Developmental Biology BIOL 4350(6350), Sections A-B (4 credit hours) Fall Semester 2021

Lecture (BC 2022): Mon-Wed 3:30 PM - 4:45 PM

Laboratory (BC 2071): Section A Thu 9:30 AM – 12:20 PM

Section B Fri 10:00 AM - 12:50 PM

Instructor: Dr. Cristina Calestani

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Office hours:

Mon 5:00-5:30 PM; Tuesday 2:00-5:00 PM; Wednesday 5:00-5:30 PM; Friday 2:00-3:00 PM

Or by appointment (please send me an email to my valdosta.edu account).

Pre-Requisites: BIOL 1107, BIOL 1108, and BIOL 3200 with a grade of C or better or permission of instructor.

Course Description (as stated in the Undergraduate Catalogue):

A study of development from fertilization through embryological stages, with an emphasis placed on experimental embryology and molecular genetic mechanisms in selected model organisms.

Course Learning Outcomes

This course learning outcomes support the achievement of the Department of Biology Educational Outcomes 1 through 5, and the VSU General Education Outcomes 3, 5, and 7. By the end of this course the students will be able to:

- 1) Describe the developmental anatomy of selected invertebrate and vertebrate embryos
- 2) Comprehend the basic molecular and cellular mechanisms of fertilization and embryo development
- 3) Compare and contrast development of different organisms
- 4) Comprehend and predict the outcomes of possible interactions between developmental processes and environmental factors, naturally occurring or man-made.
- 5) Understand experimental approaches used to answer specific questions in developmental biology
- 6) Develop and test a hypothesis using experimental embryology techniques learned in the laboratory

ASSESSMENTS

Lecture

The lecture assessments will consist of three exams and one presentation from the literature. The final exam will be optional and comprehensive.

Exams 1,2 and 3 will be taken during class time and must be turned in by the scheduled end of class. The final exam will

TENTATIVE LABORATORY EXERCISES:

Lab