

MCB 3210, Gene Expression:

The objective of the course is for students to gain an in-depth understanding of the mechanisms underlying gene expression in eukaryotes. This will be accomplished through formal lectures and in-class discussions. At the conclusion of this course you should have a solid grasp of the complexity of genomes, their organization and their function in the context of gene expression. You are expected to have a solid foundation in genetics and cell biology as well as basic molecular biology techniques (e.g.

Syllabus for:

MCB 3210 Gene Expression, 3 credits

Instructors:

Barbara Mellone, Ph.D.

Associate Professor, Department of Molecular and Cell Biology

Leighton Core, Ph.D.

Assistant Professor, Department of Molecular and Cell Biology

Contact information:

ESB Room 206E, barbara.mellone@uconn.edu

Office hours: by appointment

ESB Room 306B, leighton.core@uconn.edu

Office hours: by appointment

Course schedule:

Tu-Thu 9:30AM - 10:45PM AUST 202

Please check the academic calendar for important dates:

<http://registrar.uconn.edu>

Subject to Change Statement: **Information contained in the course syllabus, other than the grade policy, may be subject to change with advance notice, as deemed appropriate by the instructor.**

Course objectives:

The objective of the course is for students to gain an in-depth understanding of the mechanisms underlying gene expression in eukaryotes. This will be accomplished through formal lectures and in-class discussions. At the conclusion of this course you should have a solid grasp of the complexity of genomes, their organization and their function in the context of gene expression.

This is an upper level course. You are expected to have a solid foundation in genetics (2410 or equivalent) and cell biology as well as basic molecular biology techniques (e.g. PCR, Western blotting, etc.). **We will not be covering the genetics and cell biology basics** – but moving quickly into the molecular aspects of gene regulation. If you are having trouble with the material, please notify the instructors immediately so that we can direct you to appropriate background reading.

Recipe for success:

The single most important element in doing well in this class is keeping up to date. **Taking careful notes, reviewing your notes and quizzes before the next lecture and studying the assigned reading ahead of time** will make an enormous difference in the final result. Do not hesitate to ask the

instructors questions. Reviewing the material only before exams is a very poor strategy, since each lecture builds on materials from previous lectures and you could get left behind. Furthermore, participation in class discussions is highly encouraged as this will make this course dynamic and enjoyable for both students and instructors.

Course Materials:

The class will consist of lecture based material, a few readings that will be distributed by the instructors, and in-class review activities. We strongly encourage student participation and aim to establish a forum of open discussion in the class. There is no recommended textbook, but references will be provided for students who would like to use them to further the depth of their understanding of certain concepts. Lectures and your notes are the primary source of information so attendance is strongly recommended. Lectures will be posted on Husky CT *after* class for your review.

Assessment:

There will be three exams for this class, each worth 25% of your grade, and they will be approximately 1hr and 15min in length. Exam 1 will cover material taught by Dr. Mellone, Exam 2 will cover material taught by Dr. Core. The final exam will be comprehensive, i.e. on *any* of the material covered in class. An optional oral final exam which will cover the content of the entire course can be administered under exceptional circumstances. Exams will assess your **mastering** of the material in terms of knowledge of concepts **and** the application of these concepts to new problems.

Quizzes will comprise 20% of your grade. There will be a total of 8 quizzes (4+4). You will be allowed to drop your 2 lowest quiz grades (one for each half of the course). **There will be NO make up quizzes**, early quizzes may be arranged on a case by case basis.

The remaining 5% of the grade will be based on participation during class. Students will be responsible to keep track of their participation at the end of each class. The instructors will determine the grade for the participation component at their discretion, based on the frequency of participation as well as its content. Remember, it pays off to be an active member of the class!

Missed class policy:

Please plan to attend all classes. If you cannot attend classes due to illness or other extenuating circumstance please email the instructor in advance. You will be responsible to make up the missed material. You are welcome to come to office hours for any clarifications *after* you have reviewed the missed material.

Recording:

You must ask advance permission from the instructors to record the lectures. The primary material for the class are your lecture notes and slides and recordings are not necessary, but we understand they might be helpful for some students. The instructors own the copyright of the recordings and therefore these must be deleted at the end of the semester and cannot be shared.

Grading scale:

A	94-100	B-	80-83	D+	67-69
A-	91-93	C+	77-79	D	64-66
B+	87-90	C	74-76	D-	60-63
B	84-86	C-	70-73	F	59-

Disability Support Services:

Students who believe that they may need accommodations in this class are encouraged to contact the Center for Students with Disabilities as soon as possible to ensure that accommodations are implemented in a timely fashion. Center for Students with Disabilities, 233 Glenbrook Road, Unit 4174, Wilbur Cross Building, Room 204, Storrs, CT 06269-4174, Voice: 860-486-2020, Fax: 860-486-4412

Correspondence:

All students are expected to check and respond to their email on a regular basis. Students will be contacted at their UConn email address (firstname.lastname@uconn.edu). It is the student's responsibility to have UConn email forwarded to personal email accounts. The instructor is not responsible for undelivered email. Students must retain a copy of important emails sent to the instructor for documentation purposes (including date, time, and address sent to).

Academic Misconduct:

Academic misconduct in any form is in violation of the University of Connecticut Student Code and will not be tolerated. This includes, but is not limited to copying or sharing answers on tests, assignments, plagiarism, and having someone else do your academic work. Depending on the act, the student could receive an F grade on the test/assignment, F grade for the course, and could be suspended or expelled from the University. Please see the Student Code at http://www.community.uconn.edu/student_code.html for more details and a full explanation of the Academic Misconduct policies and process.