

FALL 2012

BIOC19H3 – ANIMAL DEVELOPMENTAL BIOLOGY

Course Instructor: Vania Branker

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COURSE DESCRIPTION:

This course investigates the development of several model systems such as erythropoiesis, lens development in the eye, spermatogenesis and myogenesis. There will be discussions of both the cellular and molecular events in early embryonic life, with particular emphasis on the concept that the regulation of gene expression is fundamental to development.

LECTURES:

This course is a **LECTURE COURSE**. There is no laboratory component. Lectures are held on Thursdays, 1-3pm in S-309.

Attendance is highly recommended since **you are responsible for everything that is covered in the lecture**. You are expected to supplement the posted lecture notes (which are posted prior to each lecture) with any details and possible changes given during the lecture.

PREREQUISITES:

Must have **1 full course equivalent from BIOB10H AND BIOB11H, OR BIOB10Y**

OFFICE HOURS:

I am on campus on Thursdays **ONLY**. If you have any questions regarding the course, I am best reached via e-mail. Please use your UTSC account.

I will be available for office hours on **Thursdays from 3:30 – 5:00pm in SW540B**.

Should you be unable to meet during those hours, please e-mail me so that we can set up an appointment.

NO REQUIRED TEXT:

There is **no required textbook** for this course. You will be tested on all of the material presented in the lectures **ONLY**.

There is a suggested **REFERENCE** book on short-term loan in the UTSC library (2 hour). I will sometimes refer to diagrams from this text.

DEVELOPMENTAL BIOLOGY by Browder et al. (3rd Edition)

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EVALUATION:

Midterm Test (50%) – This test is worth 50% of your final grade. The format is multiple choice and short answers. Date and time TBA.

If you miss the MIDTERM, you must **e-mail the instructor immediately and submit an official UTSC medical certificate within 1 week of the missed exam date**, in order to write a make up exam. The certificate **must** clearly state that in your doctor's opinion you were unable to write the exam.

Final Exam (50%) – This exam is worth 50% of your final grade. The format is also multiple choice and short answers. It will be held during the final exam period at the end of the term.

LECTURE SCHEDULE

#	DATE	TOPIC
Week 1	Sept 13	Principles of Development
Week 2	Sept 20	Interactions of the nucleus and cytoplasm
Week 3	Sept 27	Development of Red Blood Cells
Week 4	Oct 4	Lens Development in the Eye
Week 5	Oct 11	Roles of hormones in development
Week 6	Oct 18	Tissue interactions in development
Week 7	Oct 25	Muscle Development/Liver Development
Week 8	Nov 1	Zymogens in development
Week 9	Nov 8	Spermatogenesis
Week 10	Nov 15	Expression of yolk proteins in egg development
Week 11	Nov 22	Cancer
Week 12	Nov 29	NO CLASS