1



Syllabus

MWF 3:00 PM - 3:50 PM Hardman Hall, Room 101

F 12:40 PM – 1:30 PM & Hardman Hall, Room 101

We will meet in-person during our scheduled class time. Your attendance is required. Breakout session is a regular class and attendance is required.

Although masking will not be mandatory, I will be wearing a mask during. I am fully vaccinated. However, I encourage you to wear mask in class because: the variant is highly transmissible, even to and by vaccinated individuals.

This syllabus contains all of the information you need to know about the course goals, how you will be assessed, and how the course is organized. Please read through this carefully!



We are all connected to each other biologically, to the earth chemically, and to the rest of the universe atomically. - Neil deGrasse Tyson

Course Description

Prerequisite

(CHEM 2211 or CHEM 2311H or CHEM 2411) and (CHEM 2211L or CHEM 2311L or CHEM 2411L) and (BIOL 1107 or BIOL 2107H)

Course Tools

eLC

elc.uga.edu

Everything you need will be posted on eLC: announcements, reading guizzes, and case studies, etc.

Top Hat

tophat.com (Join Code: 981677)

We will be using **Top Hat Pro** (www.tophat.com) for class participation and questions. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.

For help setting up your account, see "Top Hat Start Guide" the Getting Started in eLC.

Textbook

Biochemistry: A Short Course, 4th Edition (Tymoczko, Berg, Stryer)

You may use an older edition of the book, but it is your responsibility to do the appropriate readings.

Peer Learning Assistants

Rachel Champagne Svarali Ahire rnc56162@uga.edu sva65557@uga.edu

Good news: this class is supported by Division of Academic Enhancement. PLAs are students who successfully took this course in a previous semester and are returning this semester to support you and your learning. They have received special training on how people learn and how to be an effective resource for you. In addition, they will meet regularly with your instructor to understand how to best support your learning in this course. PLAs are not here to reteach the material, nor to provide you with the answers, nor to evaluate your work. They do not grade assignments or exams and are not teaching assistants (TAs). PLAs are here specifically to help you learn by enhancing discussions and activities in this class. They will help you get the most out of classroom activities by clarifying instructions and assisting you in finding the right questions to deepen your learning. So, get to know your PLAs and take advantage of their training on your journey to academic success.

Professor



Dr. Jin Kyu Lee jinkyu@uga.edu

Office: Life Science Bldg. C102 120 Green Street Athens, GA 30602

Office Hours via zoom

Tuesday 3:30 PM – 5:00 PM Thursday 3:30 PM – 5:00 PM

Office Hours in-person

Wednesday 12:00 PM - 1:00 PM

Join Meeting

https://zoom.us/j/97728129248?pwd=M2VCZ285NkFjT3ZwcVR2d2lhWDh6Zz09

Meeting ID: 977 2812 9248

Passcode: 269108

Grader: Jessica McAlpine jjman95@uga.edu

Communication and Technology

To comply with the Family Educational Rights and Privacy Act (FERPA), all communication that refers to individual students must be conducted either in person or through a secure medium (i.e., UGAMail or eLC). Instructors are not allowed to respond to messages that refer to individual students or student progress in the course through non-UGA accounts, phone calls, or other forms of electronic media.

The use of computers is strongly encouraged because it will be necessary at times for responding to questions via Top Hat and for accessing information on the web. HOWEVER, *using technology for purposes unrelated to class is prohibited.* Not only would you be cheating yourself out of an opportunity to learn, but you would also be hurting your group. Please be respectful of class time.

Course Description

In this course, we will explore the chemistry of life.

This course has been designed to facilitate your learning of the topics of biochemistry and molecular biology. During our semester together, we will work on case studies, which have been chosen not only for the material they will teach you but also to give you a chance to develop problem-solving skills and scientific reasoning. You will learn about biochemical concepts and principles such as the chemical properties of the cellular environment, the thermodynamics and kinetics of biochemical reactions, metabolic pathways and how they are regulated, and the structure and function of biomolecules. You will not be expected to memorize the twenty amino acids that make up the proteins in our bodies, nor will you be asked to write the citric acid cycle from memory. Rather, you should be able to use information about amino acids and metabolism to answer broader questions about biochemistry. I expect you to come to class prepared to work, having read the relevant materials before class. I expect you to work during class, which means you will need to bring your textbook, your case, and a device with which you can access the Internet.

Course Organization

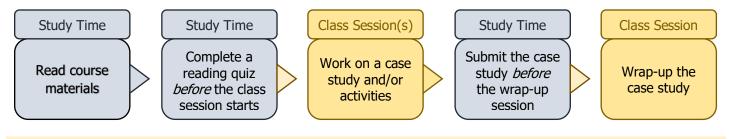
This course is divided into four units, each of which ends in an exam. Each unit will be detailed in a unit calendar, which will be posted on eLC at the beginning of the unit. The unit calendars will list learning objectives, readings, quizzes, case studies, and in-class activities on a day-by-day basis. You are responsible for downloading the unit calendars and completing all readings, quizzes, case studies, and exams as specified in the calendars.

Unit		Course Sessions	Exams		
1	Water and Proteins	Aug 17 – Sep 19	Sep 21		
2	Carbohydrate Metabolism	Sep 23 – Oct 12	Oct 14 (Breakout session)		
3	Integrated Metabolism	Oct 14 – Nov 7	Nov 9		
4	Amino Acid metabolism and	Nov 11 – Dec 2	Dec 5		
	Nucleic Acids				
	Final Exam (optional)		Dec 9 (3:30 PM - 4:30 PM)		

All course sessions will be used to help you meet the learning objectives and achieve success on the assessments. **Therefore, attendance is required at all sessions including breakout session.** During any one session, we may be (1) discussing cases, (2) solving problems, (3) reviewing for exams, or (4) discussing exams. You will have time to work with the material both alone and in groups, ask and respond to questions, and write and reflect. When necessary, I will give lectures on difficult concepts, but you will also be expected to work during each session.

Flow of One Topic Within a Unit

Each unit is made up of multiple topics. The time spent on each topic varies with the complexity of the topic.



Assessment

I expect you to take charge of your learning in this class. There is not enough time for us to cover every detail of biochemistry during class; therefore, you will have to do some learning on your own. You should expect to attend all class sessions and participate. Learning is not a spectator sport!

The best way to be successful is to complete ALL readings and assignments.

Type of Assessment	Number Offered	Number Dropped	Number Counted	Points Each	Total Points	% of Grade		
Formative – Informs you of your learning progress								
Reading Quizzes	14	2	12	4	48	7.6		
Case Studies	13	2	11	9	99	15.7		
Top Hat Questions (Correctness)	~100	0	~100	0.4	40	6.3		
Participation on Top Hat	~100	0	~100	0.4	40	6.3		
Course Evaluation	1	0	1	3	3	0.5		
Summative – Measures the <u>sum</u> of your learning								
Unit Exams	4	(0 or 1)	4	100	400	63.5		
Final Exam* (optional)	1	(0 or 1)	1	100	(100)			
				Total	630	100		

Reading quizzes (48 points, 7.6%)

There will be one quiz per topic that covers the reading assignments. The quizzes must be completed BEFORE class on eLC. Two lowest grades will be dropped.

Case studies (99 points, 15.7%)

There will be approximately one case study per week. These assignments will require you to apply knowledge you have gained from the reading and class discussion to real-life scenarios. Two lowest grades will be dropped.

Top Hat Questions (40 points, 6.3%)

There will be two or three Top Hat questions in a class. These questions will draw upon your understanding of Case Studies previously submitted. You should attend in-person class or zoom class to take the quiz.

Participation on Top Hat (40 points, 6.3%)

This will be assessed using Top Hat question. You will receive the points by just answering the Top Hat questions.

Course evaluation (3 points, 0.5%)

Complete the end-of-course evaluation and receive these points.

Unit Exams (400 points, 63.5 %)

These will include multiple-choice and short essay questions. There will be four unit exams. These exams will give you the opportunity to apply your understanding of biochemistry to novel problems. Unit exams will focus upon the

material within each unit. Technically, they are not cumulative, though they may draw upon your understanding of concepts from previous units.

*Final Exam (100 points) – Optional

It will replace the lowest grade among the four unit exams. If you were to do worst on the final than your other exams, the final will be dropped.

Draws on material from Unit 1, Unit 2, Unit 3, and 4.

Unit exams and final will be administered on eLC using Respondus Lockdown Browser (LDB) in class room as scheduled. You need to bring a laptop or iPad.

Grading Policies

- Late Reading Quizzes will NOT be accepted.
- Case studies will be accepted for 4 days after the due date but 1 point will be deducted for every day you are late.
- You should turn in your cases to the eLC assignment drop box. Only Word files (.doc or docx) are allowed for submission.
- 6 questions of each case studies will be selected randomly and graded using a grading rubric, worth 1.5 points each:
 - 1.5 point: question correct
 - 1.0 points: question partially correct
 - 0.75 point: question incorrect but attempted
 - 0 points: question not answered
- There is NO MAKE-UP for any missed Top Hat Question, Reading quiz, case, or exam.
- If you must miss an exam for a university-sanctioned event (*e.g.*, an athletic competition) or a graduate/professional school interview, you may arrange an <u>early exam</u>. You must provide written documentation of the event to the professor at least one week prior to the date when you would like to take the exam.
- Appeals for Top Hat participations and Top Hat Questions must be verbally made to me just after class (that is, the day of).
- Grade appeals (except Top Hat grade) must be submitted to me in writing within two weeks of receiving the grade.
- To be excused from class, students must submit the document proving the situation.

In order to be fair, there are no exceptions to these policies.

Tentative Grading Scale

Α	93 – 100
A-	90 – 92.9
B+	87 – 89.9
В	83 – 86.9
B-	80 – 82.9
C+	75 – 79.9
С	70 – 74.9
C-	65 – 69.9
D	60 – 64.9
F	≤ 60

I will determine the actual grade cutoffs based on the distribution of course percentages (see above). I anticipate that the class average of final grade will be in mid 80s. Depending on the class distribution, the lower limit of each grade shown above may be lowered. Examples: you will receive an A if you get at least 93%, but depending on the class average, the lowest A might be 92.5%; you will receive a B if you get at least 83%, but depending on the class average, the lowest B might be 82%; you will receive a C if you get at least 70%, but depending on class average, the lowest C might be 68%. If the class average is above 83%, the cutoffs for each grade will NOT be raised.

Guidelines for Recommendation Letters

I will write recommendation letters for students that achieve an A or A⁻ in my class. If you do not achieve those grades, I will write you a letter if you have clearly demonstrated hard work as demonstrated by multiple appearances to office hours for help and at least 90% attendance.

UGA Resources

Academic Honesty Policy

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at:

www.uga.edu/honesty.

(http://www.uga.edu/honesty/ahpd/culture_honesty).

Academic work includes, but is not limited to, course assignments, reading quizzes, case studies, exams, Top Hat questions, and course evaluations. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course

assignments and the academic honesty policy should be directed to the instructor.

Cheating is wrong. Cheating is wrong.

More specifically, the following examples are violations of the policy. You WILL NOT:

- 1. Post academic work to a text message, website (Course Hero, Koofers, etc.), electronic media, or physical space.
- 2. Copy someone else's academic work, or share your academic work with others.
- 3. Complete academic work for someone else.
- 4. Look at another person's exam or Scantron while taking an exam. NOTE: You are allowed to share your personal course notes if you would like to.

Students who violate this policy will be reported to the Office of the Vice President for disciplinary action, and are subject to severe disciplinary penalties including possible failure of the course and/or dismissal from the University.

DAE Peer Tutoring:

The Division of Academic Enhancement (DAE) offers free peer tutoring in over 200 of UGA's most rigorous courses including writing tutoring. To engage with a Peer Tutor, download the Penji app, available on iOS and Android, and sign in through SSO using your MyID.

Need help? Visit our website for more information on how to engage with a Peer Tutor or email us at tutor@uga.edu. In addition to peer tutoring, the DAE also provides Academic Coaching, Student Success Workshops and more. The DAE is committed to the success of all students at the University of Georgia. For more on these and other resources, please visit.

Disability Accommodations

Reasonable accommodations are available for students who have a disability. The Disability Resource Center in the Division of Student Affairs coordinates accommodations and services for students with disabilities. Contact them for details.

114 Clark Howell Hall 706-542-8791 voice 706-542-7719 fax 706-542-8778 TTY

CORONAVIRUS INFORMATION FOR STUDENTS

UGA adheres to guidance from the University System of Georgia and the recommendations from Georgia Department of Public Health (DPH) related to quarantine and isolation. Since this may be updated periodically, we encourage you to review the latest guidance here. The following information is based on guidance last updated on May 9, 2022.

As the COVID-19 pandemic transitions and public health conditions and treatments improve, UGA will begin treating COVID-19 as we do any other infectious disease cases.

Face coverings:

The University System of Georgia (USG) encourages people to wear masks based on their preference and assessment of personal risk.

How can I obtain the COVID-19 vaccine?

University Health Center is scheduling appointments for students through the UHC Patient Portal (https://patientportal.uhs.uga.edu/login_dualauthentication.aspx). Learn more here – https://www.uhs.uga.edu/healthtopics/covid-vaccine.

The Georgia Department of Health, pharmacy chains and local providers also offer the COVID-19 vaccine at no cost to you. To find a COVID-19 vaccination location near you, please go to: https://georgia.gov/covid-vaccine.

In addition, the University System of Georgia has made COVID-19 vaccines available at 15 campuses statewide and you can locate one here:

What do I do if I have COVID-19 symptoms?

Students who believe they have been directly exposed to COVID-19 and are showing symptoms should seek care from the University Health Center. Please isolate until you can be assessed and do not walk in. For everyone's safety, the Health Center is seeing patients by appointment only. For respiratory complaints, we will often schedule a telehealth visit via Zoom through which we can determine how best to arrange for both care and testing. To make an appointment via telehealth or in person please call 706-542-1162, or, if you know it use your primary care team's number.

What do I do if I test positive for COVID-19? (Isolation guidance)

Anyone who tests positive should isolate for 5 days, even if you are not experiencing any symptoms, regardless of vaccination status per the CDC. You are also strongly encouraged to share your test results with those you believe you were in close contact with so they may take appropriate measure to isolate.

There may be treatments available for some individuals with COVID-19. Please see this link for further information on the CDC website.

What if I have been exposed but am not showing any symptoms?

If you have have received **all recommended doses of the vaccine AND have been boosted if eligible,** or have had a covid positive viral test in the last 90 days:

- You do not need to quarantine at home.
- You should wear a mask around others for 10 days.
- If possible, get tested on day 5.
- If you develop symptoms, get tested and isolate at home until test results are received, then proceed in accordance with the test results.

You may continue to come to campus as you normally do. However, monitoring yourself for symptoms is still recommended. For information on where to get tested, visit the COVID-19 testing portal.

If you are **unvaccinated**, or became fully vaccinated more than 6 months ago (Moderna or Pfizer vaccine) or more than 2 months ago (J&J vaccine) and have not received a booster:

- You must **quarantine** at home for 5 days. After that, continue to wear a mask around others for 5 additional days.
- If possible, get tested on day 5.
- If you develop symptoms, get tested and isolate at home until test results are received, then proceed in accordance with the test results.

Well-being, mental health, and student support

If you or someone you know needs assistance, you are encouraged to contact Student Care & Outreach in the Division of Student Affairs at 706-542-7774 or visit https://sco.uga.edu/. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services. UGA has several resources to support your well-being and mental health: https://well-being.uga.edu/

Counseling and Psychiatric Services (CAPS) is your go-to, on-campus resource for emotional, social and behavioral-health support: https://caps.uga.edu/, TAO Online Support (https://caps.uga.edu/tao/), 24/7 support at 706-542-2273. For crisis support: https://healthcenter.uga.edu/emergencies/.

The University Health Center offers FREE workshops, classes, mentoring and health coaching led by licensed clinicians or health educators: https://healthcenter.uga.edu/bewelluga/

Monitoring conditions:

Note that the guidance referenced in this syllabus is subject to change based on recommendations from the Georgia Department of Public Health, the University System of Georgia, or the Governor's Office. For the latest on UGA policy, you can visit coronavirus.uga.edu.