Distance Education · Natural Sciences · Biology - BIOL

Biology for Non-Science Maj I

BIOL-1308

Summer I 2019 Section N02 CRN-30716 3 Credits 06/03/2019 to 07/01/2019 Modified 06/26/2019

Meeting Times

This is an online course so there are no face to f ace meetings with this course, but **all exams must be proctored**. Students may take exams at any Blinn testing centers, at another school's testing center, or use ProctorU. The student will be responsible for any fees charged by outside services and are responsible for letting the instructor know where their exams will be taken. Please see the Course Requirements section of the syllabus for more details.

Contact Information

Instructor: Ms. Jody Klann

Email: Jody.Klann@blinn.edu
Phone: 414-255-7818
Office Hours: Online by appointment

Please **do not be shy**; your success is my priority and I am here to help you in any way that I can. Minimester courses are intense and you will have deadlines very close together, so any time you have a question please do not hesitate to contact me.

Description

3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.

Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.

Requisites: None

Recommended: Successful completion of MATH 1314 - College Algebra or concurrent enrollment in higher-level mathematics.

Core Curriculum Statement

Through the Texas Core Curriculum, students will gain a foundation of knowledge in human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning. For details relating to this core course, please see:

https://www.blinn.edu/academics/core-curriculum.html (https://www.blinn.edu/academics/core-curriculum.html)

Outcomes

Upon successful completion of this course, students will:

1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
5. Describe karyotyping, pedigrees, and biotechnology and provide an example of the uses of each.
6. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
7. Analyze evidence for evolution and natural selection.

Materials

Textbook: *Biology Concepts and Investigations Fourth Edition Package,* 2018, M. Hoefnagels, McGraw-Hill Publishers, New York.

Course Requirements

All sections of this course regardless of location or modality will require:

1. A minimum of three major exams
2. A comprehensive final exam
3. Assignments designed to address core science objectives must be include in the curriculum.

Evaluation

The following are required components of a student's final grade.

1. Major exams designed to address both knowledge and skills and will account for at least 30% of the final grade.
2. Student participation is assessed through the various assignments and will count for at least 10% of the final grade.
3. *Final Exam*: Comprehensive exam covering the entire course. The comprehensive final exam will account for at least 20% of the final grade.
4. *Quizzes/Homework/In Class Assignments*: As required by the department or at the discretion of the instructor.
5. *Additional Reports or*Projects: As required by the department or at the discretion of the instructor.

Blinn College Policies

All policies, guidelines, and procedures in the Blinn College Catalog (http://catalog.blinn.edu/), Blinn College Board Policies (http://pol.tasb.org/Home/Index/1204), and the Blinn College Administrative Regulations (https://www.blinn.edu/administrative-regulations/) are applicable to this course.

Specific information on civility, attendance, add/drop, scholastic integrity, students with disabilities, final grade appeal, alternative retailers, campus carry and proctoring arrangements and cost. (http://www.blinn.edu/syllabus-policies/)

Notice of any action taken under these protocol and procedures, by Blinn College or its employees, may be delivered by hand, through the U.S. Postal Service, or electronically to the student's Blinn Buc e-mail account. Notice shall be deemed received upon actual receipt, on deposit in the U.S. Mail, or upon entering the information processing system used by Blinn College for Blinn Buc e-mail accounts, whichever first occurs.

Course Policies

Problem Resolution

If you have a complaint about your class, you should first request a conference with your instructor to try and resolve the problems or issues. If the problems or issues cannot be resolved at the instructor level, you should request a conference with the Science Department Head.

Biology Department Head: Dr. Steve R. Simcik

Phone: 979-209-7515

email: steve.simcik@blinn.edu

Schedule

BIOL 1308 Course Calendar

Due Date	Chapter	Exams/Major assignments
June 9	1: The scientific study of life	Chapter 1 LS Chapter 1 Assignment (Quiz) Discussion Experimental Design Quiz (Dropbox)
June 9	2: The chemistry of life	Chapter 2 LS Chapter 2 Assignment (Quiz) Discussion
June 9	3: Cells	Chapter 3 LS Chapter 3 Assignment (Quiz) Discussion Lecture Exam 1: Chapters 1-3 (Open June 6-8)
June 16	4: The energy of life	Chapter 4 LS Chapter 4 Assignment (Quiz) Discussion
June 16	5: Photosynthesis	Chapter 5 LS Chapter 5 Assignment (Quiz) Discussion
June 16	6: Respiration and Fermentation	Chapter 6 LS Chapter 6 Assignment (Quiz) Discussion Lecture Exam 2: Chapters 4-6 (Open June 13-15)

June 23	7: DNA structure and gene function	Chapter 7 LS Chapter 7 Assignment (Quiz) Discussion Gene Expression Homework (Dropbox)
June 23	8: DNA replication, binary fission, and mitosis	Chapter 8 LS Chapter 8 Assignment (Quiz) Discussion Cancer Essay Questions (Dropbox)
June 23	9: Sexual reproduction and Meiosis	Chapter 9 LS Chapter 9 Assignment (Quiz) Discussion
June 23	10: Patterns of inheritance	Chapter 10 LS Chapter 10 Assignment (Quiz) Discussion Lecture Exam 3: Chapters 7-10 (Open June 20-22)
June 30	11: DNA Technology	Chapter 11 LS Discussion
June 30	12: The forces of evolutionary change	Chapter 12 LS Chapter 12 Assignment (Quiz) Discussion
June 30	13: Evidence for Evolution	Chapter 13 LS Chapter 13 Assignment (Quiz) Discussion

June 30	14: Speciation and Extinction	Chapter 14 LS Chapter 14 Assignment (Quiz) Discussion Lecture Exam 4: Chapters 11-14 (Open June 27-30)
July 1	Final Exam Review	Final Exam: Chapters 1-14 (Open July 1-2)