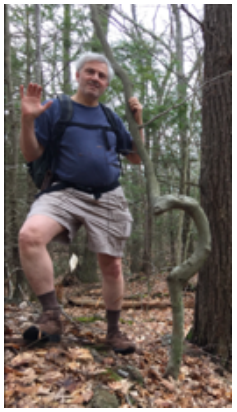
Northern Essex Community College
Department of Science, Technology, Engineering, and Mathematics
BIO 122 O2A – Anatomy and Physiology II
Summer II, 2025

Welcome



Welcome to Anatomy and Physiology II. My name is Noel Ways. I am a biologist by training, and for over 33 years, I have had the privilege of teaching both A&P I and A&P II hundreds of times. Oddly, the content never gets old. The material remains the same, but what breathes life into the classroom every semester is the student. We work together, and we learn together. As you embark on this segment of your academic journey, I am here to help guide and encourage you to be the best you can be. Welcome to the class.

Course Information

Name: Anatomy and Physiology II
Course Number: Bio 122 O2A **CRN:** 5123
Credits: 4 Credit Hours. 3 Lecture hours, 2 Lab hours
Dates: June 30 – August 8 (~6 weeks)

Presentation Modality: Online

Prerequisites: BIO 121 Anatomy and Physiology I

Instructor Contact Information

Instructor: Noel Ways
Email: **nways@necc.mass.edu**
Virtual Office Hours: As our schedules vary dramatically, specific "office hours" that work for everyone can be challenging to coordinate. If you would like to meet, please email me, and we will schedule a meeting using the Zoom video teleconferencing software at a mutually acceptable time. You will find a "Zoom Office Hours" link on Blackboard.

College Course Description

A continuation of Anatomy & Physiology I. Systems covered include the circulatory, endocrine, reproductive, urinary, digestive, and respiratory systems. (3 hours of lecture and 2 hours of lab per week.)

General Course Description

Human Anatomy and Physiology II is considered a "gateway course" and is designed to provide an anatomical and physiological foundation for further coursework for students pursuing careers in the allied health fields. We will explore the human body, how it is put together, and how the various parts work together. This course is a continuation of Human Anatomy and Physiology I and will proceed on a system-by-system basis.

The course will begin with a study of the cardiovascular system, followed by an in-depth look at the immune and respiratory systems. Other organ systems, such as the digestive, urinary, and reproductive systems, will also be examined. Additional subjects of particular relevance will be discussed at appropriate points in the lecture sequence.

The laboratory component of the course is designed to give students a "hands-on" appreciation of the anatomical considerations discussed in the lecture and to familiarize them with some of the more basic physiological concerns related to gross anatomy. All course components (lectures and labs) will be delivered online using various online and video resources.

Course Delivery – 6 weeks, online

This particular section of A&P II is presented in an accelerated format with largely intact and unabridged course content. The exception will be the urinary system, which we will approach in an overview format through laboratory study. This course is accelerated because the content typically covered in a 16-week semester will now be covered in 6 weeks. Therefore, modules will be presented twice weekly, resulting in two assessments (exams) per week. Such frequency is helpful as it reduces the overall content for any one exam. Given the accelerated nature of the course and the fact that students work independently, significant time must be set aside to master the material.

Course content is divided into topic-specific modules, each accompanied by content-specific outlines and handouts. Videos for all content have been prerecorded and are almost identical to an in-class, face-to-face modality. You will find the course to be organized and easy to follow.

Correspondence between the instructor and the class occurs frequently, typically at least twice per week. I am also available to meet with students through Zoom. Student–student interactions may occur on a discussion board on Blackboard.

General Course Objectives

As we endeavor to prepare you for a career in the allied health professions, specific goals and benchmarks have been established toward this aim. Looking toward this end, the general course objectives listed below expand on the overall course description. As the flow of the course ensues, you will find that the course topics and laboratory work will align with these objectives.

Module - Blood

- Distinguish between the formed elements of the blood by name and function.
- Describe erythrocyte production and regulation.
- Describe hemostasis and the control of blood clotting.
- Illustrate the CO_2 gas transport as it involves erythrocytes.
- Compare and contrast leukocyte functions in fighting infection.

Module - Heart

- Identify the name and functions of the structures of the heart.
- Explain the cardiac cycle, integrating electrical activity, pressure issues, EKG, heart sounds, and blood flow.
- Describe how cardiac output is controlled.

Module – Vessels and Routes

- Compare and contrast the tissues of blood vessels and how tissue differences affect the specific functions of various vessel types.
- Identify specific major blood vessels in the body.
- Describe the vessels of and function of the hepatic portal system and the hypothalamic hypophyseal portal system.
- Describe the fluid exchange of capillaries and fluid return to the heart.
- Illustrate blood pressure regulation.

Module – Lymphatic System

- Identify the name and functions of lymphatic organs.
- Describe the relationship of various organs to the particular functions in the immune response and other blood maintenance activities.

Modules – Nonspecific Host Immunity *and* Adaptive Immunity

- Explain the essential components of both nonspecific and specific host immune responses.
- Critique the complement system and place of interferon in the immune system.

Module – Respiratory System

- Identify the major organs of the respiratory system and their functions.
- Explain the mechanism of gas transport.
- Describe the anatomy and physiology of the larynx and sound production.
- Explain how lungs are "inflated" and what happens in pneumothorax.
- Explain the mechanisms that affect the oxygen-carrying capacity of hemoglobin.

Module – Digestive System

- Identify the major organs of the digestive system and their functions.
- Describe gastric regulation
- Describe the process of lipid digestion and transport

  Describe the process of deglutition

Module – Urinary System

- Identify the major organs of the urinary system and their functions.
- Compare and contrast nephron components in terms of their anatomy and physiology

Modules – Male Reproductive System *and* Female Reproductive System

- Identify the structures and functions of major organs of the reproductive system
- Describe the hormonal regulation of spermatogenesis
- Describe and integrate the physiology of both the uterine cycle and the ovarian cycle
- Illustration of several examples of hormonal regulation in the body

---

Intensive Core Skill Objectives

In addition to the General Course Objectives mentioned above, Anatomy and Physiology II has been designated by the college as both Science Intensive and Quantitative Intensive. Consequently, additional objectives unique to this designation are outlined below to support the General Course Objectives listed earlier. Below is a college statement regarding these objectives:

Intensive Core Skill Objectives

BIO121 has been designated as a **Science and Technology Intensive** course. Students will have the opportunity to develop knowledge and/or skills concerning the ability to:

- Demonstrate basic knowledge of major concepts related to science and technology. This includes current theories, historical and data trends, and empirical findings.
- Be able to critically read, evaluate and interpret research findings and/or theories and draw reasonable conclusions. This includes supporting or rejecting a hypothesis or theory, analyzing case studies, and providing alternative explanations.
- Transfer, adapt, and apply prior knowledge to science and technology related issues and develop new understanding.
- Be able to identify reliable sources of information from a variety of resources including those from the library, websites, journals, magazines, newspapers, and other media.

BIO121 has been designated as a **Quantitative Reasoning Intensive** course.
Students will have the opportunity to develop knowledge and/or skills concerning the ability to:

- Graphical and statistical analysis, such as trends over time.
- Descriptive and/or inferential statistics.
- Data analysis.
- Experimental design and creation of data sets with simple evaluation.
- Application of Mathematics in context.
- Reading, Writing, and/or Critical thinking in context with numbers.
- Development of mathematical solutions and equations to solve problems in context.
- Discussion of multiple interpretations of a single data set.
- An emphasis on the difference between cause and effect versus correlation data.
- Proportional reasoning in the context of real situations.

Course Materials

- **Textbook (Required):** Anatomy & Physiology, by OER Commons. Note, that the textbook is obtained as a free online resource and can be accessed at:
  https://www.oercommons.org/courses/anatomy-and-physiology-4/view
- **Videos:** YouTube Lecture Videos with Closed Caption
- **Handouts:** Accessible and downloadable PDFs
- **Internet:** Websites that feature animations explaining complex physiology

Aside from the required text, other course material resources are linked on Blackboard.

Zoom Link - "Office Hours Link"

Office Hours

Join Zoom Meeting
https://zoom.us/j/96233097264

Meeting ID: 962 3309 7264
One tap mobile
+13017158592,,96233097264# US (Washington DC)
+13126266799,,96233097264# US (Chicago)

Dial by your location
+1 301 715 8592 US (Washington DC)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
+1 669 900 6833 US (San Jose)
Meeting ID: 962 3309 7264
Find your local number:
https://zoom.us/u/adSc6HD29O

Join by SIP
96233097264@zoomcrc.com

Join by H.323
162.255.37.11 (US West)
162.255.36.11 (US East)
115.114.131.7 (India Mumbai)
115.114.115.7 (India Hyderabad)
213.19.144.110 (Amsterdam Netherlands)
213.244.140.110 (Germany)
103.122.166.55 (Australia Sydney)
103.122.167.55 (Australia Melbourne)
149.137.40.110 (Singapore)
64.211.144.160 (Brazil)
149.137.68.253 (Mexico)
69.174.57.160 (Canada Toronto)
65.39.152.160 (Canada Vancouver)
207.226.132.110 (Japan Tokyo)
149.137.24.110 (Japan Osaka)
Meeting ID: 962 3309 7264

Join by Skype for Business
https://zoom.us/skype/96233097264

Course Presentation – 6 weeks, Asynchronous/Online Modality

This course is delivered Asynchronously online, where the students work independently, outside a traditional classroom and laboratory setting. The delivery of course curricular content will utilize resources available through Blackboard and the instructor's website, to which Blackboard is linked. The course content is organized into modular components to facilitate accessibility, clarity, and the organization of this process.

Each module will have the following components:

- **Module (or Lecture) Home Page** – The Module Home Page serves as a resource hub for the instructional unit. The Module Home Page will contain a lecture outline,

supportive handouts, laboratory considerations, videos, and other resources. This Module Home Page is located on Blackboard and can also be accessed on the website: www.noelways.com.

- **Learning Guide** - A Learning Guide will guide the student through the supportive readings, videos, animations, and other media under consideration for any particular lecture/module. This document provides tips on approaching the material and issues of specific concern relating to the associated exams.
- **Lecture Outline** - A lecture outline organizes the course content and guides the student through the material in preparation for associated assessments. In addition, the outline is designed for student note-taking.
- **Handouts** – Handouts highlight points in the lecture sequence requiring special attention, comment, or visual support. These tend to revolve around more complex physiological topics.
- **Video Support** - Videos of the lectures will follow a lecture outline closely. The goal of this media is to cover all content, both in the lecture setting as well as in the laboratory.
- **Laboratory** - In a traditional educational setting, the laboratory lends itself to a "hands-on" approach to understanding course content. As this course has a laboratory component but is entirely online, rich image banks compensate for this aspect with accompanying video support.
- **Exams** are usually given on a module-by-module basis and are administered on Blackboard. The exams cover material on the outlines, handouts, and videos. The exams are noncumulative, but any lecture topic assumes a working knowledge of previous lecture topics.

  For additional details of the module week, see "Course Walkthrough" in the Getting Started folder on Blackboard.

Course Workload for a 6-week Accelerated Online Course

We all come from different backgrounds and have varying employment obligations, family responsibilities, and commitments that must be honored. Given the many demands on our time and resources, incorporating another major activity into our daily routine can be challenging. Allocating several hours each day for study may seem daunting for some. However, this needs to be addressed promptly and requires a thoughtful decision to ensure success.

As this course aims to cover the typical 16-week semester content in 6.5 weeks, it is accelerated; therefore, students should expect to dedicate 6 hours daily to mastering the material. This is highly individualistic, but determining your unique learning needs is essential.

I also encourage you to talk to those important in your life about your educational needs at this point in your career. I would recommend examining all the time-demanding activities in your life and making appropriate adjustments in light of your career aspirations. The word "priorities" comes to mind here.

Assignments

Anatomy and Physiology is a content-heavy course. Your primary assignment for each lecture topic is to establish a foundation that will support you throughout your developing career. Therefore, at the beginning of each module or lecture topic, your task is to gain a working knowledge of the material being presented. To start, each Module will feature a Learning Guide that will navigate you through the specific goals and points worthy of consideration in preparation for an assessment. The module content is outlined in the "Lecture Outline." The Lecture Outline will serve the following functions:

- The "Lecture Outline" is designed for note-taking purposes.
- The "Lecture Outline" acts as your study outline.
- The "Lecture Outline" also functions as the exam outline. If something is on the outline, you will need to know it. If something is not on the outline, you do not need to know it, even if it is in the textbook.

As Anatomy and Physiology II is a laboratory course, many topics are presented and assessed in a laboratory context. For example, we will discuss the heart in a lecture context and have an appropriate assessment. We will also study a heart dissection and models of the heart. This laboratory component will be assessed using another format: the laboratory practical, where the material is visually presented. Having alternative methods of studying the material and alternative forms of assessment not only provides students with different ways to access the content and demonstrate mastery but also reinforces essential topics.

To begin the learning process, start with the *Learning Guides*. These documents provide insights into approaching the material on a module-by-module basis and highlight matters that require special attention or preparation. The *Lecture Outline* will then systematically guide you through the text and lecture content. Handouts and videos will supplement and reinforce key concepts.

Exams and Makeup Work

The assignment of a final semester grade will depend on completing all exams listed on the syllabus below, with the lowest grade being dropped (except for the last unit). These exams will cover material from online assignments, handouts, and video presentations.

The nature of the exams is non-comprehensive. However, any particular unit will assume a working knowledge of previous units.

The exams are also timed, with no backtracking allowed. You will have enough time to read the question, pause, and put down an answer. To ensure this process goes smoothly, master the material well before the exam date. Again, there is no backtracking, and the exams must be completed in one sitting. For details, see the "Assessments" document online.

Exams consist of a variety of question types listed below. For details, see the "Assessments" document online.

- True and False
- Matching
- Fill in the Blanks
- Illustrations
- Guided Essays
- Short Answers

Exam Answers – Answers on exams must reflect a working knowledge of the content as presented in the module. Occasionally, an answer may be correct, but if it was not covered in the module, or if the answer was presented in a manner that does not align with the module's content, it will be considered incorrect for the purposes of the exam. Answers on exams must reflect an understanding of the vocabulary and concepts as presented in the module.

Makeup Exams and Documentation - Makeup Exams should generally be avoided! However, if a makeup is necessary, documentation is requested to validate the request. If documentation is not provided, a makeup is still allowed, but an adjustment to the grade will be made at the instructor's discretion. This adjustment typically reduces any extra points that would have otherwise bolstered your grade. You will never receive a grade lower than your earned grade. If a makeup is needed, it should be completed within one week of the student's return to school. See the document, "Exam Makeup" for further clarification. If you do need to schedule a makeup, contact me to coordinate a time and date.

Exam Retention - Completed exams are retained as a record of student performance. Exams are not returned as having exam content in general circulation could compromise the academic integrity of the assessment process.

Exam Administration - Most exams are taken on **Blackboard**. Check the course schedule for exam dates and times. Exams are timed, and there is no backtracking.

Communication and Interactions

Throughout the course, I will be in touch with you biweekly to offer advice, provide feedback, and send reminders. If you have questions that are relevant to the entire class, I will address these on the Student Interaction Board (a Discussion Board).

Blackboard

Please log into the Blackboard site daily. Announcements, class resources, and all assessments will be managed through Blackboard. I will also regularly send emails to the class via Blackboard. In these cases, Blackboard will deliver the email to your NECC student account. If you prefer, you can change the email account that receives these messages in your Blackboard settings.

If you encounter difficulties with Blackboard, please contact the college helpdesk.

Email

Please check your student email daily. You can also forward your student email to any other account. Instructions can be found at: (link to instructions).

Email is the best way to contact me. The turnaround time is typically 24 hours or less.

Email: nways@necc.mass.edu

When you send me an email, always include:

- Your name
- Your class (either course number or title, day, and time)
- A relevant subject

Grading Criteria

As mentioned before, this course aims to build a foundational knowledge base so that you can become a competent medical professional. Dedicating time and effort contributes significantly to achieving your career goals. Additionally, receiving good grades on exams provides a sense of satisfaction that reflects a job well done.

Exams - Grading criteria are outlined in the Learning Guides available on Blackboard. Please refer to the Learning Guides for specifics on grading criteria, suggestions on areas to focus on, and special exam activities. Exams are held biweekly and can be found in the appropriate folder at the bottom of the Blackboard list.

Exam #1	Blood	100 points
Exam #2	Heart	100 points
Exam #3	Vessels and Routes	100 points
Exam #4	Lymphatic and Non-specific Host Immunity	100 points
Exam #5	Non-specific Host Immunity	100 points
Lab Exam #1	Lab Practical #1 (Heart and Vessels)	100 points
Exam #6	Respiratory System, Part #1 and Part 2	100 points
Exam #7	Digestive System, Part #1	100 points
Exam #8	Digestive System, Part #2	100 points
Lab Exam #2	Lab Practical #2 (Lymph, Resp, Dig, Uri. Sys)	100 points
Exam #9	Male Reproductive System	100 points
Exam #10	Female Reproductive System	100 points

All exams carry equal weight. Always keep track of your grades! This is important not only to monitor your progress in the class but also to alert you if there seems to be an issue (though this rarely happens). Feel free to email me if you have any questions.

Grade Calculation - Your final semester grade will be determined by completing all lecture exams and lab practicals, which are weighted equally. The lowest grade may be dropped, except for the last unit(s) of the exams given. Calculating your current standing in the class is straightforward: drop the lowest grade, compute a simple average, and then use the Number/Grade Equivalency chart (below). You will always know your standing in the class regarding your grade at any time.

NECC Grading System

A link to the College Grading System can be found at: NECC Grading System

A	4.00	93-100	C	2.00	73-76
A-	3.70	90-92	C-	1.70	70-72
B+	3.30	87-89	D+	1.30	67-69
B	3.00	83-86	D	1.00	60-66
B-	2.70	80-82	F	0.00	59 or less; failure;
C+	2.30	77-79			no credit earned
W	0.00	Withdrawal from the course by the student within the withdrawal period			
NP	0.00	Non-participation withdrawal grade assigned by the instructor due to evidence of non-participation			
IP (or I)		In progress. Extension granted due to extenuating circumstances			

Accessibility/Learning Disabilities

"Northern Essex Community College is committed to providing equal access to students with documented disabilities. To ensure equal access to this class (and your program) please contact the Center for Accessibility Resources & Services (CARS) or Deaf and Hard of Hearing Services (DHHS) to engage in a confidential discussion about accommodations for the classroom and clinical/practicum settings.

Center for Accessibility Resources & Services: Serving students with documented disabilities, such as learning disabilities, attention deficit disorders, autism spectrum disorders, brain injuries, chronic illness, low vision/blind, physical disabilities, psychiatric disabilities and seizure disorders.

Deaf and Hard of Hearing Services: Serving students who are Deaf or Hard of Hearing.

Accommodations are not provided retroactively. Students are encouraged to register with CARS or DHHS at the start of their program.

The Center for Accessibility Resources & Services is scheduling appointments Mondays through Fridays. Communications/meetings can be flexible based on student's needs and may consist of the following communication options: Zoom, Phone, In-Person or Email.

To get started students may contact us as outlined below:

- **Call** the **Center for Accessibility Resources & Services main number 978-556-3654 or email centerforaccess@necc.mass.edu.**
- **Deaf and Hard of Hearing Services call 978-241-7045 (VP/Voice) or email deafservices@necc.mass.edu.**
- **To request an Interpreter or communication access email: interpret@necc.mass.edu**
- **Individual staff members can be contacted via email**

COVID vaccinations are required to be on campus. NECC is a mask optional campus, however, please consider wearing a mask on campus to mitigate the risk o catching and spreading COVID-19. For current information please visit: Coronavirus Information and Updates and Student COVID-19 Vaccination Requirement.

Statement on Plagiarism and Academic Integrity

As students pursuing a career in the allied health professions, you will eventually be responsible for important medical duties. The health and well-being of those you work with and for are paramount. A solid foundation in anatomy and physiology is crucial for competent practice in these roles. Therefore, exams serve as milestones on your path to success. They indicate that you are making good progress and achieving your career objectives. However, to ensure this process is effective, academic integrity and ethical behavior are essential. Receiving a grade that does not accurately reflect your knowledge and skills undermines your academic progress and puts you at risk of not realizing your goals or possibly harming others in your care. All future coursework and clinical activities will rely heavily on the knowledge base you are establishing now.

Artificial Intelligence (AI) Technology – The use of Artificial Intelligence is encouraged to the extent that it enhances your understanding of course content. However, using AI for any assessments is strictly prohibited.

Exam Answers – Exam answers must demonstrate an understanding of the course content as presented in the lecture sequence. An answer that is correct but not covered in a similar manner during the course will be deemed incorrect for exam purposes. Answers must show a solid grasp of the vocabulary and content as presented.

All work completed on assessments and practicals must be your own. You are encouraged to collaborate and prepare together, but the work submitted must be entirely your own when taking an exam. Therefore, the following guidelines are established to help you approach your studies ethically and legitimately in your assessments.

1. When exams are conducted, no electronic devices may be present.
2. No web browsers or other information sources may be utilized.
3. Violating the above rules will result in one of the following consequences:
    - a "0" on the exam
    - an "F" for the course
    - a meeting with the dean of students, who will assess the infringement and follow college disciplinary procedures.

NECC Outcomes Assessment (a College Statement)

NECC's commitment to student success involves the evaluation of student work at the program, department, and/or campus levels to help ensure that students are achieving the learning outcomes identified by our programs and the college. This process may include the collection of such evidence as student classroom products or classroom-associated reports of student knowledge or skill demonstrations. All collected products will have any identifying information removed before they are reviewed. Results from these reviews are then aggregated to provide an overall view of students' outcomes achievements. Assessments carried out at the program, department, and/or campus levels will not impact students' course grades. The process of assigning grades will continue to be the responsibility of the course instructors. Any student who does not wish to have their products collected for program, department, or campus-level assessment can opt out by notifying their instructor.

Getting Help

I am here to help you with this course and to make this an enjoyable and successful experience. Please email me if you would like assistance regarding study tips, progress, or other issues. Do not wait until the last moment to ask for help. Remember, I am just an email away.

Additional Educational Services

Tutoring: NECC also offers FREE tutoring and other services at:
https://www.northshore.edu/support/tutoring/index.html

Lecture Syllabus

Below is a tentative but likely schedule of topics and dates. The schedule may be adjusted based on the progress of the lecture sequence or if unforeseen circumstances arise.

Assignments

A specific Lecture Topic will be addressed on a module start date. Your assignment is to utilize the resources provided to master the topic in preparation for an assessment (exam) on that topic. As mentioned earlier, refer to the Learning Guide found on Blackboard for guidance on how to approach the material. In addition, the Lecture Outline will provide structure and organization for the lecture content and allow for note-taking. Supplemental handouts will reinforce and expand on anatomical and physiological topics of particular importance or complexity. In the lecture videos, I will guide you through most (with a few exceptions) of the material.

Northern Essex Community College

Anatomy and Physiology II

SCHEDULE - 2025, Summer II - Bio 122-O2A

Below is a tentative but probable schedule of topics and dates. The schedule may be modified according to the progress of the lecture or unforeseen circumstances.

Exams are administered on Blackboard and are open at 7 am. Exams are to be completed by 11:59 pm.

NOTE: the lowest exam grade may be dropped except for the:

- Reproductive Exams (male and female)
- Final Exam (Lab Practical #2)

Module and Exam Dates

June 30 (Mon) → **Formal Start – Module: Blood**

July 3-4 **(Thu-Fri)** *Exam – Blood*
→ **Module: Heart, Cardiac Cycle, & Dissection**

July 7 (Mon) *Exam – Heart*
→ **Module: Vessels and Routes**

July 10 **(Thurs)** *Exam – Vessels and Routes*
→ **Modules: Lymphatic**

July 14 (Mon) *Exam – Lymphatic*
→ **Module: Non-specific Host Immunity**

July 17 **(Thurs)** *Exam –Non-specific Host Immunity*
→ **Module: Respiratory System, Part #1**

July 19 **(SAT)** ***Lab Practical #1 (Heart and Vessels)***

→ **Continue: Respiratory System, Part #1**

July 21(Mon) *Exam – Respiratory System, Part #1*

→ **Module: Respiratory System, Part #2**

July 24 **(Thurs)** *Exam – Respiratory System, Part #2*

→ **Module: Digestive System, Part #1**

July 28 (**Mon**) *Exam – Digestive System, Part #1*

→ **Module: Digestive System, Part #2**

July 31 **(Thurs)** *Exam – Digestive System, Part #2*

→ **Module: Male Reproductive System**

NOTE: The exams that follow are non-droppable

August 4 (**Mon**) *Exam – Male Reproductive System*

→ **Module: Female Reproductive System**

August 7 **(Thurs)** *Exam – Female Reproductive System*

→ **Brief Primer on Urinary System, and Lab Review Time**

August 8 **(Fri)** ***Lab Practical #2***

Academic Calendar

NORTHERN ESSEX COMMUNITY COLLEGE
ACADEMIC CALENDAR, ABRIDGED

Spring 2025

- Official NECC Academic Calendar

↑ Above is a link to the ***official*** NECC Academic Calendar

↓ Below is an ***abridged*** rendition of the Academic Calendar.

Session I:	First Half Summer Session Classes (6 Weeks)	May 19 - June 27 (6 weeks)
Session II:	Second Half Summer Session Classes (6 Weeks)	June 30 - August 8 (6 weeks)
Session III:	Covers Entire Summer Session (12 Weeks)	May 19 - August 8 (12 weeks)

Summer Session II 2025

Classes meet for 6 weeks Monday, June 30 1 - Friday, August 8 (6 weeks)

Book Voucher Period	June 23 -August 11	
Session II classes begin	June 30	(Monday)
Independence Day Holiday (College closed)	July 4	(Friday)
To receive a full refund for Session II, classes must be dropped by the close of business See Student Affairs Hours and Refund Policy	July 7	
No Show (NS) Roster due by noon for Summer Session II classes	July 11	
Last Day to Withdraw with "W"	July 23	(Wednesday)
Last day of classes before Final Exams	August 1	
Finals Period for Day and Evening Classes	August 2-8	
Grades due by noon	August 12	

Distance Education Course Interaction Plan (Form DE-2)

This form is to be completed by the faculty of record. Students enrolled in this distance education course shall receive a copy of this completed form.

Course Title: *Anatomy and Physiology II*
Faculty: *Noel Ways*
Email: *nways@necc.mass.edu*

Online √ Asynchronous Component

Asynchronous: This form of distance education is characterized by an emphasis on "learning on demand" or "as-needed communication" between students and faculty from multiple locations at times convenient to participants.

Synchronous: This form of distance education entails the use of live, two-way communication among and/or between students and faculty in a scheduled or "fixed" point(s) of time(s), much like classroom-based instruction.

This course may include, but not be restricted to, the following interactions:

	YES	NO
1. in-person meetings	☐	√
2. telephone interactions	☐	√
3. electronic interactions (email, internet …)	√	☐

If yes, dates, times, and places are to be specified.

Students are encouraged to engage in the following interaction(s) for successful completion of this course:

Discussion board promotes student-student and student-instructor interactions.

Student-instructor interactions occur weekly via email and announcements. Should a follow-up meeting be necessary, an online Zoom meeting will be scheduled at a mutually acceptable time.