

 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Undergraduate Programs		UUPC Approval <u>4/29/24</u> UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department <u>NA</u> College <u>Honors</u>		
Current Course Prefix and Number <u>BSC 1010/2 f</u> <u>BSC 1010</u>	Current Course Title Honors General Biology		
<i>Syllabus must be attached for ANY changes to current course details. See Template. Please consult and list departments that may be affected by the changes; attach documentation.</i>			
Change title to: Honors Biological Principles <u>Honors Biological Principles Lab</u>		Change description to: New course description for BSC 1010 only: In this course students will apply the scientific method to critically examine and explain the natural world. This course will cover molecular biology, cellular biology, genetics, metabolism, and replication.	
Change prefix From: _____ To: _____		Change prerequisites/minimum grades to: _____	
Change course number From: _____ To: _____		Change corequisites to: _____	
Change credits* From: _____ To: _____		Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).	
Change grading From: _____ To: _____			
Change WAC/Gordon Rule status** Add <input type="checkbox"/> Remove <input type="checkbox"/>			
Change General Education Requirements*** Add <input type="checkbox"/> Remove <input type="checkbox"/>			
<small>*See Definition of a Credit Hour. **WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines. ***GE criteria must be indicated in syllabus and approval attached to this form. See Intellectual Foundations Guidelines.</small>			
Effective Term/Year for Changes: <u>Fall 2024</u>		Terminate course? Effective Term/Year for Termination:	
Faculty Contact/Email/Phone <u>Julie Earles jearles@fau.edu 561 799-8673</u>			
Approved by Department Chair <u>[Signature]</u> College Curriculum Chair <u>[Signature]</u> College Dean <u>[Signature]</u> UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Meeroff</u> UFS President _____ Provost _____		Date <u>4/5/24</u> <u>4/5/24</u> <u>4/9/24</u> <u>4/29/24</u> <u>4/29/24</u> _____ _____	

Email this form and syllabus to mjennning@fau.edu seven business days before the UUPC meeting.

Rachel Corr

From: Dan Meeroff
Sent: Friday, April 5, 2024 3:51 PM
To: Rachel Corr; Julie Earles
Subject: Re: Change of Title for BSC 1010

Dear Rachel:

The funny thing is that the course is listed in the statewide course numbering system as the other title:

FAU	BSC 1010	HONORS GENERAL BIOLOGY I <i>Biological Principles</i>
FAU	BSC 1010L	BIOLOGICAL PRINCIPLES LAB
FAU	BSC 1010L	HONORS GENERAL BIOLOGY LAB <i>Biological Principles</i>
FAU	BSC 1010	BIOLOGICAL PRINCIPLES

Apparently, this title was assigned in 2015, as you can see in the screenshot.

I am told that you would like it to be changed to "Honors Biological Principles," so that is why we need the form, and then the title can be changed at the state.

--

Daniel E. Meeroff, Ph.D.
Dean of Undergraduate Studies
Florida Atlantic University
777 Glades Road SU 216
Boca Raton, FL 33431-0991

From: Rachel Corr <rcorr@fau.edu>
Sent: Friday, April 5, 2024 3:02 PM
To: Dan Meeroff <dmeeroff@fau.edu>
Subject: FW: Change of Title for BSC 1010

Hi Dan. I received this from Julie, but I don't understand where the course is listed as BSC 1010 General Biology. All of our documents have BSC 1010 as Biological Principles, so I'm not sure where, exactly, we need to change something.

Please let me know. Thank you.

Rachel

Rachel Corr, Ph.D.
Professor of Anthropology
Wilkes Honors College
Florida Atlantic University
5353 Parkside Dr.
Jupiter, FL 33458
(561) 799-8018; fax (561) 799-8602

From: Julie Earles <jearles@fau.edu>
Sent: Monday, March 18, 2024 4:04 PM
To: Rachel Corr <rcorr@fau.edu>
Subject: Change of Title for BSC 1010



FLORIDA ATLANTIC UNIVERSITY

BSC 1010-03H 15587
Honors Biological Principles
Tuesday, Thursday 9:30 AM - 10:50 AM
3 Credit(s)
Fall 2024 - 1 Full Term

Instructor Information

Kelsie Bernot

Email: kbernot@fau.edu

Office: SR 231

Office Hours: Wednesday 2-4pm; Thursday 3-5pm

Phone: 561-799-8044

*** All students can benefit from attending office hours. I care about you as a person and about your success both inside and outside of the classroom. Building relationships with your faculty will help you in several ways: 1) explore course material at a deeper level; 2) practice stating your ideas and thoughts; 3) obtain advice on steps to reach your career goals, obtain an internship or shadowing opportunity, prepare for job, graduate, and professional school applications; 4) get to know your professor better. I want to build a relationship with you. If you ever anticipate needing a recommendation letter (internships, jobs, scholarships, professional or graduate school), then you should try to build a relationship with me as well. Plan to meet with me outside of class at least a few times during the semester! I can't wait to get to know you better!

Learning Assistant Names:

Kayla

Win

kaylawin000@gmail.com

Samantha

Leonard

sleonard2021@fau.edu

Ben

Bargeron

bbargeron2020@fau.edu

Learning Assistants. This section will incorporate the Learning Assistant (LA) Program. LAs are pedagogically trained, fellow undergraduate students who have been successful in this subject. This LA based curriculum is designed to allow students the opportunity to learn by doing. LAs will assist

students in actively learning and critically thinking about course content through collaborative group work built into the course.

Importantly, learning assistants are not answer fairies – they are not here to simply give you the answer to a question. Instead, they are trained to help you construct knowledge, connecting your learning to prior knowledge and skills while building your ability to apply and analyze the concepts you are learning. They are also here to help build community in the classroom and to help you feel a sense of belonging during your development as a scientist.

Support Resources: Part of becoming an independent high-functioning professional is learning about and making use of the resources available to you. This is a small sample of FAU and community resources.

- If it is a safety emergency, call 911 (FAU and local police will be alerted to assist).
- For non-emergency concerns about another student, get help by filing here:
<http://www.fau.edu/report/>
- To schedule a free FAU CAPS counseling appointment: <https://www.fau.edu/counseling/>
- For a range of FAU, community, and online resources, FAU Thrive provides a central hub including help & support listings, discounted community mental health providers, and student blogs: <http://www.fau.edu/thrive/>
- FAU CAPS Crisis Line: 561-297-3540 (24 hours)
- Text Crisis Line: Text HOME to 741741 (24 hours)
- Trevor Project: 866-488-7386 (24 hours)

Course Description

Honors Biological Principles

Corequisite: BSC 1010L

In this course students will apply the scientific method to critically examine and explain the natural world. This course will cover molecular biology, cellular biology, genetics, metabolism, and replication.

Note on Honors Distinction

This course is an Honors course. It differs substantially from its non-Honors counterpart. The course fulfills the mission of the Honors College to develop in students the capacity to combine knowledge from different fields (e.g., Physics and Biology) and apply it to the creation of original research. The course employs Honors-level assessment standards designed to prepare students for work on their Honors Thesis. Students will be expected to articulate their reasoning clearly in speech, writing, and visually, to combine knowledge from different fields, to deploy the ideas learned in the class in their own field of study, and to develop the critical attitudes and skills needed for self-directed learning.

Welcome to BSC 1010! I'm really excited to work with you this semester as we explore our amazing world from a biological lens. I hope to both challenge and support you as you learn and grow as a scientist. I can't wait to get started!

One of the objectives of this course is to facilitate critical thinking and debate around topics, theories, and concepts where disagreement is not only anticipated, but encouraged. The ability to think critically, express your ideas clearly, and respond to the professor and other students civilly are the keystones of the academic experience. In this course, the professor will provide instruction in an objective manner and will remain open to a wide variety of viewpoints, so long as those viewpoints are evidence-based and presented in a respectful way. During class, the professor may take positions and make statements for the sole purpose of accomplishing an academic objective or enhancing the learning environment. Additionally, the adoption of class materials for this course does not imply an endorsement of the full content of those materials or the positions of the authors of those materials. Often the professor will provide materials as a point of departure for critical thinking and debate. Students should keep in mind that the ideas presented or discussed during class may not necessarily reflect the professor's personal beliefs or opinions on the subject matter.

Prerequisites/Corequisites

Corequisite(s):

Subject	Course Number
BSC	1010L

Instructional Method

In-Person

Traditional concept of in person. Mandatory attendance is at the discretion of the instructor.

Required Texts/Materials

Information about Text book and Modified Mastering Biology

You can either purchase a print version of the textbook (listed here), or you can use the eText version that comes as a package with the Mastering Biology programs.

- Campbell Biology. 12th Edition. Urry et al., 2021. The ISBN for the print version of the textbook is: 9780135188743 (optional, but recommended if you prefer to read a paper copy rather than the etext that comes with Mastering Biology codes.)

You are REQUIRED to purchase one of the options for Mastering Biology. They are listed as optional above, but you must choose one of them. You may purchase directly from Pearson (use your school email), from the bookstore, or through the Follett first day access program. Beware of 3rd party vendors (like Amazon). Students often run into problems where the code has already been used or is for the incorrect program. Neither Pearson (the publisher) nor your instructor can help you with these problems.

- 18-week access card for the Mastering Biology program that includes an eText version of the textbook. ISBN: 9780136780809
- 24-month access card for the Mastering Biology program that includes an eText version of the textbook. ISBN: 9780135856147
- 24-month access card for the Mastering Biology program that does NOT include the eText version of the textbook. ISBN: 9780135856109

Modified Mastering Biology with Pearson eText -- Access Card -- for Campbell Biology

ISBN: 9780135855836

Publisher: Pearson

Edition: 12th

Although Mastering Biology is required for this course, the length of access to Mastering Biology is up to you.. Choose this 24-month option if you plan to take the second semester of Introductory Biology BSC 1011 Biological Principles. Students with a science concentration or planning to go into a health care field most likely need both BSC 1010 and BSC 1011. This option will be the most economical if you will take Biodiversity.

Modified Mastering Biology with Pearson eText -- Access Card -- for Campbell Biology (18-Weeks), 12e

ISBN: 9780136780809

Publisher: Pearson

Edition: 12th

Although Mastering Biology is required for this course, the length of access to Mastering Biology is up to you. Choose this 18wk option if you do not plan to take BSC 1011 Biological Diversity. This option is most appropriate for students who do not plan to take another semester of Biology courses after this one.

Course Objectives/Student Learning Outcomes

This course is a comprehensive treatment of fundamental biological principles. There is an emphasis on biochemical, cellular and genetic fundamentals. These basic biological principles can serve as a basis for further study in biology.

Upon successful completion of this course, students will be able to:

- Explain important scientific concepts, principles, and paradigms.
- Explain the limits of scientific knowledge and scientific knowledge changes.
- Explain fundamental concepts and processes within the biological realm, including cellular structure and function, biochemical metabolism, cell cycle, and genetics.
- Describe how these processes were discovered and what advances are being made.
- Gain insight into modern molecular biology.

CORE CONCEPTS

Structure and Function: Basic units of structure define the function of all living things.

- Students will describe how the interactions of carbon, hydrogen, oxygen, nitrogen, and phosphorus create the diverse chemical structures of biological macromolecules: carbohydrates, lipids, proteins, and nucleic acids.
- Students will predict how alterations in structure can change the function of the molecule, cell, and organism.

INFORMATION FLOW, EXCHANGE, AND STORAGE: The growth and behavior of organisms are activated through the expression of genetic information in context.

- Students will explain how cells communicate by generating, transmitting, and receiving chemical signals
- Students will compare and contrast the mechanisms for generating genetic diversity through asexual and sexual reproduction
- Students will analyze transmission of genetic information from parent to offspring.
- Students will predict outcomes from mutations during DNA replication, transcription or translation.

PATHWAYS AND TRANS FORMATIONS OF ENERGY AND MATTER: Biological systems grow and change by processes based upon chemical transformation pathways and are governed by the laws of thermodynamics.

- Students will describe how energy captured by primary producers during photosynthesis can be passed and converted to usable energy for consumers at the cellular level.
- Students will describe how enzymes are used to regulate the synthesis and breakdown of molecules, and how endergonic reactions are driven by coupling with exergonic reactions such as ATP hydrolysis.

SYSTEMS: Biological molecules, genes, cells, tissues, organs, individuals, and ecosystems interact to form complex networks. A change in one component of the network can affect many other components.

- Students will investigate the relationship between atoms, molecules, and large biological molecules in the synthesis and breakdown of polymers
- Students will explore the interconnectivities of vesicular transport within the endomembrane system of the cell
- Students will evaluate how cell response is dependent on the integration of cellular signals

INTERDISCIPLINARY NATURE OF SCIENCE: Biology is an interdisciplinary science that is based upon chemical, physical, and mathematical relationships, yet also intersects with social sciences. Most modern biological problems are multifaceted requiring the intersection of multiple disciplines to tackle and solve.

- Students will identify the connections between disciplines and explain the importance of multidisciplinary approaches to real world problems

THE RELATIONSHIP BETWEEN SCIENCE AND SOCIETY: Biology is conducted in a societal context.

- Students will explain how science impacts society and how society creates boundaries and extensions to applications of science.

Faculty Rights and Responsibilities

Florida Atlantic University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. To ensure these rights, faculty members have the prerogative to:

- Establish and implement academic standards.
- Establish and enforce reasonable behavior standards in each class.
- Recommend disciplinary action for students whose behavior may be judged as disruptive under the Student Code of Conduct [University Regulation 4.007](#).

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across

three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Course Evaluation Method

Grading Criteria

Grading:

Your grade will be determined as follows:

Category	Points	%
Exams (3 @ 50pts ea)	150	37.5%
Final Exam	80	20.0%
Mastering Biology Homework	50	12.5%
In-Class Active Learning	50	12.5%
Final Project	70	17.5%
Total	400	100.0%

See the schedule section for tentative exam dates.

IMPORTANT NOTE: Students must receive a grade of “C” or above for this course to count towards the requirements of their major concentration.

Exams (230 points in total, 57.5% of total grade):

Exams 1-3 will be taken in-person at the scheduled class meeting location and during the scheduled class period. The exam will open promptly after class starts, and will close promptly at the end of the scheduled class period. If you arrive late, you will not have the full time to complete the exam. The University sets the schedule (time and date) for the final exam. The location will be in our usual classroom.

All exams will be cumulative, covering key concepts across the entire semester. The exams may include multiple choice, true/false, matching, fill-in-the-blank, and/or free response questions. Answers will be evaluated based on content in terms of accuracy of information, demonstration of knowledge and understanding of the important concepts, and ability to analyze biological problems. Good answers will demonstrate that you can apply the important biological concepts covered in the lectures, the textbook, the in-class activities, homework assignments, and course materials assigned online, and have met the learning objectives given in the modules for each course topic.

Students are required to bring a scantron, pencil, and pen for each exam. You must fill in your scantron with a pencil and answer the free-response questions in pen.

Students receiving accommodations for extended time in their letter from the SAS office should contact the SAS office directly to make arrangements for exams.

In-Class Active Learning (50 points, 12.5% of total grade):

Active learning engagement during the class periods will be instrumental in helping you learn the material and will have a positive impact on your exam scores and final grade. Some activities will be completed individually; many will involve discussion your classmates. We will cover aspects of the material that are either very important or are more challenging for students to learn. The goal here is for you to practice applying and analyzing the course material. Having some familiarity with the material BEFORE class is essential for your success. Reading the textbook and completing the PreLecture Mastering Biology assignments will help you prepare for class. Throughout the semester, there will be 25 in-class active learning activities, each worth 2 points. Students must turn in their in-class activities at the end of the class period for credit. Students are permitted three unexcused absences without documentation, if they email the instructor before class requesting to use one of their absences for exemption from the assignment. Students who must miss class for a legitimate and documented reason will be able to make-up the in-class activities in accordance with the University make-up policy.

Mastering Biology Homework (50 points, 12.5% of total grade):

For each module, homework assignments will be assigned through the Pearson Mastering Biology program that accompanies the textbook. Students are required to purchase the access to Mastering Biology in order to complete and earn credit for these assignments. You may request a free 2-week trial if you do not have immediate access to funds (don't request this until the first day of class to maximize the amount of time you get on the trial).

Students will complete the assignments online, outside of the class period. For each chapter, there will be a pre-lecture assignment and a post-lecture assignment. Pre-lecture assignments are always due the day Sunday nights at 11:59pm, with the exception of week one, where they are due Wednesday night before Thursday's class. (There is no pre-lecture assignment for chapter 1. There is an intro to mastering Biology assignment and a pre-lecture assignment for chapter 2 due on Wednesday of the first week of class.) Post-lecture assignments are due on Thursdays at 11:59pm, with the exception of the last chapter, which is due before Reading days begin. Points will be deducted for assignments turned in late.

Optional Recommended Mastering Biology Resources (included within your Mastering Biology access): Mastering Biology has several resources that students may find helpful for learning the material.

1. Study Area - Active Reading Guides for each chapter. Many students approach reading a textbook incorrectly and end up just highlighting a lot of the text rather than actually learning the information. These guides help students focus on actively processing the information that they are reading for better long-term retention.
2. Study Area Visual Learning Tools. For students who enjoy using pictures, images, and videos to learn, this area contains figure walkthroughs, Bioflix animations, and HHMI interactives resources that will help you apply the information that you are learning.
3. Study Area – Practice Tests and Cumulative Tests. The most effective way for students to study is to continually test whether you know what you think you know (called metacognition). You can find practice tests for each chapter and build cumulative tests to cover material in different chapters. These resources are best used at least a week before an exam so that students have time to go learn the material they are missing. Do not wait until the night before an exam to use them, or you won't have time to address the areas where you need to improve your learning.
4. Dynamic Study Modules can be found on the Mastering Biology course home page. Each chapter has a set of 30 questions. Not only do students enter a response, but they also enter whether they are confident or not about the response. This helps students think about whether they really know the material or whether they are simply guessing at the response. To successfully complete the module, students must answer each question correctly twice with confidence in their answer. This is a great tool to use while waiting for class to begin or during commercials while watching TV. There is an app that can be downloaded onto your device for your convenience.

Final Project (70 points, 17.5% of total grade):

The final project is an individual project assignment where students will research a biological topic relevant to a molecular or cellular concept covered in this course, and make a 5-minute video presenting their topic. Points for the final project will be distributed as follows: 10 points for submitting your topic choice; 10 points for submitting your outline; 50 points for the final video. A rubric will be provided in Canvas guidance regarding how the final video will be graded. More information about the requirements and deadlines for this assignment will be given in class and will be posted to Canvas.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual

responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

Plagiarism is unacceptable in the University community. Academic work must be an original work of your own thought, research, or self-expression. When students borrow ideas, wording, or organization from another source, they must acknowledge that fact in an appropriate manner. Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass off such work as one's own. Any student who fails to give full credit for ideas or materials taken from another has plagiarized. If in doubt, cite your source. Please use APA (American Psychological Association) formatting for all references. In the sciences, it is extremely rare to use direct quotes from sources. You should synthesize the information in your own words and then reference the source rather than using exact quotes from a source.

Artificial Intelligence (AI, eg. Chat GPT) can be a very useful tool for troubleshooting. However, it should never be used as a replacement for learning. Generating original thoughts, synthesizing multiple sources of information, and critically analyzing and evaluating problems are all skills that you need practice developing for your future careers. It can be easy to feel overwhelmed with deadlines and workload. Be proactive with assignments so that you don't feel pressured at the last minute to cheat rather than fall behind.

Attendance Policy Statement

Students are expected to attend all their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations, or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances, and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

I care about your learning. Education research shows soundly that attending class correlates strongly with success in learning the material. This is even more true for courses that incorporate active learning, as this course does. As such, you should make every effort to attend class every day. This is an in-person course. Both lectures and exams will be delivered in-person at the designated course meeting location during the scheduled time. All students are expected to attend class in-person during each scheduled class period unless otherwise instructed, or unless they have a legitimate reason to be absent from class

Religious Accommodation Policy Statement

In accordance with the rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs regarding admissions, registration, class attendance, and the scheduling of examinations and work assignments. University Regulation 2.007, Religious Observances, sets forth this policy for FAU and may be accessed on the FAU website at www.fau.edu/regulations.

Any student who feels aggrieved regarding religious accommodations may present a grievance to the director of Equal Opportunity Programs. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

Time Commitment Per Credit Hour

For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of out-of-class student work for each credit hour. Equivalent time and effort are required for Summer Semesters, which usually have a shortened timeframe. Fully Online courses, hybrid, shortened, intensive format courses, and other non-traditional modes of delivery will demonstrate equivalent time and effort.

Course Grading Scale

Letter Grade	Letter Grade
A	93 - 100%
A-	90 - 92%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%
C+	77 - 79%
C	73 - 76%
C-	70 - 72%
D+	67 - 69%
D	63 - 66%

Letter Grade	Letter Grade
D-	60 - 62%
F	Below 60

Grade Appeal Process

You may request a review of the final course grade when you believe that one of the following conditions apply:

- There was a computational or recording error in the grading.
- The grading process used non-academic criteria.
- There was a gross violation of the instructor's own grading system.

[University Regulation 4.002](#) of the University Regulations contains information on the grade appeals process

Policy on Make-up Tests, Late work, and Incompletes

Exams. All students must take the exams in-person. Make-up exams will ONLY be given to students who have a legitimate, university-approved, and documented reason for their absence. Documentation must be provided within 48 hours of the missed exam in order to schedule a make-up exam. There are no make up exams or exemptions for unexcused absences. Acceptable excuses include illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. In such cases, students must contact the instructor and **provide appropriate documentation** either before the missed exam or within 48 hours after the missed exam. Appropriate documentation to receive an excused absence includes a doctor's note, advisory from Student Health to isolate, a court order, a university letter showing participation in a conference or other University-approved activity, etc. Failure of the student to contact the instructor within 48 hours of the missed class, failure of the student to provide appropriate documentation, or a student missing class for any reason that is not considered an excused absence will result in the student receiving a zero on the assignment or exam. Taking a vacation or scheduling a flight is not considered an excused absence, nor is scheduling another class, job, or program that conflicts with this course. Reasonable accommodation will also be made for students participating in a religious observance. If a conflict (such as a medical school interview) is known in advance, please contact your instructor immediately with a written excuse, and alternate plans may be arranged. Please contact the instructor if you have questions or concerns about your specific situation.

In-class active-learning activities. Active learning activities will be given during each class period, and are to be completed and turned in during class, unless otherwise instructed. I understand, however, that sometimes life happens and sometimes students need to miss class. Students are permitted three unexcused absences without documentation, These unexcused absences are ONLY for in-class active learning assignments (not exams!). if students email the instructor before class requesting to use one of their absences for exemption from the assignment. Students who must miss class for a legitimate and documented reason will be able to make-up the in-class activities in accordance with the University make-up policy. No credit will be given for assignments turned in late, unless the student has a legitimate, university-approved, and documented reason for missing the assignment's due date, and has contacted the instructor to make arrangements within 48 hours of the due date.

Mastering Biology. Mastering Biology assignments are designed to help students learn - many assignment have hints, videos, and other activities to help students apply the material. The deadlines are intentionally set up to help students prepare for lecture and then to apply the material in harder homework assignments after class. This spaced, repetitive learning structure follows best practices for long-term retention of the material. Students may always complete these assignments late. However, to incentive students for completing the assignments on time, there is a late penalty applied: 10% per hour up to 50% max points. Because students generally have 5+ days to complete each assignment, extensions are only given in the case of extended illnesses. Last minute emergencies like loss of power/internet do not qualify for extensions.

Final Project. A late penalty of 10% per day will be applied to all components of the final project. Because students have weeks to complete this project, there are no extensions given for last-minute emergencies / illnesses with the exception of an extended illness, family emergency, court-order or university travel. Each of these require documentation.

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

Student Support Services and Online Resources

- [Center for Learning and Student Success \(CLASS\)](#)
- [Counseling and Psychological Services \(CAPS\)](#)
- [FAU Libraries](#)
- [Math Learning Center](#)
- [Office of Information Technology Helpdesk](#)
- [Office of International Programs and Study Abroad](#)
- [Office of Undergraduate Research and Inquiry \(OURI\)](#)
- [Science Learning Center](#)
- [Speaking Center](#)
- [Student Accessibility Services](#)
- [Student Athlete Success Center \(SASC\)](#)
- [Testing and Certification](#)
- [Test Preparation](#)
- [University Academic Advising Services](#)
- [University Center for Excellence in Writing \(UCEW\)](#)
- [Writing Across the Curriculum \(WAC\)](#)

Course Topical Outline

Date	Topic	Readings
22-Aug	Introduction to Biology	Chapter 1
24-Aug	Introduction to Chemistry	Chapter 2
29-Aug	Water and Life	Chapter 3
31-Aug	Carbon and Life	Chapter 4
5-Sep	Intro to Macromolecules	

7-Sep	Macromolecules I: Lipids and Carbohydrates	Chapter 5
12-Sep	Macromolecules II: Proteins and Nucleic Acids	Chapter 5
14-Sep	The Cell: A Tour Part	Chapter 6
19-Sep	Membranes	Chapter 7
21-Sep	EXAM 1 (Chapters 1-5)	
26-Sep	Intro to Metabolism	Chapter 8
28-Sep	Respiration I	Chapter 9
3-Oct	Respiration II, Photosynthesis I	Chapters 9 & 10
5-Oct	Photosynthesis II	Chapter 10
10-Oct	Cell Communication	Chapter 11
12-Oct	EXAM 2 (Chapters 1-10)	
17-Oct	The Cell Cycle and Mitosis	Chapter 12
19-Oct	Case Study on Cancer	
24-Oct	Sexual Reproduction and Meiosis	Chapter 13
26-Oct	Genetics I: Mendelian Genetics	Chapter 14
31-Oct	Genetics II: Beyond Mendel	Chapter 14
2-Nov	Chromosomal Basis of Inheritance	Chapter 15
7-Nov	Molecular Basis of Inheritance	Chapter 16
9-Nov	EXAM 3 (Chapters 1-15)	
14-Nov	Gene to Protein I: Transcription	Chapter 17
16-Nov	Gene to Protein II: Translation	Chapter 17
21-Nov	In Class assignment	
23-Nov	No Class - Thanksgiving Holiday	
28-Nov	Regulation of Gene Expression	Chapter 18
30-Nov	Regulation of Gene Expression	Chapter 18
5-Dec	Reading day – NO CLASSES	
13-Dec	FINAL EXAM (Chapters 1-20)	
	Section 01H Tuesday, Dec 12th 10:30am-1:00pm	
	Section 03H Thursday, Dec 7th 7:45am-10:15am	



FLORIDA ATLANTIC UNIVERSITY

BSC 1010L-06H 15134
Honors Bio Principles Lab
Thursday 1:00 PM - 3:50 PM
1 Credit(s)
Fall 2024 - 1 Full Term

Instructor Information

Samantha McGovern

Email: smcgovern2018@fau.edu

Office: HC170

Office Hours: Mondays from 9-11 am or by appointment

Phone: (561) 799-8677, Extension 68677

Course Description

Honors Biological Principles Lab

Corequisite: BSC 1010

An introduction to general laboratory procedures to demonstrate the basic principles of biology. This is a General Education course.

Prerequisites/Corequisites

Corequisite(s):

Subject	Course Number
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Subject	Course Number
BSC	1010

Instructional Method

In-Person

Traditional concept of in person. Mandatory attendance is at the discretion of the instructor.

Required Texts/Materials

There are no required texts or manuals for this lab. Any supplemental material such as videos or articles will be posted on Canvas

Course Objectives/Student Learning Outcomes

The Honors Biological Principles Lab is designed to provide a comprehensive understanding of the fundamentals of biology including (but not limited to) the scientific method, molecular biology, energy transformation, cell biology, reproduction, and genetics.

Faculty Rights and Responsibilities

Florida Atlantic University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. To ensure these rights, faculty members have the prerogative to:

- Establish and implement academic standards.
- Establish and enforce reasonable behavior standards in each class.
- Recommend disciplinary action for students whose behavior may be judged as disruptive under the Student Code of Conduct [University Regulation 4.007](#).

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available

for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Course Evaluation Method

Category	Points	%
Lab Participation	65	12%
In Lab Quizzes (lowest dropped)	165	30%
Lab Assignments	240	44%
Final Exam	75	14%
Total	545	100%

In Lab Participation:

Points for participation in lab will be given based on your contribution to the lab discussions each week, participation in the lab activities (collecting data, looking at slides/specimens, completing the lab activity, etc.), and proper clean up at the end of lab. Prior to leaving each week, you will need to checkout with instructor. Attendance in lab is mandatory without a documented excused absence; no credit will be given for work turned in by students who did not attend the laboratory in which the data was generated without making arrangements with the Professor through email and/or office hours.

In Lab Quizzes:

Quizzes will be administered at the beginning of your lab each week, starting with the second lab. If you are late to lab, you may miss the quiz. The lowest quiz grade will be dropped at the end of the semester. These short, 5-10-minute quizzes will pertain mostly to the lab material covered the previous lab to check that you understand the material. They may also contain bonus questions which can come from posted material and readings on Canvas.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes

with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

Attendance Policy Statement

Students are expected to attend all their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations, or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances, and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Attendance Policy:

Students are required to attend all laboratories and to read any posted assigned materials on Canvas before coming to class. Additional information that is not posted on Canvas will often be presented during the pre-lab lectures. The pre-lab lecture PowerPoint slides will be posted on Canvas at the end of the week. You will be responsible for this material for lab quizzes and the final exam, so it highly recommended that you take notes. If you miss more than 2 laboratories you may automatically be dropped from the course, and you may not turn in lab assignments for a class that you did not attend. If you miss a face-to-face lab due to illness, you must make arrangements with your Professor for an alternate assignment, but you must e-mail before you miss class to make the arrangements, except in the case of unexpected emergencies. Faculty are not required to allow a student to make up work missed due to unexcused absences.

Religious Accommodation Policy Statement

In accordance with the rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs regarding admissions, registration, class attendance, and the scheduling of examinations and work assignments. University Regulation 2.007, Religious Observances, sets forth this policy for FAU and may be accessed on the FAU website at www.fau.edu/regulations.

Any student who feels aggrieved regarding religious accommodations may present a grievance to the director of Equal Opportunity Programs. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

Time Commitment Per Credit Hour

For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of out-of-class student work for each credit hour. Equivalent time and effort are required for Summer Semesters, which usually have a shortened timeframe. Fully Online courses, hybrid, shortened, intensive format courses, and other non-traditional modes of delivery will demonstrate equivalent time and effort.

Course Grading Scale

Letter Grade	Letter Grade
A	94 - 100%
A-	90 - 93%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%
C+	77 - 79%
C	73 - 76%
C-	70 - 72%
D+	67 - 69%
D	63 - 66%
D-	60 - 62%
F	Below 60

Grade Appeal Process

You may request a review of the final course grade when you believe that one of the following conditions apply:

- There was a computational or recording error in the grading.
- The grading process used non-academic criteria.
- There was a gross violation of the instructor's own grading system.

[University Regulation 4.002](#) of the University Regulations contains information on the grade appeals process

Policy on Make-up Tests, Late work, and Incompletes

If you miss more than 2 laboratories you may automatically be dropped from the course, and you may not turn in lab assignments for a class that you did not attend. If you miss a face-to-face lab due to illness, you must make arrangements with your Professor for an alternate assignment, but you must e-mail before you miss class to make the arrangements, except in the case of unexpected emergencies. Faculty are not required to allow a student to make up work missed due to unexcused absences.

Special Course Requirements

Laboratory Safety:

Personal protective equipment (PPE) such as a lab coat and goggles are required for several laboratory activities. Close-toed shoes are required for all labs.

1. No eating or drinking in the lab.
2. Wash your hands after the exercises and before you leave the lab for the day.
3. Tie back long hair.
4. Know where emergency/first aid equipment and disposal receptacles are.
5. Wear close-toed shoes, lab coats, gloves, and eye protection when required (PPE).
6. Always follow the proper sanitation protocols when entering and leaving the lab space.

These guidelines are for your safety and the safety of those around you. In addition, labs are often messy, so you should dress accordingly. Any injuries should be reported to your instructor immediately!

Laboratory Equipment & Clean Up:

Instruments are delicate and expensive so you will be instructed on their proper use and care. Please help us keep the equipment in good condition by taking proper care of it. At the end of each lab:

1. Properly put away any equipment you have used (e.g., microscopes, glassware).
2. Clean and return all supplies to their proper places.
3. Clean your workspace with disinfectant.
4. Check out with your lab instructor before leaving.

**If you break something or something does not work as expected, please let someone know so that it can be repaired.

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students

a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

Student Support Services and Online Resources

- [Center for Learning and Student Success \(CLASS\)](#)
- [Counseling and Psychological Services \(CAPS\)](#)
- [FAU Libraries](#)
- [Math Learning Center](#)
- [Office of Information Technology Helpdesk](#)
- [Office of International Programs and Study Abroad](#)
- [Office of Undergraduate Research and Inquiry \(OURI\)](#)
- [Science Learning Center](#)
- [Speaking Center](#)
- [Student Accessibility Services](#)
- [Student Athlete Success Center \(SASC\)](#)
- [Testing and Certification](#)
- [Test Preparation](#)
- [University Academic Advising Services](#)
- [University Center for Excellence in Writing \(UCEW\)](#)
- [Writing Across the Curriculum \(WAC\)](#)

Course Topical Outline

Date (week of)	Topic
21-Aug	Introduction and Lab Safety
28-Aug	Scientific Investigation
4-Sep	Microscopes and Parts of a Cell
11-Sep	Macromolecules
18-Sep	Online Lab Assignment- Protein
25-Sep	Online Lab Assignment- Cell
2-Oct	Bacteriology
9-Oct	Metabolism and Enzymes
16-Oct	Cell Communication

23-Oct	Cell Division: Mitosis and Meiosis
30-Oct	DNA and PCR
6-Nov	Genetics and Review Game
13-Nov	Final Exam
20-Nov	No Lab- Thanksgiving
27-Nov	No Lab