

 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Undergraduate Programs	UUPC Approval _____ UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department Chemistry and Biochemistry College Science	
Current Course Prefix and Number BCH 3033	Current Course Title Biochemistry 1	
<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: Change prefix From: _____ To: _____ Change course number From: _____ To: _____ Change credits* From: _____ To: _____ 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.</small> <small>**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines.</small> <small>***GE criteria must be indicated in syllabus and approval attached to this form. See Intellectual Foundations Guidelines.</small>	Change description to: Foundation course in biochemistry, covering the properties of amino acids, nucleic acids, carbohydrates, and lipids. Also covered are the principles of replication, transcription, and translation, enzyme kinetics, biological membranes and transport, and biology's cellular, chemical, physical, genetic, and evolutionary foundations. Change prerequisites/minimum grades to: Change corequisites to: Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).	
Effective Term/Year for Changes: Fall 2024	Terminate course? Effective Term/Year for Termination:	
Faculty Contact/Email/Phone Tito Sempertegui / tsempert@fau.edu / 561-297-2508		
Approved by Department Chair <u>Andrew Tepent's</u> College Curriculum Chair <u>[Signature]</u> College Dean <u>[Signature]</u> UUPC Chair _____ Undergraduate Studies Dean _____ UFS President _____ Provost _____	Date 9-27-24 10/25/24 10-24-24 _____ _____ _____	

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



FLORIDA ATLANTIC UNIVERSITY

BCH 3033-001 10212

Biochemistry 1

Date: Wednesday, Friday 9:30 AM - 10:50 AM **Building:** Phil

Smith Hall Boca **Room:** 120

3 Credit(s)

Fall 2024 - 1 Full Term

Instructor Information

Donella Beckwith

Email: dbeckwith@fau.edu

(Please allow 24-48 business hours for reply)

Office: PS216

Office Hours: W/F 10:50 am - 11:50 am (begins 8/21/24)

TA Name: Jay Jebelli **Office:** PS314 **Office Hours:** To Be Announced **Email:** jjebelli@fau.edu

For problems or questions related to homework, exams, and grades please contact your TA at their email. When many students ask similar questions, announcements are made in Canvas instead of replying to each email separately.

Course Description

Biochemistry 1

Prerequisite: CHM 2210 and 2211

Foundation course in biochemistry, covering the properties of amino acids, nucleic acids, carbohydrates, and lipids. Also covered are the principles of replication, transcription, and translation, enzyme kinetics, biological membranes and transport, and biology's cellular, chemical, physical, genetic, and evolutionary foundations.

Prerequisites/Corequisites

Prerequisite(s): All of the following:

- CHM 2210 Graduate / Undergraduate (Minimum Grade of D-)
- CHM 2211 Graduate / Undergraduate (Minimum Grade of D-)

This is NOT a self-paced course and students need to complete work by scheduled deadlines, and test on specific dates/times (see the Course Schedule for specific deadlines and test dates). Lectures will NOT be recorded.

Instructional Method

In-Person

This class is designated as “In-person”. Class sessions will be conducted in the designated classroom. Students must have access to FAU’s learning management system: Canvas. You must log into Canvas with your FAU ID and Password to access materials, assignments, and grades in this course. If you do not know your FAU ID or Password, click on this link. Technical problems with Canvas should be addressed with OIT. In-person lectures are not recorded.

Required Texts/Materials

Lehninger Prin of Biochemistry (Achieve 1-Term Access Card)

ISBN: 9781319230906

Publisher: MPS

Edition: 8th

Recommended Readings and Materials



Achieve for Lehninger Principles of Biochemistry

ISBN: 9781319350161

Publisher: MPS

Edition: 8th

Books (digital or hardcopy) can be rented or purchased new or used from the FAU bookstore, Booksmart, Cengage, or other online suppliers. You can use an older edition of this book (8th Ed. hardcopy ISBN-13: 9781319228002).

Lehninger Prin of Biochemistry (Achieve 1-Term Access Card)

ISBN: 9781319230906

Publisher: MPS **Edition:**

8th

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.

Time Commitment in Perspective

Students enrolled in a 3-credit course are expected to spend a minimum of 5,400 minutes of out-of-class-time specifically working on course-related activities (i.e., reading assigned pieces, completing homework, preparing for exams and other assessments, reviewing class notes, etc.) and fulfilling any other class activities or duties as required.

This is a very demanding course and will require substantial time commitment to do well. Please be sure to give this class appropriate time or it may not go well. Previous students report spending at least 2 hours per day, every day, every week of out-of-class-time specifically working on course-related activities as a starting point.

Course Objectives/Student Learning Outcomes

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

- Understand the fundamental principles of biochemistry which forms the essence of life.
- Understand biomolecules that constitute living organisms and their properties.
- Develop a thorough understanding of the solvent properties of water in living things; ionization, acid-base behavior, pH changes in biological systems.
- Describe and identify structure and function as they relate to amino acids, peptides, proteins, carbohydrates, nucleic acids and nucleotides, lipids, and biological membranes.
- Understand how enzymes work, their mechanism of action, and enzyme kinetics.
- Understand genetic information transfer: DNA to RNA to protein, DNA replication, transcription, translation, gene expression, and DNA repair mechanisms.

Course Evaluation Method

There are 13 instructional Learning Modules in the Canvas LMS. Please consult the Course Schedule for specific dates each Module will officially “open” and officially “close.” Although prior Modules will not be removed from view, work submitted after a Module officially closes will not receive credit. Below is a summary of assessments that will determine students’ grades in this course.

There are NO graded reading assignments in this course but students are expected to read the assigned chapters and complete the end of chapter problems in order to assist in understanding the material. Exam questions are not drawn exclusively from the textbook, but the text can provide a useful alternative view of the material covered in lectures.

The course grade will be based on:

Syllabus and Canvas Agreement Module (ungraded): You must complete a Syllabus and Canvas Agreement (Getting Started Module) within the first week of the term. It is available on the Canvas Home Page under Modules. ***No course Modules for the Chapters will become available until you have completed the Getting Started Module.***

The course material on Canvas is organized into modules by chapter. The Canvas course begins with a START HERE module that will familiarize you with the organization and navigation of the course. Always refer back to this module if you ever have questions. Many links are included to make navigation easy.

For each chapter you will open a new module to access the lecture PowerPoint slides, assignments, and other relevant materials. Students are encouraged to read the chapters prior to lecture (chapters from the textbook are listed in the syllabus as well as on Canvas).

Problem sets, simulations, and homework are assigned for each chapter and may include topics not covered in lecture. These sets contain problems that will serve as a source of in-class discussion and build your knowledge for the exams. Your success in class is related to the time you spend problem solving.

Homework (100 points)

Each chapter (13 chapters) will have a homework assignment associated with it. Only 10 homework assignments (10 points each) will count towards your course homework grade of 100 points. The total possible points available to earn in this course for homework assignments is equal to 100 points. Students are encouraged to complete all the homework assignments available (13 in total). Due dates for each chapter are listed in Canvas and within the syllabus and there will be no extensions in time for any homework assignment unless you have a documented, verified FAU excuse. Technical difficulties with your computer, software, or online connection are not acceptable excuses for extensions. Homework assignments can be completed early. Homework assignment due dates may change if the course is running behind the planned schedule. Additional practice problems are available in the *Achieve* software (ungraded/optional).

Critical Thinking Question Assignments (100 points)

In most lectures (except the first day of class and on exam days), I will pose a critical thinking question(s) to the class that will require an answer to be provided in one of two ways. 1) If asked a free response question, students will need to post their response (answer) to the question in Canvas under assignments by the night before the next lecture (by 11:59 pm) that include citations. 2) If asked a multiple choice question(s), students will need to submit their answer(s) in class on a blue scantron. There are 20 Critical Thinking Question Assignments that equal 100 points (5 points x 20 assignments = 100 points). The questions will only be provided/available during lecture. There will be no extensions in time for any Critical Thinking Question Assignment unless you have a documented, verified excuse. Technical difficulties with your computer, software, or online connection are not acceptable excuses for extensions. It is the student's responsibility to have a blue scantron with them in each lecture. Using an AI or ChatBot to generate responses for these questions is not acceptable.

Multiple students found with similar responses will receive zeros.

Exams (200 points)

There will be three in-person exams worth 100 points each. The lowest of the three exam grades will be dropped, making the total points for the exams equal to 200 points (300 points – 100 points = 200 points). Exams will be comprised of around 40 questions but no more than 50. Students will be given 80 minutes to test (the pedagogical standard). Internet, AI or Electronic assistance, books, or collaboration during testing is not allowed and will result in a zero. However, one single page (8.5" x 11") of hand written notes (front and back) will be allowed during the exam. Blue scantrons are required and must be provided by the student (you can bubble in your Z# and name before the exam see Canvas on how to fill out). A photo ID is required for testing; an FAU OWL CARD is recommended (all students are required to have an Owl Card, see <https://www.fau.edu/businessservices/owl-card/>), but any government-issued photo ID will be accepted as long as you look like your ID image. Exam study outlines are available on Canvas under each Module. Each exam will be based on readings, lectures, homework, and class discussions. However, assessments are authentic, robust and meant to engage students (more in-depth), and are designed to thoroughly test material covered in all previous chapters/lectures in Biochemistry, as well as relevant concepts from Organic Chemistry and General Chemistry. Exams will be conducted in person in your regular lecture room at the regular class time (*see the Course Schedule for dates*). Students must be present and seated at the beginning of the scheduled exam time to take the exam. Late arrivals will not be accommodated, this means you will not be allowed to enter the room to take the exam if you are more than 10 minutes late, you will receive a zero. Alternate testing dates or extensions in time for examinations cannot be considered. Exam procedures are posted on Canvas; failure to observe testing procedures is a violation of academic integrity, which will be addressed in accordance with the FAU Code of Academic Integrity Regulation 4.001.

Final Exam (100 points)

There is one mandatory in-person cumulative final exam worth 100 points. The final exam will be on the date and time as scheduled by the University (*see the Course Schedule for date and time*). The exam will be comprised of around 40 questions but no more than 50. Students will be given 80 minutes to test (the pedagogical standard). Internet, AI or Electronic assistance, books, NOTES, or collaboration during testing is not allowed and will result in a zero. A blue scantron is required and must be provided by the student (you can bubble in your Z# and name before the exam - see Canvas on how to fill out). A photo ID is required for testing; an FAU OWL CARD is recommended (all students are required to have an Owl Card, see <https://www.fau.edu/businessservices/owl-card/>), but any government-issued photo ID will be accepted as long as you look like your ID image. The exam will be based on readings, lectures, homework, and class discussions. However, assessments are authentic, robust and meant to engage students (more in-depth), and are designed to thoroughly test material covered in all previous chapters/lectures in Biochemistry, as well as relevant concepts from Organic Chemistry and General Chemistry. Students must be present and seated at the beginning of the scheduled exam time to take the exam. Late arrivals will not be accommodated, this means you will not be allowed to enter the room to take the exam if you are more than 10 minutes late, you will receive a zero. Alternate testing dates or extensions in time for examinations cannot be considered. Exam procedures are posted on Canvas; failure to observe testing procedures is a violation of academic integrity, which will be addressed in accordance with the FAU Code of Academic Integrity Regulation 4.001.

Additional Exam and Final Exam Rules:

Students will need to provide a blue scantron, pencil, eraser, and scientific calculator (**TI-30 version or less** all others will have to be put away) and one 8.5" x 11" note page for exams 1-3. No hoodies, hats, ear buds, earphones, smart watches, sunglasses, smart glasses, cell phones, or other materials or electronics of any kind are allowed to be out or ON during your exams. Drink cups and bottles will be placed in your bags or on the floor. Scratch paper is in your exam packet we provide and you can write on the exam. No talking is allowed

during the exam and you cannot start the exam until notified to do so. Picture identification is required to submit your exam.

Your final course grade will be determined using the formula below:

	Points Each	Total Points
Homework (10 assignments)	10	100 (3 HW grades dropped)
Critical thinking questions (20)	5	100
Exams 1, 2, 3	100	200 (1 exam grade dropped)
Final Exam	100	100
TOTAL POINTS:		500

Final letter grades will be assigned based on total grade points earned, as set forth in the tables above and below. Grade points will not be rounded up. Please do NOT ask for special grade consideration. All assessments must be administered in accordance with published guidelines, and exceptions cannot be made for individual students.

Letter Grade	Points
A	468-500
A-	450-467
B+	433-449
B	413-432
B-	398-412
C+	383-397
C	363-382
C-	348-362
D+	333-347
D	313-332
D-	298-312
F	0-297

You may monitor your progress using the online Canvas Learning system (<http://canvas.fau.edu/>).

Course Grading Scale

Letter Grade	Letter Grade
A	94 - 100%
A-	90 - 93.99%
Letter Grade	Letter Grade

B+	87 - 89.99%
B	83 - 86.99%
B-	80 - 82.99%
C+	77 - 79.99%
C	73 - 76.99%
C-	70 - 72.99%
D+	67 - 69.99%
D	63 - 66.99%
D-	60 - 62.99%
F	Below 60

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](#).

Cheating

Cheating is defined in the FAU Student Code of Conduct as “...the unauthorized use of notes, books, electronic devices, or other study aids while taking an examination or working on an assignment, providing unauthorized assistance to or receiving assistance from another person or entity during an examination or while working on an assignment, having someone take an exam or complete an assignment in one’s place, or securing an exam, receiving an unauthorized copy of an exam, sharing a copy of an exam or uploading an exam or exam questions online.

Other Forms of Dishonesty

Other forms of dishonesty are defined in the FAU Student Code of Conduct as “... falsifying or inventing information, data, or citations, failing to comply with examination regulations or failing to obey the instructions of an examination proctor, submitting the same paper or assignment, or part thereof, in more than one class without the written consent of both instructors, and any other form of academic cheating, plagiarism, or dishonesty.

Classroom Etiquette/Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as “... activities which interfere with the educational mission within classroom.” Students who disrupt the educational experiences of other students and/or the instructor’s course objectives in a face-to-face or online course are subject to disciplinary action. Such behavior impedes students’ ability to learn or an instructor’s ability to teach. Disruptive behavior may include but is not limited to non-approved use of electronic devices (including cellular telephones); cursing or

shouting at others in such a way as to be disruptive; or other violations of an instructor's expectations for classroom conduct.

Plagiarism

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. This includes all discussion board posts, journal entries, wikis, and other written and oral presentation assignments. If in doubt, cite your source.

Netiquette

Due to the casual communication common in the online environment, students are sometimes tempted to relax their grammar, spelling, and/or professionalism. Please remember that you are adult students and professionals—your communication should be appropriate. For more in-depth information, please see the FAU statement on netiquette.

Social Media

Students sharing course materials or information through any social media site, such as GroupMe, WhatsApp, or Chegg, is strictly PROHIBITED. Establishing or participating in a site and sharing course information will be considered a violation of the FAU Code of Academic Integrity.

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 nonattendance. 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.

Course Participation:

Students are expected to login to the Canvas Learning Management System daily to ensure that assessment participation, pertinent postings and/or announcements are not missed. When many students ask similar questions, announcements are made in Canvas instead of replying to each email separately.

Exam Dates:

Exam 1: Wednesday Sept. 25, 9:30-10:50 am

Exam 2: Wednesday Oct. 30, 9:30-10:50 am

Exam 3: Friday Nov. 22, 9:30-10:50 am

Final: Wednesday Dec 11, 7:45am

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/.

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 executive director of The Office of Civil Rights and Title IX. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

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

Assessments must be completed on time. The need for accommodation for missed work is not expected in this course due to the flexible date/time ranges afforded for completion of most assessments (avoid last-minute issues that can result in loss of credit—don't procrastinate!). Due date extensions will only be considered for FAU-approved activities, religious observance, student illness, or death of a close family member, at the discretion of the Instructor.

LATE ASSIGNMENTS POLICY

Late work will not be accepted. There are no extensions to assignment deadlines.

Make-up Policy for Tests

Any student who does not take an exam at the scheduled time will receive a score of zero on that exam. An exemption from this policy will be considered only for one of the following documented, verified reasons:

1. Medical emergency or problem
2. Death in the immediate family
3. Participation in a FAU-sponsored academic or athletic activity
4. Required appearance in a civil or criminal court
5. Religious holiday
6. Military obligation

Only one make-up exam is permitted under this policy and only for exam 1 or 2 (exam 3 and the final exam will NOT be considered). Make up exam dates/times will be announced by the instructor during the semester. Instructor will notify students of the date, time, and location of the makeup exam through Canvas announcement and/or email. It is the student's responsibility for reading all emails and announcements posted by the Instructor. There will be no make up for the third and final exam.

Delays in notification or documentation will jeopardize receiving accommodations.

Planned Absences

Participation in FAU-sponsored academic or athletic approved activities or religious observances are planned (excusable) events, so accommodations for such events must be made in advance to facilitate scheduling of accommodations prior to the originally scheduled due date. Requests for accommodations due to participation in an FAU-approved activity must be accompanied by documentation from FAU personnel involved in the sport

or club leadership, that verifies participation in the event and this documentation must be received prior to the planned exam that will be missed.

Unexpected Absences

Should an emergency arise on an exam date (or otherwise) that you believe warrants special consideration, please provide documentation for the emergency in an email to Dr. Beckwith (dbeckwith@fau.edu) from your FAU email at your earliest opportunity. Delays in notification or documentation will jeopardize receiving accommodations. Documentation for medical absences must state the student's full name, beginning and ending dates of illness or incapacity, the medical provider's office contact information for verification, and be signed by a physician (MD) or physician's assistant (PA). Acceptable documentation for absences due to loss of a family member is either a death certificate, an obituary naming the student as next of kin, or a note from the funeral director (the latter is often easiest to obtain as funeral directors routinely provide these).

Any request for a make-up assignment or test that is not accompanied by acceptable documentation will not be considered. Accommodation will be considered on a case-by-case basis; late penalties or grade reductions may apply and all documentation will be verified.

NOTE THAT TECHNOLOGICAL ISSUES DO NOT CONSTITUTE AN EXCUSABLE EMERGENCY.

Students are required to have and maintain reliable equipment and internet connections for course participation (see Required Computing Capabilities in the Special Course Requirements section of this syllabus).

Incomplete Grade Policy

The University policy states that a student who is passing a course but has not completed all work due to exceptional circumstances, may, with consent of the Instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the Instructor but is allowed only if the student is passing the course and has completed a majority of the course work at the time of the request. Incomplete is not to be used to allow students to do extra work subsequently to raise a grade or repeat the whole course for a better grade. To be considered to receive an incomplete grade:

1. Majority of the course work must be completed.
2. Student must have a passing grade at the time of the request.

Student must have documentation for an exceptional circumstance and documentations must be presented during the request.

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 therapy, group therapy, and crisis 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](#)
- [Center for Global Engagement](#)
- [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 \(WAC\)](#)

Artificial Intelligence Preamble

FAU recognizes the value of generative AI in facilitating learning. However, output generated by artificial intelligence (AI), such as written words, computations, code, artwork, images, music, etc., for example, is drawn from previously published materials and is not your own original work.

FAU students are not permitted to use AI for any course work unless explicitly allowed to do so by the instructor of the class for a specific assignment. [\[Policy 12.16 Artificial Intelligence\]](#)

Class policies related to AI use are decided by the individual faculty. Some faculty may permit the use of AI in some assignments but not others, and some faculty may prohibit the use of AI in their course entirely. In the case that an instructor permits the use of AI for some assignments, the assignment instructions will indicate when and how the use of AI is permitted in that specific assignment. It is the student's responsibility to comply with the instructor's expectations for each assignment in each course. When AI is authorized, the student is also responsible and accountable for the content of the work. AI may generate inaccurate, false, or exaggerated information. Users should approach any generated content with skepticism and review any information generated by AI before using generated content as-is.

If you are unclear about whether or not the use of AI is permitted, ask your instructor before starting the assignment.

Failure to comply with the requirements related to the use of AI may constitute a violation of the [Florida Atlantic Code of Academic Integrity, Regulation 4.001](#).

Proper Citation: If the use of AI is permitted for a specific assignment, then use of the AI tool must be properly documented and cited. For more information on how to properly cite the use of AI tools, visit <https://fau.edu/ai/citation>

AI Language Specific To This Course

- AI Prohibited: The use of AI to assist in any work assigned in this specific course is prohibited.

Course Topical Outline

Tentative Lecture Outline: Content and dates are subject to modification.

DATES	CHAPTER	TOPICS	TO DO
08/21/24	1	Introduction to Course & The Foundations of Biochemistry	Canvas Intro and Read Ch.1
08/23/24	1	The Foundations of Biochemistry	Read Ch. 2
08/28/24	2	Water, the Solvent of Life	Complete class question
08/30/24	2	Water, the Solvent of Life	Read Ch. 3, Complete class question
09/04/24	3	Amino Acids, Peptides, and Proteins	Complete class question
09/06/24	3	Amino Acids, Peptides, and Proteins	Read Ch. 4, Complete class question
09/11/24	4	The 3D Structure of Proteins	Complete class question
09/13/24	4	The 3D Structure of Proteins and Protein Function	Read Ch. 5, Complete class question
09/18/24	5	Protein Function	Complete class question
09/20/24	5	Protein Function	Study for Exam #1, HW 1-5 due
09/25/24		Exam #1: Chapters 1-5 (Bring picture ID)	Read Ch. 6
09/27/24	6	Enzymes	Complete class question
10/02/24	6	Enzymes	Complete class question
10/04/24	6	Enzymes	Read Ch. 7, Complete class question
10/09/24	7	Carbohydrates and Glycobiology	Complete class question
10/11/24	7	Carbohydrates and Glycobiology	Read Ch. 10, Complete class question
10/16/24	10	Lipids	Complete class question
10/18/24	10	Lipids	Read Ch. 11, Complete class question
10/23/24	11	Biological membranes and Transport	Complete class question
10/25/24	11	Biological membranes and Transport <i>(last day to drop with W)</i>	Study for Exam #2, HW 6-11 due
10/30/24		Exam #2: Chapters 6,7,10,11 (Bring picture ID)	Read Ch. 8
11/01/24	8	Nucleotides and Nucleic Acids	Complete class question
11/06/24	8	Nucleotides and Nucleic Acids	Read Ch. 25, Complete class question
11/08/24	25	DNA Metabolism	Complete class question
11/13/24	25	DNA Metabolism	Read Ch. 26, Complete class question
11/15/24	26	RNA Metabolism	Read Ch. 27, Complete class question
11/20/24	27	Protein Metabolism	Study for Exam #3, HW 8,25-27 due
11/22/24		Exam #3: Chapters 8,25-27 (Bring picture ID)	Study for Final Exam
12/11/24		Final Exam: 7:45am - 10:15am in regular classroom, must be present at 7:45am to take exam, cumulative (Bring picture ID)	

Communication Policy

Expectations for Students

Announcements

When many students ask similar questions, announcements or discussion boards are made in Canvas instead of replying to each email separately.

You are responsible for reading all announcements posted by the instructor and TA. Check the course announcements each time you log into Canvas. It is suggested that you optimize your Canvas notifications so that course announcements are forwarded to a place you will receive them immediately. It is strongly recommended that your Canvas notifications are set so that you receive an immediate email of each announcement, so that important course information is not missed. To receive announcements directly to your email:

1. Within our Canvas course, select 'Account' in the left control panel; then
2. Select 'Notifications'; then

3. Select the bell icon next to 'Announcement' in the 'Course Activities' section and select 'Notify Immediately' (the bell icon will turn green, indicating that you have elected to receive an immediate email for each new announcement posted on Canvas).

Email/Video Conferencing

You are responsible for reading all your course email and responding in a timely manner. Emails sent to the instructor or TA must be sent from your FAU email or through Canvas. When many students ask similar questions, announcements are made in Canvas instead of replying to each email separately.

Instructor's Plan for Classroom Response Time & Feedback

Email/Video Conferencing Policy

Except for weekends and holidays, the instructor will typically respond to emails (Canvas inbox or FAU email) within 48 hours. If you have questions of a personal nature, you should email the instructor using your FAU email only.

Assignment Feedback Policy

The instructor or TA will provide feedback on submitted assignments within one week of the submission date. Some assignments may require a longer review period, which the instructor will communicate to you.

Course-Related Questions Policy

Except weekends and holidays, the instructor will generally answer questions within 48 hours.

Electronic Communication Policy

In addition to the University's policy, please consider the following:

- Privacy, confidentiality, and security in all electronic communications.
- All electronic communication resources must be used for the course and in alignment with to the University mission.
- Prohibited use of false identity, false identity pseudonyms, or anonymous (sender's name or electronic identification is hidden).
- Access without consent.
- Disruption of services including introducing computer contaminants (viruses).
- Harassment of any kind.

Please see the Office of Information Technology's policies on Cyber Security Awareness.

Minimum Technology and Computer Requirements

Hardware & Software Requirements

Hardware

- Dependable computer
- Computer speakers
- Headset
- Microphone
- Webcam
- Printer/Ink/Paper
- Scanner App or other scanning device

Software

- Microsoft 365 Suite
- Reliable web browser (recommended Chrome)
- Canvas mobile app: Download instructions for iOS device or Android device
- Adobe Reader
- Adobe Flash Player
- LockDown Browser and Monitor (no iPADS)

Internet Connection

- Recommended: Broadband Internet connection with a speed of 4 Mbps or higher.
- To function properly, Canvas requires a high-speed Internet connection (cable modem, DSL, satellite broadband, T1, etc.). The minimum Internet connection speed to access Canvas is a consistent 1.5 Mbps (megabits per second) or higher.

Computer Requirements

Basic Computer Specifications for Canvas

- Operating system: Windows 10 or macOS High Sierra (10.3) or higher.

Peripherals

- A backup option should be available to minimize the loss of work. This can be an external hard drive, a USB drive, cloud storage, or your folder on the FAU servers.

Software

- Once logged in to Canvas make sure your Internet browser is compatible.
- Other software may be required for specific learning modules. If so, the necessary links to download and install will be provided within the applicable module.

Minimum Technical Skills Requirements

The general and course-specific technical skills you must have to succeed in the course include but are not limited to:

- Accessing Internet.
- Using Canvas (including taking tests, attaching documents, etc.).
- Using email with attachments.
- Copying and pasting functions.
- Downloading and installing software.
- Using presentation, graphics, and other programs.
- Searching the FAU library and websites.
- Maneuvering through interactive screens and scenes.
- Using a scantron.
- Using a scientific calculator (TI-30).

Technical Support

In the online environment, technical issues are always possible (e.g., lost connection, hardware, or software failure). Many of these can be resolved relatively quickly, but if you wait until the last minute before due dates, the chances of these glitches affecting your success are greatly increased. Please plan appropriately. If a problem occurs, it is essential you take immediate action to document the issue so your instructor can verify and take appropriate action to resolve the problem. Most issues in Canvas can be resolved by clicking on the “Help” tab located on the menu bar.

When a problem occurs, click “Help” to:

- Report a Problem
- Live Chat with Canvas Support
- Search Canvas Guides

Additional Technical Support

1. Contact the eLearning Success Advisor for assistance: (561) 297-3590
2. If you can, make a Print Screen of the monitor when the problem occurs. Save the Print Screen as a .jpg file. Print screen should show the date and time.
3. Complete a Help Desk ticket. Make sure you complete the form entirely and give a full description of your problem so the Help Desk staff will have the pertinent information in order to assist you properly. This includes:
 - a. Select “Canvas (Student)” for the Ticket Type.
 - b. Input the Course ID.
 - c. In the Summary/Additional Details section, include your operating system, Internet browser, and Internet service provider (ISP).
 - d. Attach the Print Screen file, if available.
4. Send a message within Canvas to your instructor to notify him/her of the problem. Include all pertinent information of the incident (2b-d above).
5. If you do not have access to Canvas, send an email to your instructor with all pertinent information of the incident (2b-d above).

6. If you do not have access to a computer, call your instructor with all pertinent information of the incident. If he/she is not available, make sure you leave a detailed message.
7. If you do not hear back from the Help Desk or your instructor within a timely manner (48 hours), it is your responsibility to follow up with the appropriate person until you obtain a resolution.

The instructor reserves the right to adjust this syllabus as necessary.