random House Dictionary of the English Language, 2d ed., "Plagiarism is the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work". Working with other students on individual assignments, giving or receiving assistance during quizzes or exams is a form of academic dishonesty and will be considered cheating. Copying or printing of any quiz or test questions (for any purpose) is expressly prohibited and considered cheating.

**NOTE:** Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result in at least an "F" for that assignment (depending on the severity of the case, may lead to an "F" for the entire course) and may be subject to appropriate sanctions according to the Student Code of Conduct in the current Valencia Student Handbook. <u>Valencia Policies.</u>

**Turnitin:** All written assignments are subject to submission through plagiarism detection software. Turnitin is an automated system which instructors can use to compare each student's papers and assignments quickly and easily with a wide variety of web sites. It is also an enormous database of student papers that grows with each submission. After the assignment is processed, the instructor receives a report from Turnitin that states if and how another author's work was used in the assignment. All written assignment should include appropriately formatted references, including the use of generative AI such as ChatGPT that may have been utilized to assist in the writing process.

Online Rules of Student Behavior / Netiquette: The term "netiquette" refers to the awareness of the need for a certain code of behavior (etiquette) in electronic environments (the net) ... Net + Etiquette = netiquette. All students are expected to:

- Show respect for the instructor and for other students in the class.
- Respect the privacy of other students.
- Express differences of opinion in a polite and rational way
- Maintain an environment of constructive criticism when commenting on the work of other students.
- Avoid bringing up irrelevant topics when involved in group discussions or other collaborative activities.

#### Students should not:

- Show disrespect for the instructor or for other students in the class.
- Send messages or comments that are threatening, harassing, or offensive.
- Use inappropriate or offensive language.
- Convey a hostile or confrontational tone when communicating or working collaboratively with other students.
- USE ALL UPPERCASE IN THEIR MESSAGES -- THIS IS THE EQUIVALENT OF SHOUTING!!

If a faculty member feels that a student is violating any of the above guidelines, they will contact that student to discuss the situation in person. If you feel that another student is behaving inappropriately, please send your instructor a private e-mail message explaining the situation as soon as possible.

Valencia ID Cards: All students are required to obtain a Valencia ID card to access the campus and any student services that are provided. A valid Valencia ID is the only form of identification that is accepted at the Library and Testing Center. After you have registered and paid for your fees, bring a photo ID to Student Development to obtain your Student ID card. Student IDs are free. If your ID is lost, there is a \$5 fee to replace it.

## STUDENT HELP / SUPPORT SERVICES

Your success is very important to us! Students are encouraged to seek assistance from the instructor as needed. When additional support is needed, Valencia provides many student support resources including Computer Labs, Learning Centers, Student Success Workshops, Online Tutoring, Testing Center Support and Writing Consultations. For more information, go to: Learning Support

Baycare Behavioral Health's Student Assistance Program: Valencia is committed to making sure all our students have a rewarding and successful college experience and helps students in need of private counseling. To that purpose, Valencia students can get immediate help that may assist them with psychological issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home, or work. Students have 24-hour unlimited access to the Baycare Behavioral Health's confidential student assistance program phone counseling services by calling (800) 878-5470. Three free confidential face- to-face counseling sessions are also available to students.

**Students with Disabilities:** Students with disabilities who qualify for academic accommodations must provide a Notification to Instructor (NTI) form from the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class; accommodations will not be applied retroactively. The Office for Students with Disabilities determines accommodation based on appropriate documentation of disabilities. The OSD is located on the West Campus SSB, Rm. 102 Phone: 407-582-1523 Fax: 407-582-1326.

**Disclaimer:** The course outline and syllabus are subject to change as needed; changes will be announced in Canvas and/or via ATLAS email, in a timely manner. Your continued participation in this course after the drop-add deadline period constitutes an agreement with and an acceptance of the conditions presented in this syllabus.