



# BIOLOGICAL SCIENCES 333

## Developmental Biology

### Spring 2011 (1111)

Instructor	Office	Phone	E-mail
Sessional (TBA)			

#### COURSE PREREQUISITES

BISC 202, MBB 222, MBB 231<sup>1</sup>

#### COURSE DESCRIPTION

Classical and modern experimental approaches will be described for understanding development of embryos of several species having common and distinctive features. These approaches are at the organismal, cellular, molecular and genetic levels.

#### OUTLINE OF TOPICS

We will cover the material in the text, mostly in order. We will begin with some general concepts and ideas and then see how they apply to a variety of model organisms beginning with early development in invertebrates (*Drosophila melanogaster*) and then vertebrates (Xenopus, chick, frog). We will then cover some selected invertebrate systems with "special" developmental processes, and finally plant development. The focus will be on comparing and contrasting the various systems. The second half of the course will cover basic processes of later development, morphogenesis, organogenesis, with special emphasis on nervous system development. We will finish off with late developmental processes, including gametogenesis, metamorphosis and regeneration and if time permits, aging and senescence.

*This is a tentative outline.*

*Pending information from the instructor...*

<sup>1</sup>Prerequisite Minimum Grade Requirement: Unless stated, a grade of C- or better is required on all Prerequisite BISC & MBB courses.