BIO 204: Human Anatomy & Physiology II Syllabus

Credit: 5 units

Class Meetings:

Lecture - Available 24/7 on Canvas

Laboratory Time: M 3:00 - 5:50 pm OR F 3:00 - 5:50 pm

Laboratory Location: Main Building, S102

Instructors:

Lecture Instructor: Daniel Slutsk, PhD. E-mail: daslutsky@mail.ltcc.edu Laboratory Instructor: Rayna Harris, PhD. E-mail: rharris2@mail.ltcc.edu

Description: BIO 204 is the second part of a three-course sequence providing an in-depth study of the structure and function of the human body. The major topics covered in BIO 204 are the central nervous system, peripheral nervous system, autonomic nervous system, special senses, endocrine system, blood, the cardiovascular system (heart), and the immune system. Required laboratory work includes microscopic study of tissues, dissection of preserved animal specimens, and study of anatomical models and skeletons.

Prerequisites: BIO 203 with a grade of "C" or better or equivalent.

Required materials:

- FREE Text: There is no assigned textbook for this course. However, having a
 textbook will be an important resource for your success in this class. Digital,
 openly licensed educational materials such as OpenStax Anatomy & Physiology 2e can be used. We also encourage you to get a physical text for
 more detailed information.
- 2. **Lab Manual:** Exploring Anatomy and Physiology in the Laboratory 4th edition by Amerman is your required Lab Manual for the lab portion of the course. Graded assignments will be collected from the lab manual. **This is a required text.**
- 3. **A computer and stable internet connection.** Access to Canvas is required. There is also an app called "Canvas Student" which provides convenient access to Canvas while on the go, however, some assignments cannot be completed using mobile devices.
- 4. **Provided Supplies:** Lab coats, nitrile gloves, and Goggles will be provided in the lab for your weekly use.

Student Learning Objectives (SLOs)

Upon completing this course successfully, our Student Learning Outcomes state that you should be able to:

- 1. identify specific anatomic components of the nervous, endocrine, and cardiovascular, systems using appropriate tools (microscope, models, preserved organs, and cadaver material).
- 2. describe the mechanisms of neural communication and control.
- 3. evaluate data collected during experimental challenges to homeostasis.
- 4. apply knowledge of physiological changes to cellular and organ pathology.
- 5. diagram the functional relationship between each organ and the system to which it belongs.
- 6. correlate the mechanisms by which the functional cells of major systems respond to maintain homeostasis.
- 7. evaluate the neuronal and hormonal responses to changes in cardiovascular dynamics.

Canvas

This semester we will use Canvas as our Learning Management System. Canvas works best using Chrome as your web browser. We will use Canvas to communicate, share resources, provide due dates, and post grades. Some of your homework assignments will be submitted on Canvas as well. Please confirm that you are receiving emails from your LTCC account. We also recommend setting up notifications in Canvas to receive alerts for new content.

Communication

Email: This is the best way to contact your professors. Our emails are listed on the first page of the syllabus. You can also send messages using the **Canvas Inbox**.

Diversity, Tolerance, and Equity

By enrolling in this course at Lake Tahoe Community College, you agree to abide by the Academic Senate's official Faculty Statement on Tolerance and Diversity. The policy is as follows: The Lake Tahoe Community College Academic Senate promotes a positive learning environment and culture based on open-mindedness, critical thinking, inclusion, tolerance, equity, and respect. Free speech is at the core of our college, but we will not tolerate racist, sexist, homophobic, or any other forms of discriminatory language or behavior. Hate speech and other such language or behavior, as defined in Lake Tahoe Community College Board Policy 5500 — Standards of Student Conduct will result in Disciplinary Sanctions/Actions, as stated in Administrative Procedure 5520 — Student Discipline Procedures.

Basic Needs

Anyone can find themselves in a situation where they are struggling to meet their basic needs because of unforeseen circumstances such as a health issue, loss of

employment, a rent increase, or other common "life" interruptions. The Basic Needs Center at Lake Tahoe Community College helps eligible students meet their most basic needs so they can focus on their studies and succeed. If you are facing financial hardship and need emergency supplemental food, mental health or medical assistance, help with housing, transportation, utilities, or childcare, the Basic Needs Center can help! Click here for more information

Campus Safety

Please be aware of your surroundings. If you are on campus early in the morning or late at night, I would encourage you to walk to the parking lot in groups. If there is an emergency or crime, please contact 911.

SAS Accommodations

Any registered student with a verifiable disability is eligible for Student Accessibility Services. The use of services is voluntary. Students do not necessarily need to have a disability to enroll in classes. However, to receive academic accommodations students must have a verifiable disability. Students can be assessed at the SAS. For more information, please visit our website: <u>Click here</u>

Etiquette and Class Policies

- Be respectful to all members of our classroom community.
- Turn off or silence cell phones before class.
- Arrive to class on time.
- Audio recording is permitted, but video recording is NOT permitted.
- Handle all equipment, models, and supplies with extreme care.
- Lab groups are fluid and we encourage you to meet as many peers as possible early in the semester.

Personal Pronouns

Professional courtesy and sensitivity are especially important to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records.

Grading

• **Lecture Exams:** The course is divided into 2 units, each with a lecture exam worth 100 points. There will also be a cumulative Final Exam worth 100 points. Lecture exams will contain multiple-choice, fill-in-the-blank, matching, and short-answer questions. *Make-up exams are only allowed in cases of a documented emergency. Contact us ASAP if you have an emergency and we will develop a plan.*

- Lab Manual Unit Reviews: Your lab manual contains Unit Reviews at the end of each section. There are two components to the Reviews, a "Check Your Recall" and a "Check Your Understanding". Both parts of these reviews will be collected and graded for completeness. We are looking for time and effort in your answers, and you will not be penalized for wrong answers. However, if you do not put effort into your answers or leave questions blank, points will be deducted. Reviews are due in the lab or online on their assigned days. Reviews may be turned in up to one week late for half credit.
- Laboratory Quizzes: After each lab, you will take an approximately 10-minute quiz. If you miss that lab, you cannot take the quiz. Each student can drop one lab because of an unexcused absence with no questions asked. There are no make-up labs. You may swap sections if you have a conflict if you coordinate with the instructor the week before.
- **Laboratory Practical Exam:** At the end of the quarter, a hands-on laboratory practical will be administered to test your knowledge. The practical will also consist of multiple choice, fill-in-the-blank, matching, and short answer questions but will require the use of a microscope and models, images, or drawings of anatomical parts. *Make-up practical exams are only allowed in cases of a documented emergency. Contact us ASAP.*

Graded Assignments	Points Per Assignment	<u>Total</u>
1 Syllabus Quiz	10 points	10
2 Lecture Exams	120 points each	240
1 Final Lecture Exam	120 points	120
9 Unit Reviews	10 points each	90
8 Lab Quizzes	30 points each	240
1 Lab Practical	200 points	200
1 Presentation	100 points	100
Total		1000

GRADING SCALE:

A = 90% of possible points

B = 80% of possible points

C = 70% of possible points

D = 60% of possible points

F = below 60%

Academic Dishonesty and Plagiarism Policy

LTCC has a very specific Academic Dishonesty and Plagiarism Policy. This policy applies to this class, so please read the following policy and understand it in its entirety: LTCC Academic Dishonesty and Plagiarism Policy.pdf

Understanding what constitutes academic honesty and plagiarism is an important part of being a college student. Academic dishonesty refers to committing or contributing to dishonest acts by those engaged in teaching, learning, research, and related academic activities, and it applies not just to students, but to everyone in the academic environment. Academic dishonesty includes cheating and plagiarism.

- Cheating involves the unauthorized use of information, materials, devices, sources, or practices in completing academic activities.
- Plagiarism is a type of cheating in which someone adopts another person's ideas, words, design, art, music, etc., as their own without acknowledging the source, or, when necessary, obtaining permission from the author. For example, copying and pasting material from a website into your document without proper citation is considered plagiarism.

The specific policies in this LTCC class (again, directly related to LTCC's Academic Dishonesty and Plagiarism Policy) are as follows:

- All work completed in the course must be written in your own words. Cutting
 and pasting words from another source is considered plagiarism in this class.
 Included in the list of plagiarized sources is work written by another student
 for a previous version of this class. All work in this class may be submitted to
 Turnitin.com for determination of plagiarized content. Be aware that the
 instructor is familiar with current technological methods that may be used to
 fool some plagiarism software, such as hidden and foreign text characters.
- Students in this course are allowed to use the textbook and readings in the completion of class assignments. All uses of the textbook and readings should be for paraphrasing (or restating) those ideas using your interpretations.
- In this class, students are not allowed to work together on assignments, including quizzes, discussion posts, or written assignments. All work must be completed by you, alone. Work may not be completed by any other person. You must be the sole author of all work in this class. In this class, essays or written assignments created through "paper mills" or online essay writing services are considered plagiarized and academically dishonest material.
- Any students who commit academic dishonesty or plagiarism in this
 class may be subject to a failing grade on the assignment and, perhaps, a
 failing grade in the class. In addition, students who commit academic
 dishonesty or plagiarism in this class may be subject to disciplinary action by
 the LTCC Office of Instruction and possible suspension or expulsion from Lake
 Tahoe Community College. Academic dishonesty and plagiarism are serious
 offenses and any violations of LTCC's academic dishonesty and plagiarism
 policy will be met with firm action and discipline.

If you have any questions about what constitutes academic dishonesty or plagiarism in this class, do not hesitate to reach out. Please know that as the instructor in this class, I am always available to help answer any concerns or questions about the originality and authenticity of your class work.

Tips for Success

Most of you have heard that this course is extremely time demanding. There is an enormous amount of information coming at you quickly. Your success will largely depend on your time commitment to the class and your willingness to jump in and engage with the material, with me, and with your classmates. Effective time management is essential for success. To meet the requirements for this 5-unit course, you should be prepared to spend at least 10 hours per week studying in addition to the time spent in class! Use some of your lab time each week to review previous content with your lab partners. Lab groups are fluid; please be respectful and kind to all members of the class. The more interaction with your peers, the better. It will deepen your understanding of the material.

- Form a study group, for in-class and out-of-class discussions.
- Attend every class meeting and stay until the end of class.
- Ask questions, either to me or your classmates. Share your knowledge whenever possible.
- Stay on top of the material complete the work as scheduled so that you don't fall behind.
- Check due dates often I will be giving frequent reminders. I do not give make-up exams or quizzes unless you have a documented emergency.
- If you need any accommodation or assistance, please notify me immediately. If you are having difficulty with any component of this class, let me know as soon as possible. Chances are that other students are having the same problems. This includes asking questions about class content or about technology issues. Don't let technology get in the way of your learning.
- Please communicate with me before you become frustrated. I am here to facilitate your learning.

Attendance and Participation

We hope that you find the course interesting and see the value in attending every meeting. If you attend and actively participate, you will be much more prepared for the exams. You are a vital part of your classmates' education; please take advantage of the teaching and learning opportunities that happen each time you interact with your peers!

Excessive unexcused absences for the laboratory portion will not be tolerated. If you miss the first three weeks of the laboratory, you will automatically be dropped from the course. If you miss six labs in total, you may be given an F or an incomplete. The laboratory quizzes are weighted heavily to encourage participation and attendance.

Drop Dates

Please be aware that drop dates and withdrawal dates differ depending on the length of your class. The only time I will drop a student from my course is if they have not attended. It is your responsibility to drop this course if you decide to do

so. Contact Enrollment Services for more information. The last day to drop a class without a W on your record is January 17 or with W on your record is February 21.

Important Dates to Remember

Click this link to access the campus due dates for the quarter. Academic Calendar

Student Support Services

Under the orientation module in Canvas, you will find links to many support services available to you, including Financial Aid, Counseling, CalWorks, EOPS, Students Accessibility Services (SAS), Tutoring Services, and Canvas Tech Support.

As your professors, we are dedicated to ensuring your success in this course. Should you exhibit any academic challenges that might hinder your progress, we are committed to engaging in a discussion with you to address and resolve the issue. Additionally, we may utilize the *Early Alert* system, an online program specifically designed to identify and respond to students encountering academic difficulties. Through this system, we might refer you to the Student Support staff, who will proactively reach out to you and provide the necessary assistance.

Timely Care

LTCC students, you have 24/7 access year-round to the mental health AND medical support you need, for free! Use the Timely Care app or website to get immediate help, or to schedule a future appointment with a licensed therapist, nurse practitioner, or doctor. If you're currently enrolled, don't wait - get started by visiting timelycare.com/LTCC and get the mental and medical support you need right now! CLICK HERE to access TimelyCare

Land Acknowledgment

As we come together as an educational community in Lake Tahoe, we acknowledge that we are gathered on the historical lands of its original inhabitants, the Washoe (Waši•šiw) Tribe. The land acknowledgment is a recognition of Indigenous communities in the stewardship and protection of their cultural resources and homelands. We recognize the Washoe Tribe and their native lands, we honor these ancestral grounds upon which we are collectively gathered, and we support the strength and resilience that the Washoe continue to show.

Closures at LTCC

Occasionally, heavy storms can interrupt normal business on LTCC's campus. When the decision is made to close LTCC's campus, that information is shared via the LTCC Alert system. All current students (and any parent or community member who wishes to) can enroll to receive free text, email, or phone messages automatically using LTCC Alert. You can also check the LTCC's website homepage (www.ltcc.edu) or call the college's main phone line message at (530) 541-4660.

Lecture Topics and Lecture Exam Dates

- 0. Introduction
- 1. Nervous System Organization and Tissue
- 2. Graded Action Potentials (AP)
- 3. AP Signal Transmission
- 4. Spinal Nerves and Reflexes
- 5. Autonomic Nervous System Introductions
- 6. Autonomic Pathways 1
- 7. Autonomic Pathways 2
- 8. Special Senses

Exam 1 (Wednesday, February 5)

- 9. Endocrine System: Hormone Types and Regulations
- 10. Hormone Interactions and Pathways
- 11. Endocrine System: Hormones and Effects
- 12. Cardiovascular System: The Heart Cells
- 13. Heart: Cardiac Conduction System
- 14. Heart: Cardiac Cycle & Regulation
- 15. Blood Vessel Physiology
- 16. Components of Blood
- 17. Blood Physiology

Exam 2 (Wednesday, March 19) Final Exam (Wednesday, March 26)

Lab Schedule

Lab Date	Day	Lab Topic	Unit Review Due
1/6/2025	М	Ch 13 Central Nervous System and Brain Dissection	
1/10/2025	F	Ch 13 Central Nervous System and Brain Dissection	
1/13/2025	М	Ch 14 Peripheral and Autonomic Nervous System	Unit 12 Review: 337-340
1/17/2025	F	Ch 14 Peripheral and Autonomic Nervous System	Unit 12 Review: 337-340
1/20/2025	М	MLK Observance No Lab	
1/24/2025	F	Ch 15 General and Special Senses and Eye Dissection	Unit 13 Review: 361-366
1/27/2025	М	Ch 15 General and Special Senses and Eye Dissection	Unit 13 Review: 361-366
1/31/2025	F	Neuroscience Presentations	Unit 14 Review: 389-392
2/3/2025	М	Presentations Presentations	Unit 14 Review: 389-392
2/7/2025	F	Ch 16 Endocrine System	Unit 15 Review: 419-424
2/10/2025	М	Ch 16 Endocrine System	Unit 15 Review: 419-424

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2/14/2025	۲	President's Day Observance No Lab	
2/17/2025	М	President's Day Observance No Lab	
2/21/2025	F	Ch 17 CVS: The Heart and Heart Dissection	Unit 16 Review: 453-458
2/24/2025	М	Ch 17 CVS: The Heart and Heart Dissection	Unit 16 Review: 453-458
2/28/2025	F	Ch 18 CVS: Blood Vessel Anatomy	Unit 17 Review: 475-480
3/3/2025	М	Ch 18 CVS: Blood Vessel Anatomy	Unit 17 Review: 475-480
3/7/2025	F	Ch 19 CVS: Cardiovascular Physiology	Unit 18 Review: 509-514
3/10/2025	М	Ch 19 CVS: Cardiovascular Physiology	Unit 18 Review: 509-514
3/14/2025	F	Ch 20 Blood	Unit 19 Review: 533-536
3/17/2025	М	Ch 20 Blood	Unit 19 Review: 533-536
3/21/2025	F	Final Practical	Unit 20 Review: 557-560
3/24/2025	М	Final Practical	Unit 20 Review: 557-560