

### BCH3025 Fundamentals of Biochemistry

Spring, 2025
Asynchronous Online, 4 Credits

#### Instructor – Peggy R. Borum, Ph.D.

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Cell - 352-562-2861

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Zoom office hours – Monday and Wednesday, 3:00 -4:00 PM, https://uflphi.zoom.us/j/4742141397

#### TA - Jake Shire, Graduate Student in Food Science and Human Nutrition

Email - jshine@ufl.edu

#### **Course Description**

Introducing biochemistry with emphasis on intermediary metabolism.

#### **Course Prerequisites**

Prerequisites - <u>CHM 2200</u> and <u>CHM 2200L</u> (or preferably <u>CHM 2210</u>, <u>CHM 2211</u> and <u>CHM 2211L</u>) with minimum grades of C.

#### **Course Learning Objectives**

- **Connect Catalysis to Life** Explain the role of catalysis in biological systems and how bioenergetics facilitates chemical reactions.
- **Identify Biochemical Structures** Identify and describe the structure-function relationships of biochemical compounds.
- **Deconstruct Bioenergetics** Deconstruct the process of bioenergetics within the context of energy production, storage and utilization.
- Integrate Metabolism Integrate biochemical concepts to explain the role of metabolism in homeostasis.
- Decipher Information Pathways Describe the interrelationships of DNA, different types of RNA, proteins, and different types of glycosylation or acylation in information pathways
- **Predict Phenotype Using Biochemistry** Predict the effects of genetic and environmental factors on an organism's phenotype, using biochemistry principles.
- Relate Biochemistry to Your Future Hypothesize how biochemistry will impact your future.

#### **Learning Materials and Supplies**

- The required text for BCH 3025 is "Lehninger Principles of Biochemistry" by David L. Nelson, Michael M. Cox, and Aaron A. Hoskins Eighth Edition, 2021. This course requires access to the Achieve site. The Achieve site includes access to an ebook. Please note that this course will be participating in the UF All Access program. Login at the following website and Opt-In to gain access to your UF All Access course materials <a href="https://www.bsd.ufl.edu/AllAccess">https://www.bsd.ufl.edu/AllAccess</a> UF All Access will provide you with your required materials digitally at a reduced price and the charge will be posted to your student account. This option will be available starting 1 week prior to the start of the semester and ending 3 weeks after the first day of class.
- When you purchased access to Achieve (available through UF Bookstore), you received a code needed to login to Achieve. When you log into Canvas you will see Macmillan Learning on the left navigation pane. This will take you to a screen where you will need your code for the first time you login. The electronic textbook is available to you at any time you have internet access without carrying a heavy book. The required graded learning activities "Knowledge Check" and "Principle Based Problems" are also in Achieve and available from the Assignments tab.
- I appreciate that textbooks are expensive including this one. However, the package deal of the electronic text and the many study materials is cheaper than purchasing the many pieces separately. Additional study aids based on the textbook material are provided to students in Canvas at no additional costs

#### Instructor's Interaction Plan

- The best way to Contact the instructor and the TA is using Canvas mail. We often use Canvas Mail or the Announcement tab to keep everyone updated. It is a good idea to log in to Canvas every day to see what is happening.
- Our zoom chat (office hours) on Wednesday and Sunday afternoons at 3:00 PM in zoom room <a href="https://uflphi.zoom.us/j/4742141397">https://uflphi.zoom.us/j/4742141397</a> are important times for interaction and communication. Those times were chosen to find a time each week that does not conflict with class or other responsibilities. We can discuss most any topic you desire. If you have a special request, we can often resolve it more quickly during the zoom chat using a private breakout room than using email threads. I encourage you to take advantage of attending our zoom chats.
- Our Teaching Assistant, Jake, will take the grading lead on the "Proposed Solution to a Biochemical Mystery" and initial questions should be addressed to him. The instructor will take the grading lead on all the other assignments. Of course, we both want to help you in any way we can.
- Expect an instructor response to email and Canvas message within 24-48 hours, during weekdays
- Please do not wait until the weekend to complete assignments, as I may not be available to answer emails or messages as quickly.
- Expect instructor feedback for submitted assignments within one week past the assignment deadline

- If you ever have questions or need clarification on instructor feedback, please message or attend office hours.
- I will post an announcement at least once a week to give updates and class feedback.
- I invite your feedback in both midterm and end-of-term GatorEvals and plan to continuously improve student experience within the course. Your opinion is highly valued.

#### Required Technology & How to Obtain the Technology

- Required peripherals, such as speakers, a microphone, extended reality accessories (e.g., AR/VR/XR), or a headset are clearly specified.
- Links to all downloadable resources are provided. These resources include software and online tools, apps, plug-ins such as PDF Reader, media players, collaboration tools, social media, interactive multimedia apps, etc.
- Instructions are provided for how to access materials available through the institution's library or subscription services, including online journals or databases. When available, links are also provided.]
- If publisher materials are required, clearly stated instructions for how to obtain and use any required access codes are provided.
- Honorlock will proctor your 4 exams this semester. Honorlock is an online proctoring service that allows you to take your exam from the comfort of your home. You do not need to create an account, download software, or schedule an appointment in advance. Honorlock is available 24/7, and all that is required is a computer, a working webcam/microphone, your id, and a stable internet connection.
  - To get started, you will need google chrome and download the honorlock chrome extension.
  - When you are ready to complete your assessment, log into canvas, go to your course, and click on your exam. Clicking "launch proctoring" will begin the honorlock authentication process, where you will take a picture of yourself, show your id, and complete a scan of your room. Honorlock will be recording your exam session through your webcam, microphone, and recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.
  - Honorlock support is available 24/7/365. If you encounter any issues, you may
    contact them through live chat on the support page or within the exam itself.
     Some guides you should review are honorlock msrs, student faq, honorlock
    knowledge base, and how to use honorlock. Good luck!

# Required Technology & Digital Information Literacy Skills Technical skills may include:

- Using the learning management system
- Using email with attachments
- Creating and submitting files in commonly used word processing program formats
- Downloading and installing software
- Using spreadsheet programs

- Using presentation and graphics programs
- Using apps in digital devices
- Using web conferencing tools and software

#### Digital information literacy skills may include:

- Using online libraries and databases to locate and gather appropriate information
- Using computer networks to locate and store files or data
- Using online search tools for specific academic purposes, including the ability to use search criteria, keywords, and filters
- Analyzing digital information for credibility, currency, and bias (e.g., disinformation, misinformation)
- Properly citing information sources
- Preparing a presentation of research findings

#### **Communication Guidelines**

- Use **Course Question Discussion Board**, for general course questions that others may have too.
- Use Canvas Inbox (messaging tool) for questions that are specific to your grades or submissions.
- **Email & phone correspondence** are for (1) setting a meeting time for office hours, (2) DRC accommodations; (3) emergency situations; or (4) highly sensitive situations.
- A respectful tone is used by all community members in all forms of communication.
- Written communication, both formal and informal, uses the official language of instruction rather than popular online abbreviations and graphic elements such as those sometimes used in social media.
- Video interactions reflect a respectful tone in verbal communications and body language.
- Spelling, punctuation, and grammar are correct.

#### **Technical Support**

UF Computing Help Desk & Ticket Number: All technical issues require a UF Helpdesk Ticket Number. The UF Helpdesk is available 24 hours a day, 7 days a week. <a href="https://helpdesk.ufl.edu/">https://helpdesk.ufl.edu/</a> | 352-392-4357

## Weekly Course Schedule

(0) Big Exam; (#) Module Assessments; (X) Authentic Activities

O Dig Exam, (#)	odule Assessments; X Authentic Activities
	Week 1
Monday –	Introduction to course; – <b>Module 1</b> (Chapter 1 in textbook) - <b>The</b>
January 13,	Foundations of Biochemistry
2025	
Tuesday –	Module 2 (Chapter 3 in textbook) - Amino Acids, Peptides, and Proteins
January 14,	
2025	
Wednesday -	Module 3 (Chapter 5 in textbook) - Protein Function
January 15,	
2025	
Friday –	Module 4 (Chapter 6 in textbook) – Enzymes
January 17,	The deadline for Knowledge Checks and Principles Based Problems for
2025	Module 1 - Module 4 are delayed until next week due to drop/add.
	Week 2
Monday –	Have a safe and enjoyable MLK Day!
January 20,	
2025	
Tuesday –	Module 5 (Chapter 7 in textbook) - Carbohydrates and Glycobiology
January 21,	(#) Post Biochemistry in My World in 2035 - Step 1 by 11:59 PM
2025	
Wednesday -	(#) Knowledge Checks and Principles Based Problems for Module 1 and
January 22,	Module 2 due at 11:59 PM
2025	
Thursday –	(#) Knowledge Checks and Principles Based Problems for Module 3 and
January 23,	Module 4 due at 11:59 PM
2025	
Friday –	(#) Knowledge Checks and Principles Based Problems for Module 5 due at
January 24,	11:59 PM
2025	1
	Week 3
Monday –	(#) Post Student's View into Biochemical Mysteries 1 by 11:59 PM
January 27,	
2025	
Tuesday –	(#) Authors must post Proposed Solution to a Biochemical Mystery Step 1
January 28,	by <b>11:59 PM</b>
2025	
Wednesday –	(0) Exam 1 on Modules 1, 2, 3, 4, and 5 must be completed online via
January 29,	Honorlock between 7:00 AM and 10:00 PM.
2025	

Friday –	Module 6 (Chapter 8 in textbook) - Nucleotides and Nucleic Acids			
January 31,				
2025	at 11:59 PM			
Week 4				
Monday – Module 7 (Chapter 9 in textbook) - DNA-Based Information Technologies				
February 03,	(#) Knowledge Checks and Principles Based Problems for Module 7 due at			
2025	11:59 PM			
Wednesday -	Module 8 (Chapter 10 in textbook) – Lipids			
February 05,	(#) Knowledge Checks and Principles Based Problems for Module 8 due at			
2025	11:59 PM			
Friday - February	Module 9 (Chapter 11 in textbook) - Biological Membranes and Transport			
07, 2025	(#) Knowledge Checks and Principles Based Problems for Module 10 due			
	at 11:59 PM			
	<u>Week 5</u>			
Monday –	Module 10 (Chapter 12 in textbook) – Biochemical Signaling			
February 10,	(#) Knowledge Checks and Principles Based Problems for Module 10 due			
2025	at 11:59 PM			
Wednesday	(#) Post Student's View into Biochemical Mysteries 2 by 11:59 PM			
February 12,				
2025				
Friday – February	(0) Exam 2 on Modules 6, 7, 8, 9, and 10 must be completed online via			
14, 2025	Honorlock between 7:00 AM and 10:00 PM.			
	Week 6			
Monday –	Module 11 (Chapter 13 in textbook) – Introduction to Metabolism			
February 17,	(#) Knowledge Checks and Principles Based Problems for Module 11 due			
2025	at 11:59 PM			
Wednesday	Module 12 (Chapter 14 in textbook) - Glycolysis, Gluconeogenesis, and the			
February 19,	Pentose Phosphate Pathway			
2025	(#) Knowledge Checks and Principles Based Problems for Module 12 due			
	at 11:59 PM			
Friday – February	(#) Authors must post Proposed Solution to a Biochemical Mystery Step 2			
21, 2025	by 11:59 PM			
	Week 7			
<mark>Monday</mark> –	Module 13 (Chapter 15 in textbook) – The Metabolism of Glycogen in			
February 24,	Animals			
2025	(#) Knowledge Checks and Principles Based Problems for Module 13 due			
	at 11:59 PM			
Wednesday –	(#) Post Biochemistry in My World in 2035 - Step 2 by 11:59 PM			
February 26,				
2025	Madula 14 (Chaptar 1C in touthead). The Citair Asid Code			
Friday – February	Module 14 (Chapter 16 in textbook) - The Citric Acid Cycle			
28, 2025	(#) Knowledge Checks and Principles Based Problems for Module 14 due			
	at 11:59 PM			

Week 8		
Monday – March 03, 2025	(#) Editors must post Proposed Solution to a Biochemical Mystery Step 3 by 11:59 PM	
Wednesday Module 15 (Chapter 17 in textbook) - Fatty Acid Catabolism		
March 05, 2025	(#) Knowledge Checks and Principles Based Problems for Module 15 due	
	at 11:59 PM	
<mark>Friday</mark> –, March	Module 16 (Chapter 18 in textbook) - Amino Acid Oxidation and the	
07, 2025	Production of Urea	
	(#) Knowledge Checks and Principles Based Problems for Module 16 due	
	at 11:59 PM	
	<u>Week 9</u>	
<mark>Monday</mark> – March	Module 17 (Chapter 19 in textbook) - Oxidative Phosphorylation	
10, 2025	(#) Knowledge Checks and Principles Based Problems for Module 17 due	
	at 11:59 PM	
Wednesday	(#) Post Student's View into Biochemical Mysteries 3 by 11:59 PM	
March 12, 2025		
Friday –	(0) Exam 3 on Modules 11, 12, 13, 14, 15, 16, and 17 must be completed	
March 14, 2025	online via Honorlock between 7:00 AM and 10:00 PM.	
	<u>Week 10</u>	
March 17-21,	Have a great Spring Break!	
2025		
<u>Week 11</u>		
Monday – March 24, 2025	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM	
24, 2025	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM	
24, 2025 Wednesday	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis	
24, 2025 Wednesday	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis  (#) Knowledge Checks and Principles Based Problems for Module 18 due	
24, 2025 Wednesday March 26, 2025	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis  (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM	
24, 2025 Wednesday March 26, 2025 Friday –	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due	
24, 2025 Wednesday March 26, 2025 Friday –	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules	
24, 2025 Wednesday March 26, 2025 Friday –	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due	
24, 2025 Wednesday March 26, 2025 Friday –	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM	
24, 2025  Wednesday  March 26, 2025  Friday –  March 28, 2025	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM  Week 12	
24, 2025  Wednesday  March 26, 2025  Friday –  March 28, 2025  Monday – March	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM  Week 12  Module 20 (Chapter 23 in textbook) - Hormonal Regulation and	
24, 2025  Wednesday  March 26, 2025  Friday –  March 28, 2025  Monday – March	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM  Week 12  Module 20 (Chapter 23 in textbook) - Hormonal Regulation and Integration of Mammalian Metabolism (#) Knowledge Checks and Principles Based Problems for Module 20 due at 11:59 PM	
24, 2025  Wednesday March 26, 2025  Friday – March 28, 2025  Monday – March 31, 2025  Wednesday -	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM  Week 12  Module 20 (Chapter 23 in textbook) - Hormonal Regulation and Integration of Mammalian Metabolism (#) Knowledge Checks and Principles Based Problems for Module 20 due at 11:59 PM  Module 21 (Chapter 24 in textbook)- Genes and Chromosomes	
24, 2025  Wednesday March 26, 2025  Friday – March 28, 2025  Monday – March 31, 2025  Wednesday - April 02,	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM  Week 12  Module 20 (Chapter 23 in textbook) - Hormonal Regulation and Integration of Mammalian Metabolism (#) Knowledge Checks and Principles Based Problems for Module 20 due at 11:59 PM  Module 21 (Chapter 24 in textbook)- Genes and Chromosomes (#) Knowledge Checks and Principles Based Problems for Module 21 due	
24, 2025  Wednesday  March 26, 2025  Friday –  March 28, 2025  Monday – March 31, 2025  Wednesday -  April 02, 2025	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM  Week 12  Module 20 (Chapter 23 in textbook) - Hormonal Regulation and Integration of Mammalian Metabolism (#) Knowledge Checks and Principles Based Problems for Module 20 due at 11:59 PM  Module 21 (Chapter 24 in textbook)- Genes and Chromosomes (#) Knowledge Checks and Principles Based Problems for Module 21 due at 11:59 PM	
24, 2025  Wednesday March 26, 2025  Friday – March 28, 2025  Monday – March 31, 2025  Wednesday - April 02, 2025  Friday –	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM  Week 12  Module 20 (Chapter 23 in textbook) - Hormonal Regulation and Integration of Mammalian Metabolism (#) Knowledge Checks and Principles Based Problems for Module 20 due at 11:59 PM  Module 21 (Chapter 24 in textbook)- Genes and Chromosomes (#) Knowledge Checks and Principles Based Problems for Module 21 due at 11:59 PM  Module 22 (Chapter 25 in textbook)- DNA Metabolism	
24, 2025  Wednesday  March 26, 2025  Friday –  March 28, 2025  Monday – March 31, 2025  Wednesday -  April 02, 2025	(#) Post Biochemistry in My World in 2035 - Step 3 by 11:59 PM  Module 18 (Chapter 21 in textbook) - Lipid Biosynthesis (#) Knowledge Checks and Principles Based Problems for Module 18 due at 11:59 PM  Module 19 (Chapter 22 in textbook) - Biosynthesis of Amino Acids, Nucleotides, and Related Molecules (#) Knowledge Checks and Principles Based Problems for Module 19 due at 11:59 PM  Week 12  Module 20 (Chapter 23 in textbook) - Hormonal Regulation and Integration of Mammalian Metabolism (#) Knowledge Checks and Principles Based Problems for Module 20 due at 11:59 PM  Module 21 (Chapter 24 in textbook)- Genes and Chromosomes (#) Knowledge Checks and Principles Based Problems for Module 21 due at 11:59 PM	

Week 13			
Monday –	(#) Authors must post Proposed Solution to a Biochemical Mystery Step 4		
April 07,	by 11:59 PM		
2025			
Wednesday April	Module 23 (Chapter 26 in textbook)- RNA Metabolism		
09,	(#) Knowledge Checks and Principles Based Problems for Module 23 due		
2025	at 11:59 PM		
Friday –	Module 24 (Chapter 27 in textbook) - Protein Metabolism		
April 11,	(#) Knowledge Checks and Principles Based Problems for Module 24 due		
2025	at 11:59 PM		
	Week 14		
Monday –	(#) Post Biochemistry in My World in 2035 - Step 4 by 11:59 PM		
April 14,			
2025			
Wednesday April	Module 25 (Chapter 28 in textbook) - Regulation of Gene Expression		
16,	(#) Knowledge Checks and Principles Based Problems for Module 25 due		
2025	at 11:59 PM		
Friday –	(#) Post Student's View into Biochemical Mysteries 4 by 11:59 PM		
April 18,			
2025			
	<u>Week 15</u>		
Monday –	Catch your breath day 😊		
April 21,			
2025			
Wednesday -	(0) Exam 4 on Modules 18, 19, 20, 21, 22, 23, 24, and 25 must be		
April 23,	completed online via Honorlock between 7:00 AM and 10:00 PM.		
2025			
	No Final Exam – Have a great break!		

#### **Grading Policy**

All graded assignments and quizzes are listed on the table below. All the graded assignments add up to 500 points that total 125% of your grade. Make-up work will be allowed according to University of Florida guidelines. Using 125% instead of 100% gives 20% grace for those times that you are not at your best. You can lose 100 points and still have 100% for the course. There will be no extra credit. It is very important to note that for the "Proposed Solution to a Biochemical Mystery" assignment, steps 2, 3, and 4 depend on the previous step and must be completed before the student can proceed to the next step. Missing a step means that credit will not be given for that step and the student cannot receive credit for the remaining steps.

	<ul> <li>Assignments and Quizzes</li> </ul>	Points	Percent
Formative Assessments			18.75
•	Knowledge Check Quizzes	(25)	(6.25)
	• Knowledge Check Quizzes for Unit #1 Modules (Modules 1, 2, 3, 4, 5)	(5)	(1.25)
	• Knowledge Check Quizzes for Unit #2 Modules (Modules 6, 7, 8, 9, 10)	(5)	(1.25)
	• Knowledge Check Quizzes for Unit #3 Modules (Modules 11, 12, 13, 14, 15, 16, 17)	(7)	(1.75)
	• Knowledge Check Quizzes for Unit #4 Modules (Modules 18, 19, 20, 21, 22, 23, 24, 25)	(8)	(2.0)
•	Principles Based Problems	(50)	(12.5)
	• Principles Based Problems for Unit #1 Modules (Modules 1, 2, 3, 4, 5)	(10)	(2.5)
	Principles Based Problems for Unit #2 Modules (Modules 6, 7, 8, 9, 10)	(10)	(2.5)
	• Principles Based Problems for Unit #3 Modules (Modules 11, 12, 13, 14, 15, 16, 17)	(14)	(3.5)
	<ul> <li>Principles Based Problems for Unit #4 Modules (Modules 18, 19, 20, 21, 22, 23, 24, 25)</li> </ul>	(16)	(4)
Exams		240	60
	• Exam 1	(60)	(15)
	• Exam 2	(60)	(15)
			/4 F \
	• Exam 3	(60)	(15)
	<ul><li>Exam 3</li><li>Exam 4</li></ul>	(60) (60)	(15)
Stu		` '	(15)
Stu	Exam 4  Ident's View into Biochemical Mysteries	(60)	(15)
Stu	Exam 4  Ident's View into Biochemical Mysteries	(60) <b>60</b>	(15) <b>15</b>
Stu	<ul> <li>Exam 4</li> <li>Ident's View into Biochemical Mysteries</li> <li>Student's View into Biochemical Mysteries #1 (Modules 1, 2, 3, 4, 5)</li> </ul>	(60) <b>60</b> (15) (15)	(15) <b>15</b> (3.75)
Stu	<ul> <li>Exam 4</li> <li>Ident's View into Biochemical Mysteries</li> <li>Student's View into Biochemical Mysteries #1 (Modules 1, 2, 3, 4, 5)</li> <li>Student's View into Biochemical Mysteries #2(Modules 6, 7, 8, 9, 10)</li> <li>Student's View into Biochemical Mysteries #3 (Modules 11, 12, 13, 14, 15, 16,</li> </ul>	(60) <b>60</b> (15) (15) (15)	(15) <b>15</b> (3.75) (3.75)
Pro	<ul> <li>Exam 4</li> <li>Ident's View into Biochemical Mysteries</li> <li>Student's View into Biochemical Mysteries #1 (Modules 1, 2, 3, 4, 5)</li> <li>Student's View into Biochemical Mysteries #2(Modules 6, 7, 8, 9, 10)</li> <li>Student's View into Biochemical Mysteries #3 (Modules 11, 12, 13, 14, 15, 16, 17)</li> <li>Student's View into Biochemical Mysteries #4 (Modules 18, 19, 20, 21, 22, 23, 23, 23, 24, 25)</li> </ul>	(60) <b>60</b> (15) (15) (15)	(15)  15 (3.75) (3.75) (3.75) (3.75)
Pro	<ul> <li>Exam 4</li> <li>Ident's View into Biochemical Mysteries</li> <li>Student's View into Biochemical Mysteries #1 (Modules 1, 2, 3, 4, 5)</li> <li>Student's View into Biochemical Mysteries #2(Modules 6, 7, 8, 9, 10)</li> <li>Student's View into Biochemical Mysteries #3 (Modules 11, 12, 13, 14, 15, 16, 17)</li> <li>Student's View into Biochemical Mysteries #4 (Modules 18, 19, 20, 21, 22, 23, 24, 25)</li> <li>Oposed Solution to a Biochemical Mystery (Previous step must be completed</li> </ul>	(60) 60 (15) (15) (15) (15)	(15)  15 (3.75) (3.75) (3.75) (3.75)

Proposed Solution to a Biochemical Mystery Step 3	(16.25)	(4.0625)
Proposed Solution to a Biochemical Mystery Step 4	(16.25)	(4.0625)
Biochemistry in My World in 2035	60	15
Biochemistry in My World in 2035 Step 1	(15)	(3.75)
Biochemistry in My World in 2035 Step 2	(15)	(3.75)
Biochemistry in My World in 2035 Step 3	(15)	(3.75)
Biochemistry in My World in 2035 Step 4	(15)	(3.75)
Total	500	125

#### **Grading Scale**

Final Grade	Points/Percentage
Α	93-100
A-	90-92
B+	87-89
В	83-86
B-	80-82
C+	77-79
С	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62

BCH3025 grading scale is presented above. See the current <u>UF grading policies</u> for more information.

#### Attendance & Make-up Work

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. <u>UF Attendance Policies</u>

#### **Academic Honesty**

University of Florida students are bound by the Honor Pledge. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Student Honor Code." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor

Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see Student Conduct Code Process.

#### **Student Privacy Disclaimer:**

Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.]

#### **In-Class Recording**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student

#### **Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals,

in their Canvas course menu under GatorEvals, or via the <u>GatorEvals site</u>. Summaries of course evaluation results are available to students at <u>GatorEvals Public Data</u>.

#### Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

#### Services for Students with Disabilities

A statement related to accommodations for students with disabilities such as: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the <u>Disability Resource Center</u>. It is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

#### Campus Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

#### **Health and Wellness**

- U Matter, We Care: If you or someone you know is in distress, please contact <u>umatter@ufl.edu</u>, 352-392-1575, or <a href="https://umatter.ufl.edu/">https://umatter.ufl.edu/</a> to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit <a href="https://counseling.ufl.edu/">https://counseling.ufl.edu/</a> or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student *Health Care Center*: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit https://shcc.ufl.edu/
- *University Police Department*: Visit <a href="https://police.ufl.edu/">https://police.ufl.edu/</a> or call 352-392-1111 (or 9-1-1 for emergencies).
- *UF Health Shands Emergency Room / Trauma Center:* For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; visit https://ufhealth.org/locations/uf-health-shands-emergency-room-trauma-center
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit <a href="https://gatorwell.ufsa.ufl.edu/">https://gatorwell.ufsa.ufl.edu/</a> or call 352-273-4450.

#### **Academic Resources**

• *E-learning technical support*: Contact the UF Computing Help Desk at 352-392-4357 https://it.ufl.edu/helpdesk/ or via e-mail at helpdesk@ufl.edu.

- <u>Career Connections Center</u>: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- <u>Library Support</u>: Various ways to receive assistance with respect to using the libraries or finding resources.
- <u>Teaching Center:</u> 1317 Turlington Hall, 352-392-2010. General study skills and tutoring.
- Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Concern: Report Student Concerns or Conduct

#### **Student Complaints:**

- Residential Course: <a href="https://www.sfa.ufl.edu/written-student-complaints/">https://www.sfa.ufl.edu/written-student-complaints/</a>
- Online Course: https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint

#### **Privacy and Accessibility Policies**

For information about the privacy policies of the tools used in this course, see the links below:

- Adobe
  - o Adobe Privacy Policy
  - o Adobe Accessibility
- Honorlock
  - Honorlock Privacy Policy
  - Honorlock Accessibility
- Instructure (Canvas)
  - o <u>Instructure Privacy Policy</u>
  - o **Instructure Accessibility**
- Microsoft
  - Microsoft Privacy Policy
  - Microsoft Accessibility
- Respondus
  - Respondus Privacy Policy
  - Respondus Accessibility
- Sonic Foundry (Mediasite Streaming Video Player)
  - Sonic Foundry Privacy Policy
  - o Mediasite Accessibility (PDF)
- Vimeo
  - o Vimeo Privacy Policy
  - o <u>Vimeo Accessibility</u>
- VoiceThread
  - VoiceThread Privacy Policy
  - o <u>VoiceThread Accessibility</u>
- YouTube (Google)
  - YouTube (Google) Privacy Policy
  - YouTube (Google) Accessibility
- Zoom
  - o Zoom Privacy Policy
  - o Zoom Accessibility