

BIOL- 2112 (ANATOMY & PHYSIOLOGY – II)

Sections A & B

Syllabus - Spring Semester, 2020

Lecture:

Meeting Time: Tues & Thurs: 1.00 – 2.15 PM

Meeting Place: SCI W1002

Lab:

Meeting Time: i) Monday (Section A): 1.00 – 2.50 PM

ii) Wednesday (Section B): 1.00 – 2.50 AM

Meeting Place: SCI W2017



Instructor: Dr. Soma Mukhopadhyay

E-mail: smukhopadhyay@augusta.edu

Office: Sci W2005

Office hour: Tues – 3 PM – 4.00 PM

Thurs – 3 PM – 4.30 PM

Or by appointment

Course Description:

BIOL 2112, Human Anatomy and Physiology II, is the second part of a two-part sequence covering Human Anatomy and Physiology.

The Organ Systems covered in BIOL 2112 are endocrine system, cardiovascular system, lymphatic system, immunity system, respiratory system, digestive system, urinary system and reproductive system.

Prerequisite: Biol 2111 with C or better

Textbook (i & ii are required):

i) Human Anatomy & Physiology, by Elaine Marieb and Katja Hoehn;
10th Edition; Pearson, Benjamin Cummings Publishers.

ii) Lab Manual – Human Anatomy and Physiology Laboratory Manual by Marieb & Smith;
13th Edition, Custom Edition

iii) A Photographic Atlas for Anatomy & Physiology by Heebert, Heisler, et.al. Pearson Publishers
(recommended)

BIOL 2112 (Anatomy & Physiology – II)

Reading Assignment and Tentative Schedule

Week of:	Topics:	Readings:
6 th Jan	Introduction to the course, syllabus and policies Endocrine System	Chapter 16
13 th Jan	Endocrine System The Cardiovascular System – Blood	Chapter 16 Chapter 17
20 th Jan	The Cardiovascular System – Blood & Heart	Chapters 17, 18, ICA
27 th Jan	The Cardiovascular System – Heart <i>Quiz 1-Tuesday 28th January: Topic Chapters 16, 17 & 18</i>	Chapter 18
3 rd Feb	The Cardiovascular System - Blood Vessels	Chapter 19
10 th Feb	The Lymphatic System <i>Lecture Exam 1 (11th February, Tuesday): Chapters 16 - 19</i>	Chapter 20
17 th Feb	Respiratory System	Chapter 22
24 th Feb	Digestive System <i>Quiz 2- Thursday 27th February: Chapters 20 & 22</i>	Chapter 23
2 nd Mar	Digestive System	Chapter 23, ICA
9 th Mar	Nutrition and Metabolism	Chapter 24
16 th Mar	Body Temperature Regulation; Urinary System <i>Lecture Exam 2 (19th March, Thursday): Chapters 20, 22- 24</i>	Chapter 24, 25
23 th Mar	Urinary System	Chapter 25
30 th Mar	Fluid Electrolyte Balance Reproductive System – Male	Chapter 26 Chapter 27
6 th Apr	SPRING BREAK – NO CLASSES	
13 th Apr	Reproductive System – Male & Female	Chapter 27
20 th Apr	Immunity System	Chapter 21
27 th Apr	Immunity System <i>Lecture Exam 3 (28th April, Tuesday): Chapters 25, 26 & 27</i>	Chapter 21

7th May (Thursday) – Comprehensive Final Exam: 2.00 PM – 4.00 PM

*** Note:**

- Add/Drop- Last Day – 10 January, 2020; Midterm: 27th February, 2020
- Holidays: MLK Day: 20th Jan, 2020 (Monday); Spring Pause: 5 & 6 March (Thursday - Friday)
- Spring Break: 6 – 10 April (Monday – Friday)

BIOL-2112 (Anatomy & Physiology– II) -- POLICIES

This syllabus is subject to change. Any change/s will be announced in the class.

GRADING: 3 Lecture Exams:	300 points (100 points each)
2 Lab Exams:	200 points (100 points each)
2 Quizzes	50 points (25 points each)
In-class assignment & HW	20 points
Lab Performance & Lab Quizzes (2)	30 points (20 + 10)
<u>Comprehensive Final Exam:</u>	<u>150 points</u>
Total:	750 points

Points will be converted to percentage and

Final grades will be determined according to the following: (There will not be any curving)

A = (90-100%)	B = (80-89.99%)	
C = (70-79.99%)	D = (60-69.99%)	F = (0-59.99%):

TESTS:

- There will use a combination of traditional lecture as well as active learning activities, used in class. To make the best use of our lecture time, you will be expected to cover some portions of the course content on your own, using guides/worksheets provided (i.e. certain topics will not be covered in lecture, but you will be expected to know it for the exams).
- You are responsible to go through and learn the concepts in the Learning Objectives from each chapter (posted on D2L)
- There will be multiple choice, fill in the blanks, true-false, matching, labeling and some short answer type questions on the lecture test. You have to use pencils to fill-out scan-trons.
- Write clearly and legibly for written questions and in lab practicum. Use blue or black pen only for written type questions in tests and also for in-class assignments.
- Comprehensive final which include material covered in the lecture, handouts, and assigned readings.
- Lab Practicum will be from the material covered in the lab and it is a timed test.
- No papers, extra projects, etc. will be permitted to supplement grades received on any exams.
- After the test, you will get opportunity to review your test. Test papers will be collected back from the students. You are not allowed to take pictures of tests or practice tests.

MAKE-UP EXAM:

1. **Maximum of 1 make-up for one person will be allowed for a truly valid excuse.**
2. Prior intimation is preferred unless it is a very last minute emergency. Student have to contact me immediately if for any obvious reason he/she is going to miss the test/quiz. **The make-up for a test must be taken within a week of the original date of the latest. Students have to show proper paper work, otherwise, there will be 20 point penalty.**
3. For extreme emergency there could be make-up for Lab Practicum, You have to have written proof. Format of the test might be different from the regular lab-practicum.

ATTENDANCE:

Essential to the understanding of the course material. You are responsible for the material taught in any class (es) you miss. Attendance will be taken randomly any day and at any time of the class. Students are expected to attend all lecture classes and the labs. Students who exceed 5 absences may be withdrawn from the course at the instructor's discretion. Tardiness will be counted as ½ of an absence.


SUPPLIES REQUIRED FOR THE COURSE:

- a) Text books for Lecture and Lab
- b) Three-ring binder, pen drive
- c) #2 pencils and colored pencils, good eraser
- d) PPE (Personal Protective Equipment): gloves, lab coat, safety glasses
- e) Lab coat, Safety glasses, dissecting tools

COMMUNICATION

- Daylight (previously known as D2L) will be used for the main medium of communication. All registered students get an account to D2L for academic use. Please make sure you have an active e-mail. It might take up to 48-72 hours to get your account activated.
- Use your college e-mail for any communication; mention your name and course number. Write e-mail properly.

If you do not know how to write properly, please refer to the following site:

 <http://college.usatoday.com/2012/03/15/five-things-to-remember-when-e-mailing-a-professor/>

- Use your registered name only for test and other official papers.
- Feel free to talk to me if you have any question; remember not everything could be discussed or resolved over e-mail.
- If it is really emergency; you can send e-mail to my personal e-mail or call me at my cell phone; of extreme emergency text me. Mention URGENT
- Please do not expect immediate reply, it might take upto 24 hours to reply. If something has been already discussed in the class or mentioned in the syllabus, I am not going to reply individual e-mails.

HOMEWORK, ASSIGNMENTS AND CLASS PARTICIPATION:

- Homework will be given throughout the semester, not all of them will be graded. You are expected to come prepared.
- Assignments are due at the beginning of the class period on the due date. Assignments turned in late will be worth 10% less for each calendar day they are late.
- Student will be asked randomly to answer the questions either verbally or to write on the blackboard.
- There will be in-class assignment and activities and those who are present in the class will only get the chance to participate and earn credit.

EXTRA CREDIT:

Extra credits could be earned from bonus questions on tests (if you answer them correctly), pop-up quizzes and assignments (in-class or homework).

ACADEMIC ASSISTANCE/SUPPORT

Tutoring: Offered by academic success center. University Hall; Suite 156

<http://www.augusta.edu/afa/success-center/>

Counseling Center: The AU Counseling Center provides free academic and personal counseling. Students can seek advice about test anxiety, time management, study strategies, and other issues.

<http://augusta.edu/admin/counseling/>

Disabilities: Augusta University will make reasonable accommodations for persons with documented disabilities. Special accommodations cannot be provided without notification from Disability Services. It is the student's responsibility to contact the Office of Disability Services (Galloway Hall; 706-737-1469;

<http://www.augusta.edu/admin/tds/>) as soon as possible for more information and/or to initiate the process for accessing academic accommodations

CLASSROOM BEHAVIOR: EXPECTATION FROM STUDENTS

To maintain proper learning environment, Please do not:

- a) make noises (by talking or laughing, or eating, or snoring) which could be disruptive for the class
- b) expect to get the necessary supplies (like pencils, stapler, paper, etc) from your professor or class-mates
- c) spill any drink, break any glass bottles
- d) leave class before you teacher leaves
- e) write on desks/chairs

Please:

- a) Do your study and homework and come prepared for the class (necessary for you to perform well)
- b) Submit home-work on the due date; make sure you staple the pages if it is a multi page document.
- c) Use only blue or black ink to answer the written questions or assignments.
- d) Wear proper attire and sit properly in the class (remember it's classroom not beach or living room)
- e) Be respectful to your professor and fellow class-mates

ELECTRONIC DEVICES/DIGITAL POLICIES

a) **Cell-phones/pagers:** Should be turned off and in your book bags.

- b) You need my prior permission, if
 - i) you like to tape the lecture
 - ii) you want to use computer/tablets to take notes.
 - iii) you need to have an active cell phone;

You need to give me your name if any of the above applies to you. If for any reason you need to keep your phone on, it should be on vibrator and in your pocket.

c) You are NOT allowed to take any picture of lecture notes, notes or questions on the board

NOTE:

- If you are seen to be using your computer/tablets for anything else than for classroom related purposes (chat/snap-chat/FB/Twitter, etc your privilege for using these devices will be taken off.
- No texting or other usage of cell phones are allowed during the class. If you are seen using your phone during class, 10 points will be deducted each time from your total grade point.
- Exception: For some in-class assignments you will be allowed to use your cell phones for net browsing during the time of assignment.

INCLEMENT WEATHER

If there is bad weather (tornado, hurricane or snow) University policy and cancellation will be followed. Make sure you sign up to get txt msg for emergency alerts.

CAMPUS RESOURCES

- Biology office: SCI W2015

You can talk with Ms Brenda Brunk if you have any question related with Biology courses

- Department of Biological Sciences: <http://www.augusta.edu/colleges/scimath/biology/>
- Academic Success Center: University Hall; Suite 156
<http://www.augusta.edu/afa/success-center/>
- Reese Library at Summerville: <http://www.augusta.edu/library/reese/>
- Greenbalt Library at Medical college: <http://www.augusta.edu/library/greenblatt/>
- Testing and Disability Services: <http://www.augusta.edu/admin/tds/disabilityservices.php>
- Student Manual: http://www.augusta.edu/students/conduct/documents/fy15_student_manual.pdf
- Career Services: <http://www.augusta.edu/careerservices/>
- Academic Advising: <http://www.augusta.edu/advising/>

BIOL 2112 - Lab Schedule

Spring Semester 2020

This schedule is subject to change. Any change will be announced in the class.

Wk of Meeting:	Lab Exercises:
6 - 9 Jan, 2020	Lab 1: Functional Anatomy of the Endocrine Glands Ex 27
13 – 16 Jan, 2020	Lab 2: Blood – Hematocrit, blood cells, blood typing Ex 29
20 - 23 Jan, 2020	Martin Luther King Holiday – No Labs
27 – 30 Jan, 2020	Lab 3: Anatomy of the heart, Anatomy of Blood Vessels Electrocardiography (ECG), Blood Pressure Ex 30, 32 Ex 31, 33
3 – 6 Feb, 2020	Lab 4: Dissection of the blood vessels of rabbit DE4 (pg 733), Wingerd 81 - 89
10 - 13 Feb, 2020	Lab 5: Dissection of the blood vessels of rabbit DE4 (pg 733)
17 – 20 Feb, 2020	Lab 6: Dissection of the blood vessels of rabbit DE4 (pg 733)
26th Feb, 2020	**Lab Practical I - Topics Labs 1 – 6 SEC A @ 1 PM; SEC B @ 2 PM
2 – 6 Mar, 2020	<i>No Labs this week - Spring Pause</i>
9 – 12 Mar, 2020	Lab 7: Lymphatic System, Respiratory System- Anatomy Respiratory Physiology (Lead by Dr. Mazzoli) Ex 35, 36 Ex 37
16 - 19 Mar, 2020	Lab 8: Digestive System – Anatomy Ex 38
23 - 26 Mar, 2020	Lab 9: Anatomy of the Urinary System, Urinalysis Ex 40, 41
30 Mar – 2 Apr, 2020	Lab 10: Reproductive System - Anatomy Physiology of reproduction: Gametogenesis; Ex 42 Female Cycles Ex 43 Ex 44
6 - 9 Apr, 2020	No Lab - Spring Break
13 – 16 Apr, 2020	Lab 11: Dissection of the organ systems of rabbit Respiratory, Digestive, Wingerd Urinary and Reproductive 59 – 67, 69 - 73 91 – 95, 95 – 98
29th April, 2020 (Wed)	**Lab Practicum II- Topics Labs 7 - 11 SEC A @ 2 PM; SEC B @ 1 PM

Note

- PPE are required for labs (Lab-coat, covered toe-shoes, gloves and eye-glasses)
Refer to the Lab safety & Dress Code for further clarifications
- If you are pregnant and/or have Latex or any other chemical allergy please let me know at the first day of lab.

BIOL 2112 (Anatomy & Physiology –II) – LAB POLICIES

This syllabus is subject to change. Any change/s will be announced in the class.

ATTENDANCE: Mandatory, as the lab time is the hands-on time. If you miss one lab you will miss 2 points from your lab participation. If you miss the second lab, there will be additional 5 points deducted from your total course points. If you miss 3 labs, you will be withdrawn from the course.

Also remember you HAVE to spend extra hour to practice the labelling and identification

There is no make-up for Labs and Lab Practicums

**** LABORATORY SAFETY:**

The number one priority in lab is safety – both yours and of everyone else who uses the room. Safety violations will result in point deductions. Appropriate **PPE (Personal Protective Equipment) is required.**

- **NO FOOD & DRINK in the lab; no chewing gum**
- You will be required to wear, long pants (no distressed pants) or skirt (no slits), lab-coats and closed toe shoes to every lab and the lab practicum days. **There are no exceptions.**
- In addition to the above dress codes, safety glasses and gloves are required for dissection labs
- No use of make-up or changing the contacts
- If you have long hair, hair should be pulled back in a bun; no Hats
- Children are not allowed in the lab
- Additional safety instructions will be provided as needed.

NOTE:

- **If you fail to follow these safety procedures, you will not be allowed to do the lab and 5 extra points will be deducted from your total course points for each day of violation.**
- You will be responsible to buy your lab-coat, safety glasses and gloves
- If you are pregnant and/or have Latex or any other chemical allergy please let me know at the first day of lab.

ASSIGNMENTS: You need to finish all assigned lab experiments and exercises at the end of each section.

EXPECTATION FROM STUDENTS IN LAB

Please do:

- a) Print the Lab assignments/worksheets posted on D2L and bring those with you
- b) bring Lab Manual and binder for every lab and any homework/assignments
- c) complete the Pre-Lab quizzes and come prepared for the lab; work with your partner and team
- d) handle all the lab instruments/models carefully
- e) take extra care while handling the microscopes and follow the rules (discussed in the class).
- f) wear proper attire (remember it's class)
- g) unplug and turn off any instrument/s after you are done with your lab
- h) wash all glass/plastic wares and rinse them with distilled water after the experiments are over.
- i) wipe off the table after the experiments are over and organize all items the way they were on the table

Please do not:

- i) make noises which could be disruptive for the class
- ii) break any glass bottles, supplies, apparatus
- iii) write on desks/chairs
- iv) leave the class before you are finished with your experiment or lab work
- v) **DO NOT use cleaning solutions with bleach (*I am deadly allergic to Bleach*)**

All other general classroom policies mentioned earlier will also be applied for the lab.

Augusta University - Department of Biological Sciences

Academic Honesty Policy

All students are expected to adhere to the “Academic Honesty” policy as stated according to the University’s Academic Conduct Policy. The University’s policy can be found at:

http://catalog.augusta.edu/content.php?catoid=30&navoid=3543#Academic_Honesty

Violations of academic honesty include: cheating, plagiarism, collusion and credential misrepresentation. Consequences for being found guilty of academic dishonesty can result in a zero on the assignment or being withdrawn from the course with a WF. Record of the violation will also be kept as part of the student’s file in the dean’s office; if the student violates this policy a second time they will be subject to expulsion from the University.

The most frequent violation of academic honesty involves plagiarism, often because students do not have a clear understanding of how to properly acknowledge someone else’s ideas and/or words.

As a biology student, you will be asked to complete various writing assignments in your classes that require you to use information from written resources (*e.g.*, your textbook, journal articles, the internet, etc.). It is important that you understand how to cite this information so that you will not be guilty of plagiarism. Make sure that you follow these guidelines, in addition to any other specific guidelines that your instructor may assign:

- Written assignments should be your original work, and should not have been submitted previously by another student or by yourself in any course.
- Although it is commonly done in some other areas of study, scientific reports do not use direct quotations from resources. However, if you take a sentence or a phrase directly from a resource, it should be put in quotation marks and cited appropriately.
- If you take ideas from any resource and put them into your own words, a citation should be given at the end of the sentence.
- Paraphrasing someone else’s words and/or ideas does not involve simply rearranging words or replacing a few words in the quotation. If you have put an idea **truly** in your own words there should be little or no resemblance to the original quotation.
- Each set of ideas should be referenced; do not put one citation at the end of the paragraph, even if you have taken multiple ideas from the same resource. Each idea should be referenced separately!
- You must actually read the sources that you cite; otherwise you cannot be sure that the reference is appropriate for your piece of writing.
- All citations that are found in the text should be included a “Literature Cited” or “References” page; all references listed at the end of your assignment are used in the paper. Style manuals should not be included in the “Literature Cited”

Helpful Tips

1. Tips for good grade:
 - a) Attend classes regularly with a positive attitude.
 - b) Follow & take lecture notes.
 - c) Study regularly, form a study group
 - d) Participate in classroom discussion.
 - e) Allow extra time to practice for Lab. You can go to Lab any time in between 8.30 AM – 4.30 PM for practice when there is no class. You need to have a partner to work in the lab. Make sure to sign up during practice.
 - f) If necessary, take advantage of the tutoring service (located at academic success center)
 - g) Remember paying tuition and studying for certain hours does not make you eligible to get a good grade, you have to perform right.
2. Write down your name and telephone number on your book and notebook. If you leave your book, chances are least that you will get it back when you do not have your name in it.
3. Biology office is located at: SCI W2015
You can talk with Ms Brenda Brunk if you have any question related with Biology courses.
4. Lost and Found is located at Biology Office (CI W 2015)

REMINDER:

- Remember paying tuition and studying for certain hours does not make you eligible to get a good grade, you have to perform right.

Spring Semester, 2020

I have received a copy of the BIOL 2112 syllabus.

- I understand it
- I promise to follow the rules and policies.
- I also understand the Augusta University academic honesty policies. I know that plagiarism and collusion are NOT permitted on any of my test and assignments.

Signature

Date

NAME (PRINT)