

**THE UNIVERSITY OF TEXAS AT EL PASO**  
**COLLEGE OF SCIENCE**  
DEPARTMENT OF BIOLOGICAL SCIENCES

**COURSE #:** BIOL 4321 CRN 17587  
**COURSE TITLE:** Developmental Biology  
**CREDIT HRS:** 3  
**TERM:** Fall 2018  
**LOCATION & TIME:** T/Th 10:30 – 11:50am Physical Sciences 314  
**PREREQUISITES:** BIOL1305, 3414, ZOOLOGY 2406, or BIOL 1306  
**COURSE INSTRUCTOR:** Dr. Charlotte M. Vines  
**OFFICE LOCATION:** Biosciences 4.124  
**CONTACT INFO:** Phone: 915-747-8127  
e-mail: cvines@utep.edu  
FAX: 915-747-5808  
**OFFICE HOURS:** Tues 2 – 3 pm (or by appointment)  
**TEXTBOOK** Developmental Biology, Eleventh Edition. Scott F. Gilbert. 11<sup>th</sup> edition, (Online versions may be used). Older versions are different  
**COURSE ACTIVITIES/ASSIGNMENTS:** Evaluation will be based on the average of 4 exam grades: 3 take home midterms (22% each of your final grade), one final (22% of your final grade) and class participation/Case studies (12% of grade).  
**ASSESSMENT:** Students will be assessed via three term exams (each worth 22% of the grade) class participation/case studies (combined worth 12% of the grade) and a comprehensive final exam grade (22%).  
**COURSE DESCRIPTION:** This course examines the basic molecular mechanisms that are used during the development of animals from germ cells and fertilization thru various stages of embryonic development and in some animals post-embryonic development. We will look at evolutionary mechanisms that promote growth and differentiation at the molecular and organismic level. We will cover invertebrate (worm, sea urchin, fly) and vertebrate (frog, fish, chicken, mouse) animals. Students should have a basic understanding of genetics, cell molecular biology prior to taking this class.

**COURSE SCHEDULE (SUBJECT TO CHANGE)**

Date	Chapter/Topic
August 28-30, 2018	Chapter 1- Making New Bodies

September 4-6, 2018	Chapter 2 – Specifying Identity
September 11-13, 2018	Chapter 3 – Differential gene expression
September 18-25, 2018	Chapter 4 – Cell to Cell Communication
<b>September 27, 2018</b>	<b>Midterm Exam # 1 Due at 11:59PM No Class today</b>
October 2-9, 2018	Chapter 4 – Cell to Cell Communication
October 11, 2018	Case Study #1
October 16 – 18, 2018	Chapter 5 – Stem cells
October 23 – 25, 2018	Chapter 6 – Sex determination and Gametogenesis
<b>October 30, 2018</b>	<b>Midterm Exam # 2 Due at 11:59PM No Class today</b>
<b>November 2, 2018</b>	<b>DROP DATE</b>
November 1-8, 2018	Chapter 6 – Sex determination and gametogenesis
November 13 – 20, 2018	Chapter 7 - Fertilization
<b>November 22, 2018</b>	<b>Happy Thanksgiving</b>
November 27, 2018	Chapter 24- Birth Defects, Endocrine Disruptions and Cancer
<b>November 29, 2018</b>	<b>Midterm Exam # 3 Due at 11:59PM No Class today</b>
December 4, 2018	Chapter 25 – Development and the Environment
<b>December 6, 2018</b>	<b>FINAL Exam Due at 5:00PM No Class today- No work will be accepted after this date</b>

**GRADING POLICY:** Letter grades for this course will be assigned as follows:  
90-100% A  
80-89% B  
70-79% C  
60-69% D  
0-59% F

**DROP DATE:** **The drop date is November 2. The College of Science aligns with UTEP’s posted drop date of November 2 for the Fall 2018 semester. We will not approve any student- or faculty-initiated drop requests for a course after that date, except under circumstances of complete withdrawal of ALL COURSES.**

**MAKE-UP POLICY:** There will be **NO MAKE UP EXAMS OR QUIZZES.** If you miss an exam the exam will receive a zero.

- ATTENDANCE POLICY:** 12% of your grade will be derived from in class quizzes. **UNLESS YOU ARRANGE IT WITH THE PROFESSOR, THERE ARE NO MAKE-UPS.**
- ACADEMIC INTEGRITY POLICY:** The UTEP academic integrity policy will be strictly enforced during exams. Any student failing to adhere to the policy will be disciplined.
- CIVILITY STATEMENT:** All cell phones should be turned off during class. Students with disruptive behavior will be asked to leave the class. If you are tardy and miss the quizzes there will be no makeup quiz.
- DISABILITY STATEMENT:** If a student has or suspects she/he has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148, [dss@utep.edu](mailto:dss@utep.edu), [cass@utep.edu](mailto:cass@utep.edu) or go to Room 106 Union East Building. For additional information please visit the CASS website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass). The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.
- MILITARY STATEMENT:** If you are in the military, with the potential of being called up for military service and/or training during the course of the semester, you are encouraged to contact Dr. Vines as soon as possible