

BIO 3663
HUMAN EMBRYOLOGY
Spring 2008, Section 2, CRN 23026
Tue & Thu 8:00-9:15am, Science Building 2.02.02
January 15, 2008 to May 8, 2008

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WebCT This class uses WebCT to post announcements, lecture material, and grades. Instructor will also use the mail feature to communicate with students. Check the course WebCT site regularly for announcements and email.

COURSE OBJECTIVES

- To understand that the formation, function, and integration of organ systems have their basis in embryonic development – *the foundation of functional anatomy and physiology*
- To understand that molecular and cellular mechanisms that control embryonic development are evolutionarily conserved processes – *from flies to humans*
- To understand that most diseases are a consequence of abnormal developmental pathways – *from cell proliferation and differentiation to cancer*

PREREQUISITE BIO 1113 (Biology I), Bio 1122 (Biology Lab), and BIO 1123 (Biology II)

TEXTBOOK Human Embryology and Developmental Biology, Bruce M. Carlson, 3rd Edition, Elsevier/Mosby

EXAMS AND GRADING

Exams will cover materials in the textbook, lectures, and outside reading assignments. There will be three exams and the lowest exam score will be dropped. The top two exam scores will account for 60% of the final grade. The remaining 40% will come from a comprehensive final exam. There will be NO make-up semester or final exams. Missing 2 semester exams or the final will result in a failed grade. **You are responsible for bringing ParSCORE™ Test Forms and No. 2 pencils for all exams.** The breakdown of the overall grade is shown below:

Exam 1	30 questions	Chapters 1-5	(30%)
Exam 2	30 questions	Chapter 6-10	(30%)
Exam 3	30 questions	Chapters 11-13	(30%)
(The best two exams scores will count toward the final grade.)			
Final Exam	40 questions (q)	Chapters 14-18 (30 q), 1-13 (10 q)	40%
TOTAL SCORE			100%

POLICY ON CHEATING

Students who violate University Rules on Scholastic Dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the University. "Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." Regents' **Rules of Regulations**, Part one, Chapter VI, section 3, Subsection 3.2 Subdivision 3.22. Policies on scholastic dishonesty will be strictly enforced.

SCHEDULE OF LECTURES AND EXAMS

Date (Tue & Thu)	Week #	Topics	Chapter Reading
Jan 15 & 17	1	Introduction; Getting ready for pregnancy; Transport of gametes and fertilization	1, 2, 3
Jan 22 & 24	2	Molecular basis for embryonic development	4
Jan 29 & 31	3	Formation of germ layers and early derivatives	5
Feb 5 & 7	4	Exam 1 topics: Chapters 1-5 Establishment of the basic embryonic body plan	6
Feb 12 & 14	5	Placenta and extraembryonic membranes Developmental disorders: causes, mechanisms, and patterns	7, 8
Feb 19 & 21	6	Integumentary, skeletal and muscular systems; Limb development	9, 10
Feb 26 & 28	7	Exam 2 topics: Chapters 6-10 Nervous system	11
Mar 4 & 6	8	Nervous system	11 (cont.)
Mar 11- 13	9	Neural crest	12
Mar 17- 22 Spring Break	10	-	-
Mar 25 & 27	11	Neural crest Sense organs	12 (cont.), 13
Apr 1 & 3	12	Sense organs Head and neck	13 (cont.), 14
Apr 8 & 10	13	Exam 3 topics: Chapters 11-14 Digestive and respiratory systems and body cavities	15
Apr 15 & 17	14	Digestive and respiratory systems and body cavities Urogenital system	15 (cont.), 16
Apr 22 & 24	15	Cardiovascular system	17
Apr 29	16	Fetal period and birth	18
May 8 (Thu) 7:30-845am SB 2.02.02	17	Final Exam: Ch 15-18 (30 questions) and selected topics from Ch 1-14 (10 q).	-