



**Halmos College of Natural
Sciences and Oceanography**

Department of Biological Sciences

BIOL 3330 - Anatomy and Physiology II/Lab

I. Course Information

Course: BIOL 3330 - Anatomy and Physiology II/Lab

Semester Credit Hours: 4.0

Course CRN and Section: 20579 - DA4

Semester and Year: Fall 2017

Course Start and End Dates: 08/21/2017 - 12/10/2017

II. Instructor Information

Name: Fortino, Veronica

Email: vfortino@nova.edu

Office Hours: Hello students! Please email me to set up a meeting for office hours. Thanks!

This course is administered by the Department of Biological Sciences. If the instructor cannot be reached, please contact the Department of Biological Sciences at 954-262-8424.

III. Class Schedule and Location

Day	Date	Time	Location	Building/Room
MWF	08/21/2017 - 09/11/2017	4:15 PM - 5:05 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3048
M	08/21/2017 - 10/02/2017	6:00 PM - 8:45 PM	Ft Lauderdale/Davie Campus	Panza Science Annex-6
W	09/13/2017 - 09/13/2017	4:05 PM - 4:45 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3029
MWF	09/15/2017 - 10/02/2017	4:15 PM - 5:05 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3048
W	10/04/2017 - 10/04/2017	4:05 PM - 4:45 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3029
F	10/06/2017 - 10/06/2017	4:15 PM - 5:05 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3048
W	10/11/2017 - 10/11/2017	3:30 PM - 5:30 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3029

MWF	10/16/2017 - 10/30/2017	4:15 PM - 5:05 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3048
M	10/16/2017 - 11/27/2017	6:00 PM - 8:45 PM	Ft Lauderdale/Davie Campus	Panza Science Annex-6
W	11/01/2017 - 11/01/2017	4:05 PM - 4:45 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3029
MWF	11/03/2017 - 11/17/2017	4:15 PM - 5:05 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3048
M	11/20/2017 - 11/20/2017	4:05 PM - 4:45 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3029
MWF	11/22/2017 - 12/01/2017	4:15 PM - 5:05 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3048
W	12/06/2017 - 12/06/2017	3:30 PM - 5:30 PM	Ft Lauderdale/Davie Campus	Carl DeSantis Building- 3029

IV. Course Description

This is the second part of a two-part course that deals specifically with form and function of vertebrate organ systems. The lecture period stresses human physiology and the laboratory is devoted to histology and gross anatomy. The lecture and laboratory are presented in a unified fashion with the aim that each reinforces the other in presenting a complete picture of functional morphology. Although lower vertebrates are used for comparative purposes, human systems receive major emphasis in both lecture and laboratory. Prerequisite: BIOL 3320. Frequency: Every Fall and Winter.

V. Course Objectives / Learning Outcomes

- 1) Demonstrate an understanding of the structure and function of the human cardiovascular system.
- 2) Demonstrate an understanding of the structure and function of the human immune system.
- 3) Demonstrate an understanding of the structure and function of the human respiratory system.
- 4) Demonstrate an understanding of the structure and function of the human digestive system.
- 5) Demonstrate an understanding of the structure and function of the human excretory system.
- 6) Demonstrate an understanding of the structure and function of the human reproductive system.

VI. Materials and Resources

Book Url: [NSU Book Store](#)

Section Required Texts and Material:

Required Textbooks:

- Martini, F. H. and Nath, J. L. & Bartholomew, E. F. (2014) Fundamentals of Anatomy and Physiology Plus MasteringA&P with eText, 10th edition. Benjamin Cummings. San Francisco, California. *ISBN-13: 9780321908599. ***Please make sure to purchase access to Modified Mastering and not Mastering.*
- Amerman, E. (2013) Exploring Anatomy & Physiology in the lab. 2nd edition. Morton Publishers. Englewood, Colorado. *ISBN: 9781617310560*

Lecture Class Materials:

- Textbook (physical or e-text) must be brought to class
- Notebook, printouts from Modified Mastering, 3x5 index cards, pens/pencils, red pen

Lab:

- Attire: Lab coat, protective eye-gear, closed toe shoes
- Lab manual, color pencils/markers

Modified Mastering A&P:

- The readings and assignments for class will be presented in the lecture PowerPoints. It is expected that you will prepare for class by reading the assigned material BEFORE class meets and working on the Mastering A&P assignments on the www.pearsonmastering.com website **prior** to arriving to class. To access this website for the first time, please follow the instructions given through e-mail.
- ***Please make sure you use your @nova.edu address to register. All class communication for the semester will be through Modified Mastering.***
- Begin working on the Mastering A&P assignments as early as possible. This way you can be prepared for the in-class discussions and activities. Please be sure to check the assignment due dates so that you are not caught off guard. When you complete the assignment on the Mastering A&P website, submit it electronically before the indicated deadline for that assignment. The DSMs (all three combined) will take you at least two hours to complete, so do not leave it for the last minute.

Section Supplemental Material:

Recommended Textbook:

- Young, B., Lowe, J., Stevens, A. and Heath, J. (2013) Wheater's Functional Histology, 6th edition. Churchill Livingstone, Philadelphia, PA. ISBN: 9780702047473
- Sebastiani, A. M. and Fishbeck, D. W. (2005) Mammalian Anatomy: the Cat, 2nd. Edition. Morton Publishers. Englewood, Colorado. ISBN: 9780895826831

VII. Course Requirements

Department of Biological Sciences Academic Honesty Policy: Any impropriety (e.g., cheating/plagiarism) on examinations and/or any coursework or enabling any such impropriety may constitute grounds for failing the course. A form describing any academic misconduct will be sent to the Dean's office and kept in the offending student's permanent record. Further disciplinary action may occur at the level of the University according to the University catalog section on academic integrity http://www.nova.edu/undergraduatestudies/forms/2016-17_undergraduate_catalog.pdf

VIII. Course Schedule and Topic Outline

Course Schedule:

Class schedule subject to modification, but not without prior notification.

LECTURE SCHEDULE

Week of	Topic	Reading Assignment
8/21/2017	Blood	Chapter 19
8/28/2017	Blood The Heart	Chapter 20
9/4/2017 (No class 9/4)	The Heart Blood Vessels and Circulation	Chapter 20 Chapter 21
9/11/2017	TEST #1 (Ch. 19-20) Blood Vessels and Circulation	Chapter 21
9/18/2017	The Lymphatic System and Immunity	Chapter 22

9/25/2017	The Lymphatic System and Immunity The Respiratory System	Chapter 22 Chapter 23
10/2/2017	TEST #2 (Ch. 21-22) The Respiratory System	Chapter 23
10/9/2017	MIDTERM Consult course wizard for exam date and time	
10/16/2017	The Digestive System	Chapter 24
10/23/2017	The Digestive System	Chapter 24
10/30/2017	TEST #3 (Ch. 24) Metabolism & Energetics	Chapter 25
11/6/2017	The Urinary System	Chapter 26
11/13/2017	The Urinary System Fluid, Electrolyte & Acid-Base Balance	Chapter 26 Chapter 27
11/20/2017 (No class 11/22)	TEST #4 (Ch. 26) The Reproductive System	Chapter 28
11/27/2017	The Reproductive System	Chapter 28
12/4/2017	FINAL Consult course wizard for exam date and time.	

LAB SCHEDULE

Laboratory Week	Topic
8/21/2017	Lab Intro, Skinning the Cat
8/28/2017	Blood
9/4/2017	<i>No Lab</i>
9/11/2017	The Heart
9/18/2017	LAB PRACTICAL QUIZ #1 (HEART) Circulation & Cardiovascular physiology, Lymphatic System
9/25/2017	<i>Midterm Review (Open Lab)</i>
10/2/2017	LAB PRACTICAL MIDTERM EXAM
10/9/2017	<i>No Lab</i>
10/16/2017	Respiratory System
10/23/2017	LAB PRACTICAL QUIZ #2 (RESPIRATORY SYSTEM) Digestive System
10/30/2017	Digestive System (continued)

11/6/2017	LAB PRACTICAL QUIZ #3 (DIGESTIVE SYSTEM) Urinary System
11/13/2017	LAB PRACTICAL QUIZ #4 (URINARY SYSTEM) Reproductive System
11/20/2017	LAB PRACTICAL QUIZ #5 (REPRODUCTIVE SYSTEM) <i>Final Review (Open Lab)</i>
11/27/2017	LAB PRACTICAL FINAL EXAM

IX. Assessments

Your final grade is determined by your performance on a number of different tasks:

Lecture: 75% of total grade

- A. Class participation – 3%
- B. Homework (HW) and Classwork (CW) assignments – 8%
- C. Quizzes (Lab and Lecture) – 10%
- D. Lecture exams – 24%
- E. Midterm Exam – 15%
- F. Final Exam – 15%
- G. Bonus points – varies

A. Class Participation

Class participation points will be given to each student depending on the amount and level of discussion and involvement for every class period. Students are expected to actively and extensively participate in discussion and activities on the assigned chapter. For this reason, class attendance is imperative to success in this course. In order to be able to fully participate, students are expected to come to class having completed the assigned reading/video watching as well as having completed the assigned Dynamic Study Module in Mastering A&P.

Participation points will be lost for any and all of the following (meaning that if you are doing more than one of these things you may lose multiple points in the same day):

- Social media/surfing the web (minus 2 points per occurrence)
- Texting/phone use (minus 2 points per occurrence)
- Talking about non-class related topics during the class activities (minus 3 points per occurrence)
- Not participating/doing the group work/class work (minus 4 points each time)
- Late to class (minus 1 point each time)
- Unexcused absence (minus 4 points each time)

B. HW and CW Assignments

HW and CW will be assigned either on Mastering A&P or as a written assignment and should be completed by the scheduled deadline. The Dynamic Study Modules should be completed before coming to class and will have deadlines accordingly. Late HW assignments will not be accepted. Unfinished CW may be completed as HW.

Please note: Part of the HW will be to do the assigned reading/video watching before coming to class. This is imperative for your success in this course.

C. Quizzes

Quizzes will be administered during the semester during class time. The material tested will come primarily from the classwork assignments and active learning activities, textbook, and homework. There are no unexcused make-ups.

D. Lecture Exams

Four examinations will be administered during the semester during class time. The material tested will come primarily from the classwork assignments and active learning activities, textbook, and homework. There are no unexcused make-ups.

E. Midterm Exam

The midterm exam will be administered during midterms week. The midterm exam will include material from all of the chapters covered after the midterm, with more emphasis placed on chapters covered following the last exam. The material tested will come primarily from the classwork assignments and active learning activities, textbook, and homework. Attendance is mandatory. No make-ups.

F. Final Exam

The final exam will be administered during finals week. The final exam will include material from all of the chapters covered until that time, with more emphasis placed on chapters covered following the last exam. The material tested will come primarily from the classwork assignments and active learning activities, textbook, and homework. Attendance is mandatory. No make-ups.

G. Bonus Points

Opportunities for bonus points will be discussed in class.

Lab: 25% of total grade

- A. Lab Practical Quizzes (this is included in the total quizzes above)
- B. Lab Practical Midterm – 10%
- C. Lab Practical Final – 10%
- D. Lab Work – 5%

A. Lab Practical Quizzes

Five lab practical quizzes will be assigned using the Practice Anatomy Lab 3.0 (PAL) modules from Mastering. They will each cover one human organ system and will begin at the beginning of the scheduled lab. The quizzes may include histology and/or anatomical models. They will contain identification questions. No unexcused make-ups.

B. Lab Practical Midterm

The lab practical midterm will be administered to test each student's skill of observation and ability to identify anatomical structures and physiological processes. The lab practical midterm exam will cover all material to that date and will have a microscope component, a models component, and a computer portion. The computer portion will be assigned using the Practice Anatomy Lab 3.0 (PAL) modules from Mastering. The lab practical midterm will contain both identification and functional questions. Attendance is mandatory. No make-ups.

C. Lab Practical Final

The lab practical final will be administered to test each student's skill of observation and ability to identify anatomical structures and physiological processes. The lab practical final exam will cover all material following the midterm exam and will have a microscope component, a models component, and a computer portion. The computer portion will be assigned using the Practice Anatomy Lab 3.0 (PAL) modules from Mastering. The lab practical midterm will contain both identification and functional questions. Attendance is mandatory. No make-ups.

D. Lab Work

Pre-lab assignments: These assignments are from the lab manual and are due at the beginning of each lab. The assignments are mandatory. Lab work: All students are required to work to complete the lab and not just one member of the group. Post-lab assignments: There may be some post-lab assignments to reinforce what was learned during the lab period. These are due at the beginning of the following lab. The

assignments are mandatory.

Please note: Students that arrive late for any lecture or laboratory exam will only have the time remaining before the exam is officially concluded to complete it, even if there is remaining time on their Mastering A&P.

X. Grading Criteria

Your final grade is determined by your performance on a number of different tasks:

Percentage	Final Grade
93.0 and above	A
90.0-92.9	A-
87.0-89.9	B+
83.0-86.9	B
80.0-82.9	B-
77.0-79.9	C+
73.0-76.9	C
70.0-72.9	C-
67.0-69.9	D+
60.0-66.9	D
59.9 and below	F

XI. Course Policies

Department of Biological Sciences Statement on Academic Misconduct: Any impropriety (e.g., cheating/plagiarism) on examinations and/or any coursework or enabling any such impropriety may constitute grounds for failing the course. A form describing any academic misconduct will be sent to the Dean's office and kept in the offending student's permanent record. Further disciplinary action may occur at the level of the University according to the University catalog (http://www.nova.edu/undergraduestudies/forms/2017-2018_undergraduate_catalog.pdf) - section on academic integrity.

A. Lecture and Lab Time and Attendance

- Lectures and lab will start promptly at their scheduled times.
- Students are expected to arrive on time.
- Class attendance is not mandatory and no attendance will be taken – however, if you do not attend you will lose all class participation points for that day (3% of grade) as well as the ability to do the classwork (8% of grade) for that day. Neither of these can be made up.
- If a class is missed, it is your responsibility to acquire any missed material or announcements from a fellow student.
- If two labs are missed without PRIOR notification and an excuse per University Policy, the lab grade will automatically be a zero. This is 25% of your total grade.

B. Lecture and Lab Assignments

- Reading and/or video assignments must be done prior to arriving to class.
- All assignments are due at their scheduled times (whether in-class or in Mastering).
- Assignments turned in during lab or lecture are due at the beginning of class/lab.

- Late work WILL NOT be accepted with the exception of bona-fide documented excuses following NSU's policy. In the event of an emergency, contact me as soon as possible. Please be prepared to show proof/documentation of any situation that arises. DO NOT wait until the next class session you attend to request a make-up or to turn in late assignments. These will not be accepted.

C. Lecture and Lab Quizzes and Exams

- Lecture exams will begin at the beginning of the scheduled class session. If a student arrives late, they will only have the remaining time to complete the exam.
- Lecture and Lab quizzes/exams will begin at the beginning of the scheduled lab session. If a student arrives late, they will only have the remaining time to complete the quiz/exam.
- There will be no make-up exams or quizzes unless exceptional conditions occur as defined in the University catalog or you have prior permission from me.
- If you know in advance that you will be out of town for any reason (athletes, any other school sponsored activity, etc) let me know beforehand so that we can work out a time and place for the make-up exam. If you do not show up to the quiz/exam without prior permission, you will receive a zero for that quiz/exam.

D. Use of Electronic Devices

- The use of electronics (laptop, tablet, smartphone) is encouraged during my class, as long as it is to access the e-text and do the Mastering A&P assignments.
- Texting and web surfing (including but not limited to: Facebook, twitter, Instagram, web browsing) is not allowed. If you are caught doing this in class you will be asked to leave. You will lose any participation points for that day as well as the opportunity to do the classwork.
- If you are expecting a very important/emergency phone call/text please let me know BEFORE class begins and sit in the back of the class in the event that you need to leave the room to answer it.

E. What to do if you don't understand

- Please let me know if you do not understand something, preferably by asking questions in class, where other students will also benefit from clarification.
- Alternatively, come see me during my office hours or send me a note via e-mail. You should never feel that a question is too trivial (especially if you have tried to study it on your own first).
- Make sure that you e-mail me from your official school e-mail (@nova.edu). All others will be deleted.

F. What you can expect from me

- My overall goal is for you to learn and love anatomy and physiology.
- I will do my best to return all phone calls and e-mails within 24 hours Monday - Friday, and within 48 hours Saturday - Sunday. Please e-mail me from your official school e-mail as I will only respond to e-mails from @nova.edu.
- I want to create a comfortable, supportive, and active learning environment. I will do this by providing many opportunities for cooperative and active learning, as well as making myself available for questions or concerns.
- I will strive to be clear in my grading and expectations so that you may succeed in A&P.
- If you feel that I am not living up to these expectations, please bring it to my attention (respectfully), so that I may improve. You will not be penalized for helping me become a better teacher.

XII. University Policies

Students should visit <http://www.nova.edu/academic-affairs/nsu-syllabus-policy.html> to access additional required college-wide policies. It is your responsibility to access and carefully read these policies to ensure you are fully informed. As a student in this class, you are obligated to follow these college-wide policies in addition to the policies established by your instructor.

The following policies are described on this website:

- Academic misconduct

- Last day to withdraw
- Email policy
- Student course evaluations
- Student responsibility to register
- Student responsibility for course prerequisites

Academic Resources

Nova Southeastern University offers a variety of resources that may aid in student success. Among these resources are:

Accommodations for students with documented disabilities: For more information about ADA policy, services, and procedures, students may call the Office of Student Disability Services at 954-262-7189 or visit <http://www.nova.edu/disabilityservices>.

Tutoring and testing center:

Students are encouraged to use the free, individualized tutoring services offered by the Tutoring and Testing Center (TTC). TTC provides a supportive atmosphere in which tutors and students work collaboratively on improving students' writing, math and/or science skills. <http://www.nova.edu/tutoring-testing/index.html>