

Mysteries of Embryology

	9:00 AM to 12:00 noon: Meet in B743 East Hall, unless otherwise instructed	1:00 PM to 4:00 PM Computer labs (B743 East Hall); Wet labs (3140 Natural Science Building)
Mon 6-27	9-10 AM: computer account orientation, in 1360 East Hall 10:10: Introduction to the course and to Embryology, using the human embryo as an example	<u>Computer lab</u> : Introduction to web page construction and web surfing. Making links and using information ethically.
Tues 6-28	Developmental patterns and processes. Cellular communication and adhesion. Designing experiments. Early embryology.	<u>Computer lab</u> : Finding information on relationships between birth defects and diet (particularly vitamins and herbals).
Wed 6-29	Early embryology in the bird and human. Gastrulation through neurulation. Somites.	<u>Discussion</u> : Designing experiments. <u>Computer lab</u> : Continue web design; select candidates to test for teratogenicity
Thurs 6-30	Developing a body plan. Thinking in four dimensions. The origami embryo. Experimental logic: testable hypotheses, positive and negative controls. <u>Wet lab</u> : fold your own embryo	<u>Computer lab</u> : Develop and upload a tentative experimental design. Identify positive and negative controls.
Friday 7-01	Limb development. The heart and circulatory system: changing form while maintaining function.	<u>Wet lab</u> : Examine normal embryos; discuss and fine tune your experimental strategies
Mon 7-04	Sensory systems: the eyes and ears. The skin: our largest organ.	<u>Wet lab</u> : Experiments with potential dietary teratogens
Tues 7-05	Urinary and sexual systems: what birth defects tell us about normal development	<u>Wet lab</u> : Data analysis, and more experiments with potential teratogens
Wed 7-06	Nervous system development	<u>Wet lab</u> : data analysis. Begin to organize your reports for your web sites.
Thurs 7-07	Embryology, evolution, and the environment.	<u>Computer lab</u> : construct web page reports
Fri 7-08	<u>Computer lab</u> : fine tune reports.	<u>Computer lab</u> : We will examine everyone's web site. Final discussion

Lectures will be in room B743 East Hall

Wet labs will be in room 3140, Natural Sciences Building.

Computer labs will use computers in room B743 East Hall (B stands for Basement)

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