Human Anatomy and Physiology II

(BIO142 with lab) - Spring 2024

MWF 8:00- 8:50 or 9:00-9:50
Lecture Science Hall 105

Professor Crosson, RN, MSN, NP
acrosson@saintmarys.edu
Office: Science Hall 238

Student Office Hours: M 11:00-1pm, W 11:00-1:30pm, Thus. 4:30-5 and by appt.

Course Description: Anatomy and Physiology II (A&P II) is the second of a two-part sequence for the intended nursing major that details human anatomy and physiology from an organ system approach. A&P II will cover the nervous system, lymphatics and immune system, respiratory system, digestive system, urinary system, endocrine system, and the reproductive system with some information about human development and heredity and an introduction to electrolytes, fluids and acid-base balance. Course content will also include discussions about health/disease issues of concern as they pertain to the current course material. This class meets the NS LO1 Sophia Program Liberal Learning designations. Offered spring semester for first-year intended nursing majors; 3 hours of lecture and 3 hours of lab per week.

SPLL and Course Outcomes:

1. A Saint Mary's student uses scientific methods to investigate questions appropriate to the natural sciences.
2. A Saint Mary's student demonstrates specific knowledge of processes and principles underlying natural phenomena.
3. A Saint Mary's student identifies, analyzes, and evaluates critical scientific issues and approaches pertaining to the issues that face her as a citizen.

Required Text: Human Anatomy and Physiology, 2nd ed. by Erin C. Amerman (ISBN: 978-0-13-478807-4)
Note: The electronic textbook with Mastering access is required (you can also purchase a hard copy of the textbook for a reduced price if you choose). You will be expected to read the chapters in the textbook that are covered during lecture. You will be responsible for the material in the textbook unless otherwise specified. Exam and quiz questions will come from the material covered in lecture and lab, which comes directly from the book and Mastering learning resources.

Required Mastering Access (Pearson): You will need access to the Pearson Mastering online learning platform (through blackboard)**.** You will need to register through blackboard for this course (even if you did this in the fall you must do this again for this specific blackboard course). Instructions for registering will be available on blackboard. *This is the same account as the fall*. DO NOT PURCHASE A NEW MASTERING ACCOUNT. This course in Pearson is **crosson/97541**

Homework/Study Tables: These will be one-hour sessions where you may review lecture/lab material, ask questions, study for exams, work on assignments, read or do group work. I recommend attending study tables so that you set aside specific time weekly to work on this course. **TAs will also be holding study tables**

Open Office Hours for questions: These are open times for you to come to my office to ask questions or review any material. You can send an email to let me know you are coming or just come to my office anytime during office hours. If you cannot attend during open office hours or homework tables please email me to set up a time.

COURSE INFORMATION AND POLICIES:

Lecture Attendance: Attendance is **mandatory**. If you are unable to attend class for a legitimate reason, please let me know as soon as possible via email so we can work out a plan. If you do miss a lecture, it is **your** responsibility to find out what you missed. Attending class is important for learning and performing well on assessments (quizzes and exams). Poor attendance may result in a grade reduction. Official excused absences can be obtained through Dean Chambers' in the office of Student Academic Services kchamber@saintmarys.edu

Laboratory Attendance: Laboratory attendance is **mandatory**. See additional details in the laboratory syllabus. If you need to be gone from lab you will need to obtain an official excused absence through Dean Chambers' in the office of Student Academic Services kchamber@saintmarys.edu

Class Rules: Be at class and laboratory on-time. Refrain from side conversations and/or other disruptive behavior as this is distracting and unfair to other students who are trying to concentrate during class.

Communication: Important messages and announcements will be sent to your Saint Mary's e-mail account and/or Blackboard. Check both of these regularly as you are responsible for all e-mails sent to the class list. I will do my best to

respond to emails promptly. Allow 24 hours response time. Resend emails if you do not get a response after 24 hours.

Course Cancellation Policy: In the event that I would need to cancel class, I will let you know via email. If class is canceled, the class time *may* be made up outside of regularly scheduled class times via video lecture. I reserve the right to alter the schedule to best accommodate any cancellations.

Please see the Institutional Syllabus for Policies on the following: http://www.saintmarys.edu/academics/resources/registrar

- **Academic Honesty**
- **Accommodations for Disabilities**
- **Alternative Formats for Blackboard Ally**
- **Add/Drop and Course Withdrawal Policies**
- **Non-Discrimination Policy**
- **Title IX Policy**

METHODS OF ASSESSMENT:

Exams: There will be four exams during the semester and a Final Exam (dates below). Exams will contain an online portion as well as short answer questions either online or on paper. Exams may contain matching, multiple choice and short answer questions. All exams are mandatory. All exams are to be completed independently during the time that is assigned. You may **not** reference your notes, book, the internet, or other people to find answers as that is cheating. If you miss an exam for any reason, it is your responsibility to contact me. I will deal with this on a case-by-case basis. One possible outcome is that you may receive a zero on the exam. Official excused absences if you miss an exam are obtained through Dean Chambers' office in Student Academic Services kchamber@saintmarys.edu

In-class quizzes and miscellaneous assignments: There will be **about 5-6 lecture quizzes (on-line)** during the semester and will be taken at the beginning of lecture. Quizzes will be done independently without the use of notes, internet, or textbook. There may be other in class assignments that will be assigned during the course of the semester. Quiz format may include multiple choice, true/false, fill-in-the-blank, matching, labelling, and short answer questions. There are no make-ups for quizzes unless extreme circumstances exist. You must be present to receive credit. *Your one lowest quiz grade will be dropped at the end of the semester.* All other quizzes will count towards your grade.

Mastering Homework Assignments: Assignments will include online weekly Mastering assignments for each chapter through blackboard. You are responsible for turning in all assignments on time. **There will be no make-up on homework assignments. There will be one dropped grade from this category.**

Final Exam: The final exam will cover material from the entire semester including a section on new material (material covered following exam 4). The final exam will follow the same format as the other exams.

Your Grade: BIO 142 is an integrated lecture and laboratory course; thus, students will receive a single grade for both. Your grade in this course will be based on the following types of assessments:

In class Quizzes and miscellaneous assignments	**12.5%**
Mastering Homework assignments	**12.5%**
Exams (4 semester exams)	**45%**
Final Exam	**10%**
Lab (pre-labs, post labs, & lab quizzes)	**20%**

Assessment category	Average percentage for each assessment category written as a number. So an 80% will be written as 80 (not 0.8)	Multiply the percentage for each type of assessment by the weighted value (shown below) to get the total point value	Total point value for each assessment
Exams (4)		multiply by 0.45	
In-class Quizzes/Misc. Assignments		multiply by 0.125	
Mastering Homework Assignments		multiply by 0.125	
Final Exam		multiply by 0.10	
Lab		multiply by 0.20	
			Total =
			The total for this column is your percentage in this class

The **grading scale** for this course is:

A 93-100%	B+ 87-89.9%	C+ 77-79.9%	D+ 67-69.9%
A- 90-92.9%	B 83-86.9%	C 73-76.9%	D 60-66.9%
	B- 80-82.9%	C- 70-72.9%	Scores below 60% will be given a grade of F.

Tentative Schedule: I reserve the right to alter this schedule during the semester. If I do change the schedule, I will inform you of any/all changes in a timely manner. I will do my best not to change exam dates.

* **Lecture Quizzes will be announced at least one class prior (48 hours in advance)****

Date:	Lecture Topic	Reading and (Assignments)
Week #1 Mon. Jan. 15	Welcome back! Martin Luther King Day	*No lab this week!*
Wed. Jan. 17- Friday Jan 19th	Intro/Syllabus Introduction to the Nervous System and Nervous Tissue. (Ch. 11) Special Senses highlights. (Ch. 15 highlights)	Syllabus highlights, Chapter 11 (11.3-11.5) and highlights from Ch. 15 (15.2-15.7) **Ch. 11 (with highlights from Ch. 15) Homework due Sunday Jan 21st, 11:59PM**
Week #2 Mon. Jan. 22- Friday Jan 26	The Central Nervous System (Ch. 12) *Lecture quiz likely this week*	*Lab #1 this week: Intro to the Nervous system* 12.1 -12.8 13.1-13.2 **Ch. 12 Homework due Friday**
Week #3 Mon. Jan. 29- Friday Feb 2	The Peripheral Nervous System (Ch. 13) Autonomic Nervous System (ANS) (Ch 14)	13.3, 13.4, 13.5, 13.6 , 14.1-14.4 *Lab #2 this week: Central Nervous System + Cranial Nerves* **Ch. 13 Homework due Friday**
Week #4 Mon. Feb 5. - Wed. Feb 7	Autonomic Nervous System (ANS) Start lymphatic system/immunity (Ch. 20)	*Ch. 14* *Ch. 20 20.3-20.6* *Lab #3 this week: Peripheral and Autonomic Nervous System*
Friday Feb. 9	**Exam 1 (Ch. 11, 12, 13, 14, and 15 highlights)**	**EXAM** **Ch. 14 Homework due THURSDAY****
Week # 5 Mon. Feb. 12- Fri. Feb 16	Lymphatics/Immunity. (Ch. 20) Digestive System (Ch. 22)	Finish Ch. 20 22.1- 22.6 *Lab #4 this week: Immune System* **Ch. 20 Homework due Friday**
Week #6 Mon. Feb. 19- Fri. Feb 23	Digestive System Start Metabolism/Nutrition (Ch. 23)	22.5, 22.7, 22.8 23.1, 23.2, 23.3 23.3, 23.5, 23.6 (no thermoregulation) *Lab #5 this week: Digestive System* **Ch. 22 and 23 Homework due Friday**
Week #7 Mon. Feb. 26	Finish Metabolism/Nutrition. Start Respiratory Anatomy (Ch.21)	*Lab #6 this week: Respiratory Anatomy* *Ch. 21.*
Wed. Feb 28	**Wednesday Exam 2 (Ch. 20, 22, 23)**	
Fri. March 1	Respiratory System (Chapter 21)	
Week #8 Mon. March 4- Fri. March 8	Respiratory System	21.4, 21.5-21.8 *Lab #7 this week: Respiratory Physiology* **Ch. 21 Homework due by Friday**
Week #9 Mar. 11-15	**SPRING BREAK -NO CLASS**	NO CLASS
Week #10 Mon. Mar. 18- Fri. March 22	Urinary System Anatomy Physiology (Ch.. 24)	Chapter 24 Lab #8 this week: Urinary System Part I **Ch. 24 Homework due Friday**
Week #11 Mon. March 25- Wed. March 27	Fluid, Electrolyte-Acid Base (Ch. 25) **Wednesday Exam 3 (Ch. 21, 24, 25)**	Ch. 25 Lab #9 this week: Urinary System Part II **Ch. 25 Homework due Tuesday evening****
Fri. Mar. 29; Mon. April 1	**Easter Holiday-NO CLASS**	

Week #12 Wed. April 3-Fri. April 5	Endocrine (Ch. 16)	Lab #10 this week: Endocrine Ch. 16
Week #13 Mon. April 8-Friday April 12	Endocrine Reproductive System	*Lab #11 this week: Male/Female Reproductive System* **Ch. 26 Reading** **Ch. 16 Homework due Friday**
Week #14 Apr. 15-19	Reproductive System	Ch. 26 reading Lab #12 this week: Menstruation and Pregnancy **Ch. 26 Homework due Friday**
Week #15 Mon. Apr. 22-Wed. Apr 24	Reproductive System Wednesday April 24th: **Exam 4 (Ch. 16 and 26)** Start Ch. 27 Development and Heredity	Lab #13 this week: In Lab Presentations: Topics in Healthcare
Week #16 Mon. Apr 29-Wed. May 1	Development and Heredity (Ch. 27)	*NO LAB THIS WEEK* **Ch. 27 Homework due by Thursday *****
	Final Exam –Wednesday May 8th 10:30am-12:30pm	

Weekly Lab Schedule				
Week	**Tuesday**	**Thursday**	**Unit**	
1	Jan. 16	Jan. 18	NO LAB THIS WEEK	
2	Jan. 23	Jan. 25	Lab #1	Introduction to the Nervous System & Special Senses
3	Jan. 30	Feb. 1	Lab #2	Central Nervous System & Cranial Nerves
4	Feb. 6	Feb. 8	Lab #3	Peripheral and Autonomic Nervous System
5	Feb. 13	Feb. 15	Lab #4	Lymphatics and Immunity
6	Feb. 20	Feb. 22	Lab #5:	Digestive System
7	Feb. 27	Feb 29	Lab #6	Respiratory Anatomy
8	March 5	March 7	Lab #7	Respiratory Physiology
9	March 12	March 14	**Spring Break**	
10	March 19	March 21	Lab #8	Urinary System Part I
11	March 26	March 28	Lab #9	Urinary System Part II / Electrolytes/Fluids/Acid Base
12	April 2	April 4	Lab #10	Endocrine System
13	Apr. 9	Apr. 11	Lab #11	Male/Female Reproductive Anatomy
14	Apr. 16	Apr. 18	Lab #12	Menstruation and Pregnancy
15	Apr. 23	Apr. 25	Lab #13	In Lab Presentation-Topics in Healthcare
16	April 30		NO LAB THIS WEEK	