

## **BIO 2870: Anatomy and Physiology**

### **Lecture Syllabus, Winter 2019**

5 credits with the lab

Room 0100 General Lectures

2:30 pm – 3:45 pm; Mondays and Wednesdays

### **Welcome to Biology 2870!**

In this document, you will find all the information you need regarding the course structure, the content of the course, grading policies, exam dates, and other important information. By registering for the class, you agree to follow all of the policies listed in the syllabus and those that are mandated by the University. Therefore, **I highly recommend you read the syllabus in a great detail.** I look forward to a fun and exciting semester with all of you!

Dr. Turchyn

### **COURSE DESCRIPTION**

This course serves to introduce structure and function of organ systems to undergraduate students majoring in the Biological Sciences or other science majors, including science education, pre-allied health, and all students seeking introductory knowledge of human body.

The lecture portion of the class provides a comprehensive study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, digestive, and urinary. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The laboratory portion of the class primarily focuses on identification of the structures that make up the human body. The majority of the laboratory exercises are model-driven, with a few “wet lab” dissections.

The information learned from this course will provide students with a solid foundation to explore careers in the health and fitness industries. The lectures will include materials provided from the textbook as well as supplemental materials from outside resources, including videos and scientific journals.

## STUDENT LEARNING OUTCOMES

Upon successful completion of the course, students should be able to:

1. Develop a vocabulary of appropriate terminology to effectively communicate information related to anatomy and physiology.
2. Recognize the anatomical structures and explain the physiological functions of body systems.
3. Recognize and explain the interrelationships within and between anatomical and physiological systems of the human body.
4. Explain the concept of homeostasis, its regulation within each organ system, and know the consequences of loss of homeostasis resulting in disease or death.
5. Synthesize ideas to make a connection between knowledge of anatomy and physiology and real-world situations.

## COURSE PREREQUISITE

Students are required to have completed BIO 1510 with a final grade of C- or better. Students who managed to enroll in this course without satisfying this prerequisite are not likely to succeed in the course and for this reason will be required to drop it. If you have any questions about this prerequisite, you should see the Biology Department's Undergraduate Advisor, Ms. Kimberly Hunter ([kwalk@biology.biosci.wayne.edu](mailto:kwalk@biology.biosci.wayne.edu)) during the first week of class.

## REQUIRED COURSE MATERIALS

**Textbook** – Essentials of anatomy and physiology, 7<sup>th</sup> edition, by Martini and Bartholomew plus [masteringaandp.com](http://masteringaandp.com) access can be purchased at the bookstore or at [www.mypearsonstore.com](http://www.mypearsonstore.com).

Course Name: BIO 2870 W19; Course ID: **MAPTURCHYNW2019**.

**Laboratory Manual** – Laboratory investigations in anatomy & physiology, main version, 2<sup>nd</sup> edition by Sarikas (ISBN: 9780321575159).

## ADD/DROP INFORMATION

Students can enroll in the class until **January 18<sup>th</sup>**. If a student signs up for the class and decides to drop it before **January 18<sup>th</sup>**, the tuition for the class will be cancelled, the student will be reimbursed, and the class will not show on his/her transcript. If the student drops the class between **January 19<sup>th</sup>** and **March 24<sup>th</sup>**, the tuition will not be reimbursed and a final grade of "WP" (withdrawal with a passing grade, if average of all your scores earned to date is greater than or

equal to 60%), “WF” (withdrawal with a failing grade, if average of all your scores earned to date is less than 60%), or “WN” (withdrawal never attended) will be shown on his/her transcript. **All withdrawals must be requested through Academica and they will not be granted after March 24<sup>th</sup>.** If the student signs up for the class, stops attending lectures, and fails to withdraw, he/she will receive a failing grade “F” for the course. **Please note that “incomplete” grades will not be issued to students in poor standing who are seeking an alternative to a late drop.**

### **CODE OF CONDUCT**

Professional behavior is expected in the lecture, which includes respecting your classmates by arriving on time, turning off cell phones, and not talking, texting, surfing internet (facebook, twitter, etc.) or playing any games. If a student is caught performing any of the above during lecture, he/she will be required to leave the room. If a student is caught performing any of the above during an exam, he/she will receive a grade of “F” for the course (see below).

### **CHEATING POLICY**

A student found to be cheating during an exam (using a “cheat sheet” or notes written on a desk, looking at another student’s exam, or allowing another student to look at his/her exam) will automatically receive a grade of “F” for the course and may be expelled from the University. For discussions of cheating and plagiarism see the “Student Code of Conduct” that can be found at <https://doso.wayne.edu/conduct/academic-misconduct>.

### **OFFICE HOURS AND COMMUNICATION**

**Any questions/comments regarding the lecture** portion of the course should be directed to:

Dr. Nataliya Turchyn

**Office Location:** Room 3119, Biological Sciences Building

**E-mail:** [ai7380@wayne.edu](mailto:ai7380@wayne.edu)

**Office Phone:** 313-577-2910

**Office Hours:** 3:50 pm – 5:20 pm on Mondays & Wednesdays or by appointment

If you have a question about the lecture/textbook material, please post it in **Canvas Discussions:** <https://canvas.wayne.edu/courses/98804>

I will not reply to e-mails when the answer can be found in the syllabus or on Canvas. In addition, I

will not reply to e-mail questions that have already been answered on **Canvas Discussions**.

If you would like to make an appointment to meet, please contact me through e-mail.

If you have a question about your lecture grade, please send me an e-mail containing the scores you have in your records and I will check them with my records.

**Any questions regarding the lab** portion of the course should be directed to a student's lab teaching assistant (TA) or Ms. Krystyn Purvis, Room 205 Shapero Hall, e-mail: [Krystyn@wayne.edu](mailto:Krystyn@wayne.edu).

When e-mailing me, Ms. Purvis, or TA, please use professional style with your course number in the subject, a proper greeting (e.g., "Dr. Turchyn, Ms. Purvis, or Ms/Mr/Mrs. Teaching assistant"), and correct punctuation including capitalization and no texting abbreviations. E-mails that do not follow these rules may take longer to get a reply or may be returned for correction.

This course may be assigned a **student supplemental instructor (SI)**. The SI has already taken this course and succeeded in it. He/she will help you develop effective study strategies. You are encouraged to approach the SI with questions about the lecture material as you would your instructor. You will be provided with directions on how to contact him/her during the first or second week of the class.

In addition to that, the Academic Success Center offers individual **tutoring** and **group workshops** to the students, which are free of charge. You can also make a free appointment with a learning specialist to design study strategies just for you. See <https://success.wayne.edu/> for more information.

### **MASTERINGAANDP.COM QUESTIONS**

Students are expected to take an active role in their learning by completing readings and taking online quizzes through Pearson's [masteringaandp.com](https://www.masteringaandp.com). These quizzes will cover the material relevant to the upcoming lectures or to recently discussed lecture material. [masteringaandp.com](https://www.masteringaandp.com) questions will be posted several days before they are due. Late or missed questions will receive zero credit. It will be the responsibility of the student to regularly check the [masteringaandp.com](https://www.masteringaandp.com) calendar for upcoming quizzes (in-class reminders will be given to those in attendance). **You will have a chance to earn up to 60 points for completing them and your scores will be posted in**

**the Canvas Grades after each exam.** The quiz scores are always available in [masteringaandp.com](https://www.masteringaandp.com), but Canvas scores are official.

### EXAMS

**There will be three exams given during the semester and one final, cumulative exam (four exams total).** Each exam will be worth 110 points, while the final will be worth 220 points. The exams will consist of multiple choice and true/false questions, and will include images. **All exams are closed book, and are related to the material covered in the lecture and assigned in reading of the textbook.**

The lowest score from Exams I, II, and III will be automatically dropped. However, **every student must take the final exam, which cannot be dropped or replaced with another assignment.**

**YOU MUST BRING YOUR STUDENT ID (ONECARD) TO EVERY EXAM!** Each regular exam begins promptly at 2:30 pm and ends at 3:45 pm. **The FINAL EXAM is scheduled for WEDNESDAY, APRIL 24<sup>TH</sup> at 2:45 PM – 4:35 PM.** All exams are held in 0100 General Lectures. **There are no make-up exams.** The missed exam will be considered your lowest scored and dropped.

The final exam is scheduled as designated in the Schedule of Classes for this term. No other time for the final exam will be available, and no exception will be made for conflicts such as student travel plans or other exams the same day. **Students arriving late to an exam will NOT be given extra time.** Students will not be able to leave and re-enter the room once the exam begins for any reason (including bathroom breaks). No students will be allowed to enter and take an exam after one student has finished an exam and left the exam room. **Students who arrive after another student has left will receive a zero for their exam score.**

If more than 75% of the class answers an exam question incorrectly, everyone will receive credit for that question.

### CALCULATING GRADES

A total of 900 points are available to be earned in this course: 500 from lecture and 400 from the laboratory. There are no opportunities for extra credit or alternative assignments **under any**

**circumstances.** All exam scores will be posted in the **Canvas Grades.** **Exams will not be given in advance.**

Exam I	110
Exam II	110
Exam III	110
Lowest score from Exams I-III	-110
Masteringaandp.com	60
Final Exam	220
<u>Lab</u>	<u>400</u>
<b>Total</b>	<b>900</b>

**Final grades will be assigned based on the following percentage:**

A	93 – 100%	C	73 – 75.99%
A-	90 – 92.99%	C-	70– 72.99%
B+	86 –89.99%	D+	66 – 69.99%
B	83 –85.99%	D	63 – 65.99%
B-	80 – 82.99%	D-	60 – 62.99%
C+	76 – 79.99%	F	≤ 59.99%

### **GRADE DISPUTES**

Students will have one (1) week after the return of scantron to challenge a grade for any question. Failure to challenge the grade within this period indicates a willingness to accept the grade as is. The challenge should consist of a written description of why the answer is correct based on other published material that you cite. It is not an opportunity to complain. Be advised that an exam challenge constitutes an entire re-grade of your exam.

### **UNEXPECTED UNIVERSITY CLOSURES**

If the University is officially closed on an exam day, the exam will be held on the next regularly scheduled class day. Closure of the University is announced by the following mechanisms:

- The University Newslines (313) 577-5345\*
- WSU Homepage ([www.wayne.edu](http://www.wayne.edu))\*
- WSU Academica (<https://academica.wayne.edu/>)\* and

- By other local radio and television stations.

\* Note: The information on closures and class cancellations is likely to be found at these locations before local radio and television stations broadcast it.

### **EXAM TIME CONFLICTS**

Students are not required to take more than two exams in one day. A student with more than two scheduled final exams on one day may (not must) contact the instructor of the course with the lowest number of students enrolled to arrange an alternate time for the final exam. Such petitions must be made at least one week prior to the scheduled date of the exam. Our class currently has ~ 310 students.

### **RELIGIOUS HOLIDAY CONFLICTS**

Students who have a conflict with any of the scheduled exam times due to religious reasons must notify Dr. Turchyn in writing by class time on **Monday, January 21<sup>st</sup>**. Accommodations will not be provided unless she is notified in writing by this date.

### **STUDENTS WITH DISABILITIES**

If you have a documented disability that requires accommodations, you will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. The SDS telephone number is 313-577-1851 or 313-202-4216 for videophone use. Once you have your accommodations in place, the instructors will meet with you privately during office hours to discuss your special needs. Student Disability Services' mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University. You can learn more about the disability office at [www.studentdisability.wayne.edu](http://www.studentdisability.wayne.edu).

To register with Student Disability Services, complete the online registration form at: [https://wayne-accommodate.symphlicity.com/public\\_accommodation/](https://wayne-accommodate.symphlicity.com/public_accommodation/)

## SCHEDULE OF LECTURES AND EXAMS

The lectures will be audio- and video-recorded, and posted in the Echo360 Recordings on Canvas. If there are any problems with the lecture capture system, please contact Computing & Information Technology (C& IT) at (313) 577-4778 or [helpdesk@wayne.edu](mailto:helpdesk@wayne.edu). You are welcome to record lectures for your personal use and to take pictures of my handwritten notes and questions. All lecture PowerPoint slides can be found in the Modules on Canvas.

Here is the schedule with dates of all the exams and a tentative schedule indicating which chapter(s) will be covered each class day. Note that some chapters may take more or less time than indicated on the schedule below.

<u>Date</u>	<u>Topic</u>	<u>Chapter(s)</u>
1/7	Course introduction	
1/7	An introduction to anatomy and physiology	1
1/9	An introduction to anatomy and physiology	1
1/9	The tissue level of organization	4
1/14	The tissue level of organization	4
1/16	The tissue level of organization	4
<b>1/21</b>	<b>NO CLASS — MARTIN LUTHER KING JR. DAY</b>	
1/23	The integumentary system	5
1/28	The integumentary system	5
1/28	The skeletal system	6
1/30	The skeletal system	6
2/4	The skeletal system	6
<b>2/6</b>	<b>Exam #1</b>	<b>1 &amp; 4-6</b>
2/11	The muscular system	7
2/13	The muscular system	7
2/18	The muscular system	7
2/18	The nervous system	8
2/20	The nervous system	8
2/25	The nervous system	8
2/27	The general and special senses	9
3/4	The general and special senses	9
<b>3/6</b>	<b>Exam #2</b>	<b>7-9</b>

<b>Date</b>	<b>Topic</b>	<b>Chapter(s)</b>
<b>3/11-3/16</b>	<b>NO CLASSES — SPRING BREAK</b>	
3/18	The endocrine system	10
3/20	The endocrine system	10
3/25	The cardiovascular system: blood	11
3/27	The cardiovascular system: blood	11
3/27	The cardiovascular system: the heart	12
4/1	The cardiovascular system: the heart	12
4/3	The respiratory system	15
<b>4/8</b>	<b>Exam #3</b>	<b>10-12</b>
4/10	The respiratory system	15
4/15	The digestive system	16
4/17	The digestive system	16
4/22	The urinary system	17
<b>4/24</b>	<b>Final Exam</b>	<b>All topics covered</b>