**Bio 211 : Anatomy and Physiology I**

**Spring 2019**

Instructor:

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http://course1.winona.edu/MGarbrecht/Bio211Sp2010.htm

CONNECT website: <http://connect.mheducation.com/class/m-garbrecht-bio-211---garbrecht-spring-2019>

Class Location and Time:

Lecture: Monday/Wednesday/Friday (3:00pm to 3:50pm)

 Lab: Time Varies - check your own schedule (Pasteur 301)

Course Description:

Bio 211 is the first course in a two-semester sequence designed to give nursing and allied health students a functional understanding of human anatomy and physiology. Upon completion of the course sequence, students will have an understanding of basic the structure and function of human body at the cellular, organ, and system levels. This course involves three 50 minute lectures and one two-hour laboratory session per week. Laboratory exercises will include, but are not limited to, physiological experiments and measurements, computer tutorials, light microscopy, and examination of models and human tissues. NOTE: The examination and handling of human cadavers and preserved human tissues will be a part of the laboratory experience in order to fully appreciate and understand the complexity of human anatomy. Please contact Dr. Garbrecht as soon as possible if you have any concerns or questions concerning the use of human cadavers and tissues in this course.

Required Materials:

 ***Textbook:*** Anatomy and Physiology: The Unity of Form and Function by Kenneth Saladin. Published by McGraw-Hill.

This semester we will be using the 8th edition of the Anatomy and Physiology textbook written by Kenneth Saladin. The WSU Bookstore will be selling a book package (approximately $155.00) where you will receive a McGraw-Hill CONNECT access card AS WELL as a loose-leaf paper copy of the actual textbook. The CONNECT access card will allow you to log in and utilize a variety of practice quizzes, tutorials, animations, learning modules, and an online virtual anatomy lab. This online platform is also where you will submit homework assignments as needed. Once you obtain the CONNECT access card you will follow this link to register and activate your account : (http://connect.mheducation.com/class/m-garbrecht-bio-211---garbrecht-spring-2019).

The CONNECT access code you purchase will give you access to the CONNECT website/tutorials/and the e-book for a full year, so you **won’t** have to pay for this again next semester when you take Bio 212.

***Gloves:*** Since this course involves examination/dissection of preserved tissues, ALL students are required to purchase a “Glove Voucher” or coupon from the bookstore. This will cover the cost of gloves and any other protective equipment you might need for this course. This voucher will need to be turned in to the lab instructor on the FIRST week of lab. This will ensure that you will always have the proper size gloves available to you when you need them and you won’t have to carry your own box back and forth to lab every session.

Grading:

Grades in this course will be calculated numerically based on your performance on lecture tests (4), quizzes (4), laboratory exams (4), possible homework assignments, and a writing assignment (1). Although not officially required, attendance and class participation could affect the overall final grade of borderline students. **In order to be fair to all students, there will be NO EXTRA CREDIT opportunities on an individual basis (so please don’t ask for extra credit during the last week of class).** However, I do typically offer a few points of extra credit on each quiz or exam that can certainly add up and improve your grade. ***The grading scale for this course will be as follows : 90% or above = A, 89-80% = B, 79-70% = C, 69-60% = D, less than 60% = F.*** Since grades will be determined numerically based on the number of points you earn on each exam, quiz, or assignment, each of you has the ability to determine what your current grade is at any point in the semester.

For example: Let’s say after several weeks, you achieved a score of 40 out of 50 on Lecture Exam #1, 35 out of 50 on Lab Exam #1 and 9 out of 10 on a quiz. At this point you would have earned 84 out of a possible 110 points available. 84 divided by 110 = 76.36%. Therefore, at this point in the course you would be in the “C” range. Since you know how many points are still available in the semester, you always know where you stand and how many points you will need to earn in order to achieve the grade that you want. It is very important that you routinely monitor your standing in the class in order to prevent finding yourself unable to achieve your personal goals at the end of the semester. This can be done by checking your scores on the D2L website.

*Make-up exams*: As a general rule, make-up exams will not be offered. Therefore, you must make every human effort to make it to class to take the exam. Obviously, exceptions will be made for extreme circumstances that are out of your control such as a death or hospitalization of an immediate family member (or yourself) that can be documented, military service, etc. Not feeling well, bad weather that does not close the university, missing your ride back to school, dentist appointments, etc… are not acceptable excuses. If you anticipate that you will be unable to make it to an exam you need to contact me AS SOON AS POSSIBLE PRIOR TO EXAM TIME. This can be accomplished via an email or voicemail late at night or early in the morning, even if I don’t immediately respond, or a conversation prior to the start of the exam. It is important to note that make-up exams will NEVER be the same exams that the rest of the class took. Make-up exams will most likely involve long-answer essay type questions, not just a different set of multiple choice questions. Please take this into account when deciding whether or not you really think you need to miss an exam.

Attendance and quizzes:

Attendance will not be recorded in this class and generally will not have a direct effect on your grade. However, if I notice that attendance begins to drop off I will start giving pop-quizzes to those who do attend (no make-ups). That being said, I cannot emphasize how important it is to show up for lecture. Getting the notes from someone else or reading up in the book will not substitute for physically being in class. Poor attendance at lecture will almost certainly make it difficult to absorb and comprehend all the material you will be responsible for in this class. Lectures will not necessarily include ALL the material from the book and often will include material that is not specifically covered in the book. As your instructor, I am always eager to help a hard-working student understand the required material. My office door is pretty much always open if you want to talk.

Students with disabilities or requiring special accomodations:

It is the policy of both WSU and Dr. Garbrecht to accommodate the special needs and requirements of all students. Please contact Dr. Garbrecht as soon as possible if you have a documented disability and require special accommodations for lecture, lab, or test taking. In addition, you are encouraged to contact the Disability Services office (314 Maxwell Hall) at [www.winona.edu/accessservices/](http://www.winona.edu/accessservices/) or 457-5878.

Hints and Tips:

Although this course does require the absorption of large amounts of information, simple memorization of terms and facts will not get you the grade that you want. To fully understand human anatomy and physiology, one must be able to integrate knowledge of structure and organization (anatomy) and understand how this relates to organ and system function (physiology). Being able to think critically and problem solve is essential. Obviously, each of you has different skills and no two people will learn in the same way, so one study method won’t work for everyone. Your job is to find a study method that you are comfortable with, fits your schedule and most importantly will help you get the grade that you want.

A few suggestions:

1. **Study the lecture notes and read EVERY SINGLE DAY.** Trying to “cram” a few days prior to an exam is not only stressful, but will make it very difficult to do well on exams which cover a great deal of information.
2. **Attend Supplement to Instruction sessions.** This semester we will be having group help/review sessions (also known as S2I Sessions) that will allow you to review material from lecture and ask questions in a less formal setting. An upper level student (Junior or Senior) will lead these sessions with extensive experience in human anatomy and physiology. These sessions will likely take place on Tuesday and Thursday afternoons. The final location and times will be announced shortly. Attendance at these sessions is totally voluntary and very informal but strongly encouraged since we have observed over the last few years that students who regularly attend SI sessions earn about a full letter grade higher than students who don’t attend.
3. **Get help as soon as possible if you are struggling**. Much of what we go over in lecture will be used as a foundation for later learning. So, if you fall behind early and don’t get help, you will almost certainly struggle later on.

***Lecture Quiz/Exam Dates***

Quiz 1: Monday, January 28th

Exam 1: Monday, February 11th

Quiz 2: Friday, February 22nd

Exam 2: Wednesday, March 6th

Quiz 3: Monday, March 25th

Exam 3: Friday, April 5th

Quiz 4: Monday, April 22nd

Exam 4: Monday, May 6th (Final Exam is at 3:30pm!!)

Tentative Lecture/Lab Topic Schedule:

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| *Week* | *Lecture Topic* | *Lecture Reading* | *Laboratory Exercises* |
| 1/14/19 | Intro to A&P, orientation of the body | Ch 1, 2, Atlas “A” (pages 29-39) | Bones and skeletal system |
| 1/21/19No Class Monday (MLK Day) | Chemistry review, macromolecules | Ch. 3 | Bones and Skeletal system |
| 1/28/19 | Cell structure and function | Ch. 4 | **Lab Exam #1**  |
| 2/4/19 | Cell structure and tissues | Ch. 4  | Cell Membrane Lab |
| 2/11/19 | Tissues and Histology | Ch.5 | Light Microscopy and Histology |
| 2/18/19 | Integumentary system | Ch. 6 | Histology and Integument |
| 2/25/19 | Muscular System | Ch. 6, 7 | **Lab Exam #2**  |
| 3/4/19 | Muscular System | Ch. 8 | Muscular system |
| 3/18/19 | Muscular System | Ch. 8, 9 | Muscular system/Muscle Histology |
| 3/25/19 | Central Nervous system | Ch. 10, atlas B | **Lab Exam #3**  |
| 4/1/19 | Peripheral Nervous system | Ch. 10, 11 | Nervous System #1 - Brain |
| 4/8/19 | Autonomic Nervous system/Special Senses | Ch. 11, 12 | Nervous system #2 – Spinal Cord and Nerves |
| 4/15/19 | Skeletal system | Ch. 13, 14 | Eye/Ear |
| 4/22/19 | Skeletal system  | Ch. 13, 14 | Eye/Ear/Review |
| 4/29/19 | Joints | Ch. 15, 16 | **Lab Exam #4**  |
| **FINAL EXAM** | **MONDAY of Finals Week** | **3:30pm to 5:30pm** |  |
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### Commitment to Inclusive Excellence

WSU recognizes that our individual differences can deepen our understanding of one another and the world around us, rather than divide us. In this class, people of all ethnicities, genders and gender identities, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences.  If you feel your differences may in some way isolate you from WSU’s community or if you have a need of any specific accommodations, please speak with the instructor early in the semester about your concerns and what we can do together to help you become an active and engaged member of our class and community.

### Campus Resources

* [Winona] Student Support Services, Krueger Library 219, 457-5465[www.winona.edu/studentsupportservices/](http://www.winona.edu/studentsupportservices/)
* [Rochester] Student & Campus Services, UCR Room SS 128, 285-7100,rochss@winona.edu, [www.winona.edu/rochester](http://www.winona.edu/rochester)
* Inclusion and Diversity Office, Kryzsko Commons Room 236, 457-5595[www.winona.edu/inclusion-diversity/](http://www.winona.edu/inclusion-diversity/)
* Access Services, Maxwell 314, 457-5878 [www.winona.edu/accessservices/](http://www.winona.edu/accessservices/)
* [Winona] Counseling and Wellness Services, Integrated Wellness Complex 222, 457-5330 [www.winona.edu/counselingcenter/](http://www.winona.edu/counselingcenter/)
* [Rochester] RCTC Counseling Center, UCR Room SS 133, 285-7260, www.rctc.edu/counseling\_career\_center
* GLBTA Advocate, Prof. Dan Lintin, PAC 207, 457-5531
* Advising Services, Maxwell 314, 457-5878 [www.winona.edu/advising/](http://www.winona.edu/advising/)
* [Rochester] UCR Learning Center, UCR Room AT 306, 285-7182
* [Winona] Tutoring Services, Krueger Library 220, 457-5680<http://www.winona.edu/tutoring/>
* [Winona] Writing Center, Minné Hall 348, 457-5505[www.winona.edu/writingcenter/](http://www.winona.edu/writingcenter/)
* [Winona] Math Achievement Center, Tau 313, 457-5370<http://www.winona.edu/mathematics/mac/>

**Statement on the use of cadavers in Bio 211:**

No cell phones and/or cameras are allowed in the laboratory. Videotaping or photographing the human anatomical material is strictly prohibited without the prior consent of the University of Minnesota’s Anatomy Bequest Program Proposal Review Committee, including but not limited to any images which will published or distributed.

Students shall track all human anatomical material by keeping the donor’s acquisition number tag with the donor at all times.  If the tag becomes disassociated from the donor, the course director should be contacted immediately.  All tissue removed from the donor during dissection must be retained, identified with the donor’s acquisition number and tracked.  Bins will be provided for appropriate storage of any removed tissues, and should stay with the donor at all times.

Anatomical material must not be removed from the dissecting laboratory.

Unauthorized access to the lab is not permitted – i.e. dissection and/or study of the donors without the permission of the instructor is forbidden.  Additionally, individuals not enrolled in the course are not permitted to view the donors without permission by the instructor and fulfillment of all stated requirements.

Disrespectful language, improper handling, or any other behavior deemed inappropriate in regards to the donor or dissection process will not be allowed or tolerated.  Both conversational and written language relating to the donor and donor dissection by human anatomy students lab must be respectful and discrete. Any information about the donor including the donor’s demographical, social or medical history is confidential and students are not allowed to disclose this information.

The use of the Internet in general, and social media sites in particular, including, but not limited to, Facebook, MySpace, Twitter, etc., by students as a venue for discussing any aspect of the donor or donor dissection is strictly prohibited. Proper attire must be worn for all anatomical study.  This includes long pants or floor length skirt, full coverage t-shirts (short or long sleeve), and closed-toed shoes.

The laboratory must remain clean.  Laboratory tables and counters should be thoroughly washed after each lab, and the floors should be kept free of spills and wastes.