

**ARIZONA STATE UNIVERSITY**  
**College of Nursing & Health Innovation**  
**Doctor of Nursing Practice Program**

**Course Prefix and Number:** DNP 604

**Course Title:** Advanced Human Pathophysiology/Lifespan

**Course Title Abbreviation:** Adv Human Pathophys

**Course Address:** <http://myasucourses.asu.edu>

**Faculty:** Kathleen McLeod, DNP, RN, MAOM, FNP-BC  
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**Semester Offered:** Spring 2020

**Credit Hours:** 4 credit hours

**Course Modality:** Hybrid

**Course Meeting Information:**

Online content and one required immersion.

**Prerequisites:**

Admission to Doctor of Nursing Practice Program or permission of faculty.

**Catalog Description:**

A core course focused on human pathophysiology and concepts of genetics for advanced practice nursing.

**Course Overview:**

This graduate course is designed to prepare advanced practice nurses to apply concepts of pathophysiology from the cellular level to disease process for assessment of patients with a variety of conditions across clinical settings. Theories, concepts, and principles of normal physiology, pathophysiology, and genetics are emphasized. Current research is used to explore disruptions in normal physiological functioning. The impact of positive health behaviors on pathophysiology is addressed. A systems approach and psychophysiological interrelationships are used to analyze the disease processes and their causative factors.

**Learning Outcomes:**

Upon completion of the course, the student will be able to:

1. Examine central concepts of cellular biology and altered cellular and tissue biology.
2. Analyze the relationships between disease processes, their causative factors, and normal physiology utilizing an integrated systems approach.
3. Evaluate the relationships between basic disease processes, their causative factors, and normal physiology utilizing current theoretical formulations and research findings.
4. Evaluate the dynamically changing manifestations of a disease process.
5. Interpret observable or available data in order to explicate pathophysiological processes.
6. Analyze the relationships among pathology, normal physiology, positive health practices, and health care.
7. Compare and contrast common genetic and pathophysiological malformations in the infant and adult.
8. Assess and compare the relationships among the theoretical principles of genetics, and human development and examine these principles in relation to adult disorders.
9. Evaluate current research findings as they relate to selected genetic and pathophysiological principles.

**Required Materials:**

McCance, K. & Huether, S. (2019). *Pathophysiology: the biological basis for disease in adults and children* (8<sup>th</sup> ed). Elsevier: St. Louis.

**Topical Outline:** A separate comprehensive topical outline with due dates will be provided.

Week	Topic	Outcomes	Readings	Assignments
Week 1 and 2	The Cell Genes, Environment and epigenetics	1, 7, 8, 9	Chapters 1-6 PowerPoints	Module quizzes 1-3
Week 3 and 4	Mechanisms of self- defense, inflammation, infection, stress and disease	1, 3, 6	Chapters 7-11 PowerPoints	Module quizzes 4-7
Week 5 and 6	Neurological System	2, 3, 4, 5, 6	Chapters 15- 20 PowerPoints	Module quiz 9
Week 7	Musculoskeletal System	2, 3, 4, 5, 6	Chapters 44- 46 PowerPoints	Module quiz 18
Week 8	Cardiovascular System	2, 3, 4, 5, 6	Chapters 32- 34 PowerPoint	Module quiz 14 Exam 1 (covers weeks 1-8)
Week 9	Pulmonary System	2, 3, 4, 5, 6	Chapters 35- 37 PowerPoint	Module 15 quiz
Week 10	Digestive System	2, 3, 4, 5, 6	Chapters 41- 43 PowerPoint	Module 17 quiz
Week 11	Reproductive and renal/urologic systems	2, 3, 4, 5, 6, 7	Chapters 24- 27 and 38-40 PowerPoints	Module 11 and 16 quizzes
Week 12	Endocrine System	2, 3, 4, 5, 6, 7	Chapters 21- 23 PowerPoint	Module 10 quiz
Week 13	Hematologic System	2, 3, 4, 5, 6	Chapters 28- 31 PowerPoints	Module quizzes 12 and 13
Week 14	Cellular Proliferation: Cancer Integumentary System	2, 3, 4, 5, 6, 9	Chapters 12- 14 and 47-48 PowerPoints	Module quiz 8A and 8B
Week 15	Shock, Multiple Interacting Systems	2, 3, 4, 5, 6, 7, 9	Chapters 49- 50	Module 19 quiz
Week 16	Final Exam		Exam 2	Covers weeks 8-15

**Methods of Instruction:**

This course uses Canvas™ for the facilitation of communications between faculty and students, submission of assignments, and posting of grades. The course site can be accessed at <http://my.asu.edu> or <http://myasucourses.asu.edu>. Activities in this course include textbook, module interactive activities, quizzes, and exams.

**Course Time Commitment:**

This is a **four-credit hour** course. This course requires approximately 180 hours of work. Expect to spend at least 12 hours each week preparing for and actively participating in this course.

**Methods of Evaluation:**

Self-assessment quizzes (20-Module quizzes)	40%
Examination 1	30%
Examination 2	<u>30%</u>
	100%

**Module Quizzes (Self-Assessment Quizzes):**

Each module has one or more plug-in (interactive activities) and quizzes that correspond to the module chapter(s) in McCance and Huether (8<sup>th</sup> edition). The total score for this portion of the course is based on completion of these module quizzes by 11:59 pm on the date specified in the topical outline. There are 20 module quizzes with each quiz worth 2%. You will **have 2 attempts** to take each of the module quizzes. These module quizzes account for 40% of your grade.

It is expected you will take this exam alone in a separate and quiet space. If it is found you collaborate or work together you will receive a zero for the quiz.

Each module also has 1 or more pretests. These pretests are for your own learning and will **NOT** be included in your grades.

**Examinations 1 and 2:**

These examinations may include multiple-choice, true/false, and short-answer questions. Examination 1 accounts for 30% of your grade and the examination 2 accounts for 30% of your grade. Examinations 1 and 2 are timed and you will have **one** attempt to take the exam during the week the exam is scheduled. See topical outline for the scheduled dates of examination 1 and 2.

It is expected you will take these exams alone in a separate and quiet space. If it is found you collaborate or work together you will receive a zero for the exam.

**Late Work:** Any extension of a quiz or examination #1 must be negotiated with faculty and requested at least 48 hours before the due date. If an extension is **not** negotiated, there will be a 1-point per day deduction. If a quiz or examination #1 extension is not negotiated, and that quiz or examination #1 is not taken within one week of the due date, you will receive a zero. **There will be no extensions granted for the examination 2.**

Please follow the appropriate University policies to request an accommodation for religious practices (<http://www.asu.edu/aad/manuals/acd/acd304-04.html>) or to accommodate a missed assignment due to University-sanctioned activities (<http://www.asu.edu/aad/manuals/acd/acd304-02.html>).

### **Course Grading:**

Consistent with ASU grading policy grades are assigned according to the following scale:

Course Letter Grade	Percentage	Grade Point Equivalent
A	90-100	4.0
B	80-89	3.0
C (Repeat Course)	70-79	2.0
D (Repeat Course)	60-69	1.0
E (Repeat Course)	0-59	0.0

College of Nursing and Health Innovation graduate program grading guidelines allow for a B- in individual course/assignments (C+ or lower is not allowed on the plan of study IPOS)

### **Course Policies & Procedures**

#### **Hybrid Course**

This is a course that requires active participation in both the online and face-to-face components of the course.

#### **Communicating with the Instructor**

This course uses a Canvas™ discussion board called "Hallway Conversations" for general questions about the course. Prior to posting a question, please check the

syllabus, announcements, and existing posts. If you do not find an answer, post your question.

Students are encouraged to respond and help one another. This forum is also for sharing observations, articles, and/or websites. Faculty will participate on an as needed basis.

Email questions of a personal nature to your faculty. You can expect a response within 48 hours. **When emailing faculty use your ASU email.**

### **Email and Internet**

**ASU email is an official means of communication** among students, faculty, and staff (<http://www.asu.edu/aad/manuals/ssm/ssm107-03.html>). Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly.

***All instructor correspondence will be sent to your ASU email account.***

### **Campus Network or Canvas™ Outage**

When access to Canvas™ is not available for an extended period of time (greater than one entire evening) you can reasonably expect that the due date for assignments will be changed to the next day (assignment still due by 11:59pm).

If an outage occurs, it is expected that you will confirm that the outage is with the University and not your local internet service provider. To monitor the status of campus networks and services, please visit the System Health Portal (<http://syshealth.asu.edu/>). If a system-wide ASU outage is NOT listed, you are responsible for contacting the ASU Help Desk to report and troubleshoot the issue. By contacting the help desk, a request case number will be created for you, which serves as an important documentation of your attempt to resolve any technical problems in a timely fashion. You may be required to forward this documentation to your instructor.

### **Course Time Commitment**

This four-credit course requires approximately 180 hours of work. Please expect to spend at least 12 hours each week reading and completing quizzes or exams.

### **Late or Missed Assignments**

Notify the instructor **BEFORE** an assignment is due if an urgent situation arises and the assignment will not be submitted on time. Published assignment due dates (Arizona Mountain Standard time) are firm. Please follow the appropriate University policies to request an accommodation for religious practices (<http://www.asu.edu/aad/manuals/acd/acd304-04.html>) or to accommodate a missed

assignment due to University-sanctioned activities (<http://www.asu.edu/aad/manuals/acd/acd304-02.html>).

### **Submitting Assignments**

All assignments, unless otherwise announced, MUST be submitted to the designated area of Canvas™. Do not submit an assignment via other methods unless specifically directed.

### **Drop and Add Dates/Withdrawals**

This course adheres to a set schedule and may be part of a sequenced program, therefore, there is a limited timeline to drop or add the course (<https://students.asu.edu/academic-calendar>). Consult with your advisor and notify your instructor to add or drop this course. If you are considering a withdrawal, review the following ASU policies:

- Withdrawal from Classes (<http://www.asu.edu/aad/manuals/ssm/ssm201-08.html>)
- Medical/Compassionate Withdrawal (<http://www.asu.edu/aad/manuals/ssm/ssm201-09.html>)
- Grade of Incomplete (<http://www.asu.edu/aad/manuals/ssm/ssm203-09.html>)

### **Grade of Incomplete**

Students must request a grade of Incomplete one week prior to the last day of the semester, but it is entirely up to the instructor to approve the Incomplete. A grade of "I" can only be given by an instructor when a student, who is doing otherwise acceptable work, is unable to complete a course (e.g., final exam or term paper) because of illness or other conditions beyond the student's control. The student and instructor must complete a Request for Grade of Incomplete form.

The exact time frame for completion is negotiated between student and faculty however, students who receive a grade of "I" in any course must complete course requirements within one calendar year of the scheduled course and may NOT have longer than one calendar year. If a regular grade is not assigned within the calendar year, the "I" becomes permanent part of the transcript. To repeat the course for credit students must re-register and pay the required fees. The grade for the repeated course will appear on the transcript but will not replace the permanent "I." Please see your program's student handbook for the procedure for to request an Incomplete.

### **Grade Appeals**

Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the

department chair per the University Policy for Student Appeal Procedures on Grades (<https://catalog.asu.edu/appeal>).

### **Student Conduct and Academic Integrity**

ASU expects and requires its students to act with honesty, integrity, and respect. Required behavior standards are listed in the Student Code of Conduct and Student Disciplinary Procedures (<http://www.asu.edu/aad/manuals/ssm/ssm104-01.html>), Computer, Internet, and Electronic Communications policy (<http://www.asu.edu/aad/manuals/acd/acd125.html>), ASU Student Academic Integrity Policy (<http://provost.asu.edu/academicintegrity> and <https://provost.asu.edu/node/20>), and outlined by the Office of Student Rights & Responsibilities (<https://eoss.asu.edu/dos/srr>). Anyone in violation of these policies is subject to sanctions.

Students must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

Students are entitled to receive instruction free from interference by other members of the class (<http://www.asu.edu/aad/manuals/ssm/ssm104-02.html>). An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per Instructor Withdrawal of a Student for Disruptive Classroom Behavior (<http://www.asu.edu/aad/manuals/ssm/ssm201-10.html>).

Appropriate online behavior (also known as *netiquette*) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor.

If a student should deem any part of the course content offensive, this should be brought to the attention of the instructor, or alternatively, to the unit chair or director via email. Communication should include reference to the course information and specific offensive content.

The Office of Student Rights and Responsibilities accepts incident reports (<https://eoss.asu.edu/dos/srr/filingreport>) from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.



**Title IX Statement**

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.

**College of Nursing and Health Innovation Student Handbook**

Students are expected to adhere to the policies and guidelines in the current edition of the College of Nursing and Health Innovation for your program (<https://nursingandhealth.asu.edu/student-life/current-students>).

**Prohibition of Commercial Note Taking Services**

In accordance with ACD 304-06 Commercial Note Taking Services (<http://www.asu.edu/aad/manuals/acd/acd304-06.html>), written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the note taker's name as well as the instructor's name, the course number, and the date.

**Course Evaluation**

Students are expected to complete the course evaluation. The feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available.

**Syllabus Disclaimer**

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Please remember to check your ASU email and the course site often.

Syllabus Template Version 2.5

**Accessibility Statement**

**Disability Accommodations:** Qualified students with disabilities who will require disability accommodations in this class are encouraged to make their requests to me at the beginning of the semester either during office hours or by appointment. Note: Prior to receiving disability accommodations, verification of eligibility from the Disability Resource Center (DRC) is required. Disability information is confidential.

**Establishing Eligibility for Disability Accommodations:** Students who feel they will need disability accommodations in this class but have not registered with the Disability Resource Center (DRC) should contact DRC immediately. Students should contact the Disability Resource Center, campus-specific location and contact information (<https://eoss.asu.edu/drc/contactus>) can be found on the DRC website. DRC offices are open 8 a.m. to 5 p.m. Monday – Friday. Check the DRC website (<http://eoss.asu.edu/drc>) for eligibility and documentation policies.

Email: [DRC@asu.edu](mailto:DRC@asu.edu)

DRC Phone: (480) 965-1234

DRC FAX: (480) 965-0441

Technical Requirements & Support

**Computer Requirements**

This course requires Internet access and the following:

- A web browser. Please use only Google Chrome (<https://www.google.com/chrome>) or Mozilla Firefox (<http://www.mozilla.org/en-US/firefox/new/>)
- Adobe Acrobat Reader (<http://get.adobe.com/reader/>)
- Adobe Flash Player (<http://get.adobe.com/flashplayer/>)
- Microphone (optional) and speaker

**Computer Skills Requirements**

It is expected that you will be able to do at least the following tasks on a computer:

- Use the Canvas by Instructure™ Learning Management System (see <https://community.canvaslms.com/docs/DOC-10701> for assistance)
- Using ASU email
- Creating and submitting files in commonly used word processing program formats (specifically Microsoft Word)
- Copying and pasting text
- Downloading and installing software
- Using spreadsheet programs (specifically Microsoft Excel)
- Using presentation and graphic programs

**Technical Support**

This course uses Canvas by Instructure™ to deliver course content. It can be accessed through MyASU at <http://my.asu.edu> or the Canvas™ home page at <http://asu.instructure.com/>.

To monitor the status of campus networks and services, visit the System Health Portal at <https://uto.asu.edu/system-health> or via Twitter by following @ASUOutages.

To contact the help desk you have two options:

- Website: assessed through the MyASU Service Center at <http://my.asu.edu/service>
- Chat: assessed through the MyASU Service Center at <http://my.asu.edu/service>
- Call toll-free at 1-855-278-5080

**Copyright:**

Course content, including lectures, are copyrighted material and students may not sell notes taken during the conduct of the course. Students do not have permission to post any course materials on any websites.

Information in the syllabus, other than grade and absence policies, may be subject to change with reasonable advance notice.

**DNP Essentials and Competencies:****This course meets the following AACN Essentials of Doctoral Education for Advanced Practice Nursing Practice:**

- I Scientific Underpinnings for Practice
- VIII Advanced Nursing Practice

**This course meets the following 2012 National Organization of Nurse Practitioner Faculties (NONPF) Nurse Practitioner Core Competencies:**

1. Critically analyzes data and evidence for improving advanced nursing practice
2. Integrates knowledge from the humanities and sciences within the context of nursing science
3. Translates research and other forms of knowledge to improve practice processes and outcomes
4. Develops new practice approaches based on the integration of research, theory, and practice