

Colorado State University Department of Biochemistry
BC 405-R90 Comprehensive Biochemistry II – Metabolism Honors Section
Spring Semester 2022

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Office hours: By appointment

Schedule: W 3:00 – 3:50PM
AZE208A

Objectives: BC403 is designed to provide an understanding of the molecular and cellular features that constitute and regulate the central pathways in metabolism. This class focuses on metabolism of carbohydrates, lipids, and amino acids, from absorption to tissue specific utilization and production. The course also addresses the regulatory mechanisms required by the cell to maintain a steady-state and cellular homeostasis. Disruptions caused by dysregulation (e.g. T2DM or cancer) of these pathways are also covered.

The honors breakout session has been designed to complement the material in BC403 and deepen the students understanding of metabolic regulation and the consequences of dysregulation. In BC405 students will be asked to lead the group in an informal discussion of a particular metabolic disorder. After which, students will make a formal presentation of their disorder. Finally, students will turn in a small research paper for their disorder. Upon completion of the class students will have further developed their ability to:

1. Create innovative means of content delivery for a particular subject under study.
2. Organize content material in a manner so as to effectively facilitate other students/colleagues learning/understanding.
3. Articulate what they are learning and when they are confused regarding a particular subject under study.
4. Analyze scientific data from scientific literature.
5. Communicate orally and in written form their analysis of scientific literature within their chosen field of research.

Course Design: The main objective of BC405 is to provide students the structure and opportunity to research and teach a particular metabolic disorder. Students will first lead their colleagues in an informal discussion on their chosen metabolic disorder. After all students have led their informal discussion students will be expected to give a polished presentation of their chosen disorder. Finally, student will hand in a research paper on their chosen disorder.

Attendance: Attendance is mandatory. Any absences must have prior approval by the instructor; unexcused absences can result in total point deductions.

SDC: If you are a student who will need accommodations in this class due to a disability or chronic health condition, please provide me the SDC accommodation letter. If you do

not already have these accommodation letters, please contact the SDC as soon as possible to initiate the process of setting up accommodations. The SDC is located in room 121 of the TILT building. You can reach them by phone at 970-491-6385 or visit www.disabilitycenter.colostate.edu

COVID19:

Important information for students:

Masks are required inside university buildings. You must also meet university vaccine or exemption requirements.

All students are expected and required to report to the COVID Reporter (<https://covid.colostate.edu/reporter/>) when:

- You suspect you have symptoms of COVID, regardless of whether or not you are vaccinated and even if your symptoms are mild
- You have tested positive for COVID through a non-CSU testing site, such as home test or test at a pharmacy
- You believe you may have been exposed to COVID go to the COVID Reporter and follow the guidance under “I believe I have been in close contact with someone who has COVID-19.” This guidance will depend upon your individual circumstances

You will not be penalized in any way for reporting symptoms or concerns.

Do not ask me as your instructor to report for you. It is your responsibility to report through the COVID Reporter promptly.

As your instructor I may not ask you about vaccination status or if you have COVID but you may freely volunteer to send me information from a public health official - if you have been asked to isolate or quarantine.

When you complete the COVID Reporter, the CSU Public Health office is notified. Once notified, that office will contact you and, depending upon each situation, will conduct contact tracing, initiate any necessary public health requirements and notify you if you need to take any steps.

If you do not have internet access to fill out the online COVID-19 Reporter, please call (970) 491-4600.

For the latest information about the University’s COVID resources and information, including FAQs about the spring semester, please visit the **CSU COVID-19 site** <https://covid.colostate.edu/>.

Grades: The grade break-down is as follows:

Assignment	Points Counted
Participation	20
Informal discussion	20
Formal presentation	40
Research paper	40
Total	120

Letter grades will be assigned based on the percentage of points accumulated from the aforementioned requirements. Letter grade breakdown will be as follows:

<u>Grade</u>	<u>Final Average</u>
A+	97-100%
A	90 - 96%
B+	87 - 89%
B	80 - 86%
C+	77 - 79%
C	70 - 76%
D	60 - 69%
F	<60%

If appropriate, the final averages required for a specific grade will be reduced to compensate for a low final class average or A- and B- grades may be used to better discriminate breaks in the grade distribution.

Academic Integrity: This course will adhere to the Academic Integrity Policy found in the Colorado State University [General Catalog](#).

Course Schedule

Week	Date	Topic
Week 1	1/19	Course Introduction
Week 2	1/26	Meet with instructor IF you have questions about disorder
Week 3	2/2	Student led discussion
Week 4	2/9	Student led discussion
Week 5	2/16	No class (in class exam week)
Week 6	2/23	Student led discussion
Week 7	3/2	No class, research week
Week 8	3/9	No class (in class exam week)
Week 9	3/23	Student presentation
Week 10	3/30	Student presentation
Week 11	4/6	Student presentation
Week 12	4/13	No class (in class exam week)
Week 13	4/20	Catch up (if needed)
Week 14	4/27	Research papers due/ Catch up (if needed)
Week 15	5/6	Catch up (if needed)

