

Developmental Biology

Bio Sci 356

Fall 2022

Course Instructor: Christopher Quinn
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414-229-2602
Office: Lapham Hall N410 and N413
Office Hours: By appointment on Microsoft Teams

Mode of delivery: In Person

Lecture: Mondays and Wednesdays 10:00 AM to 11:15 AM

Classroom: Chemistry 170

Prerequisites: Bio Sci 315 or Bio Sci 325

Course Description: This course is intended for students majoring Biological Sciences or related areas. The course focuses on the development of living organisms at the molecular, cellular, and organismal levels.

It is expected that students augment their class-time learning with home study. Lectures will provide an introduction to each topic. To succeed in this course, you will also need to carefully read each assigned chapter in the textbook.

Textbook: Developmental Biology 12th edition. Scott Gilbert and Michael Barresi.

LECTURE/EXAM SCHEDULE:

Week	Date	Chapters	Topic
Week 1	Wed 9/7	Ch. 1	Intro to Developmental Biology
Week 2	Mon 9/12 Wed 9/14	Ch. 2	Specifying Identity
Week 3	Mon 9/19 Wed 9/21	Ch. 3	Differential Gene Expression
Week 4	Mon 9/26 Wed 9/28	Ch. 4	Cell-Cell Communication
Week 5	Mon 10/3		Discussion for Project
	Wed 10/5		Exam 1 (covers weeks 1-5)
Week 6	Mon 10/10 Wed 10/12	Ch. 9	Invertebrate Development (Drosophila)
Week 7	Mon 10/17 Wed 10/19	Ch 11	Vertebrate Development (Amphibians and Fish)
Week 8	Mon 10/24 Wed 10/26	Ch 13	Neural Tube Formation
Week 9	Mon 10/31 Wed 11/2	Ch 14	Brain Growth
Week 10	Mon 11/7 Wed 11/9	Ch 15	Neural Crest and Axon Growth

Week 11	Mon 11/14 11/16		Developmental Disorders
	Mon 11/21		No Class
Week 12	Mon 11/28		Review
	Wed 11/30		Exam 2 (covers weeks 6-11)
Week 13	Mon `12/5 Wed 12/7		Final Project Presentations
Week 14	Mon 12/12 Wed 12/14		Final Project Presentations

Final Project: This class will have a final project instead of a final exam. The project will be due on the final day of class and will focus on developmental disorders. Please see Canvas for details on the project.

Schedule is subject to change. The schedule of exams and lectures could be altered due to unforeseen circumstances. If this occurs, students will be notified by email and revised syllabus will be posted on Canvas.

Grade Computation:

	<u>UG</u>
Exam 1	30%
Exam 2	30%
Final Project	25%
Participation	15%

Examination Policy: Exam questions will come from the lecture and from the textbook and will be multiple choice/short answer questions. The format and questions for makeup exams will be different than the original in-person exam (for example essay format). Requests for make-up exams should be supported by documentation. In order to qualify for a make-up exam for religious observances or other excused absences, you must notify Dr. Quinn at least 1 week **before** the scheduled examination time. In case of illness, please notify Dr. Quinn as soon as you realize that you are unable to attend class due to illness. There is no final exam for this class.

COVID Policy: In case of positive COVID19 test, please follow current CDC guidelines. Please self-report to UWM and notify Dr. Quinn of your positive test and the dates of CDC-recommended quarantine. No notification is required for COVID19 exposure. However, please follow CDC-recommended precautions for COVID19 exposure ([see here](#)).

Cell Phone Policy: Cell phones should be turned off before class. Check messages after class and absolutely no texting.

Plagiarism Policy: Students are responsible for the honest completion and representation of their work and for refraining from giving or receiving unauthorized aid on homework, exams, or any other assignments. At the very least, cheating will result in a grade of zero on the exam or assignment involved. In addition, any such instance of academic misconduct will be automatically reported to university authorities and could result in more serious consequences, including a grade of F for the course and/or academic suspension. The following website provides further details regarding University policies and procedures on exams, incomplete grades, religious holidays, discriminatory

conduct, grade appeals, and students with disabilities.

<http://www.uwm.edu/Dept/SecU/SyllabusLinks.pdf>.

Academic Conduct Policy: The University has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. This course follows the guidelines and procedures detailed in the description of Student Academic Disciplinary Procedures found in Regents Policy Statements, UWS Chapter 14 and UWM Faculty Document #1686 and can be found online at http://www.uwm.edu/Dept/Acad_Aff/policy/academicmisconduct.html.

Participation by students with disabilities:

If you need special accommodations in order to meet any of the requirements of this course, please notify the instructors at the start of the semester or at the time those accommodations become necessary. Please contact the Student Accessibility Center (Mitchell Hall Room 112, 229-6287, <http://www.sac.uwm.edu>) and inform the instructor.

Attendance Policy: Attendance of all class sessions is mandatory. Absences can be excused for illness, religious observances, or other serious reasons. Each unexcused absence will result in a loss of 5% from your final grade.

Late Assignment Policy: Late assignments will be accepted for 7 days after the due date for half credit. Assignments that are more than seven days late will not be accepted. If you are unable to attend class on your presentation day you must contact the instructor in advance with a valid excuse. In case of unexcused absences you will not be permitted to make up a presentation.