

COURSE DESCRIPTION

Biology is a foundational subject for the medical sciences. This course is a study of living systems. It includes an examination of evolution, cellular structure and function, body systems, metabolism, homeostasis, genetics, and reproduction.

LEARNING OBJECTIVES

1. To have students demonstrate, through class discussions and periodic exams, a basic understanding of the major concepts of human biology.
2. To have students identify clinical correlations to the course material in recent articles, and present those findings to their peers by moderating a class discussion.
3. To have students develop a solid background in human biology, so they can proceed with confidence to more advanced courses in Western science and biomedicine.

COURSE PREREQUISITIES

None

REQUIRED TEXTS

RECOMMENDED TEXTS

Invitation to Biology, Curtis & Barnes, 5th edition, Worth Publishers, New York

COURSE REQUIREMENTS

LECTURE NOTES - The instructor has prepared comprehensive, pre-printed Lecture Notes which may be downloaded from the class website for free (see Special Notes)

GRADING:

Letter grades will be assigned using a straight scale, ensuring that every student who scores well in the course has the opportunity to earn a grade of "A."

ATTENDANCE:

Students missing more than two class sessions for any reason will not be eligible for a passing grade in this course. Class will begin promptly at the scheduled time, as will any quizzes that are scheduled for that day. Those arriving more than 15 minutes after the scheduled start time (or departing the class early) will be considered late, and two late arrivals will be considered an absence.

Absences will only be considered excused in cases of serious illness or unavoidable emergency, and documentation may be requested.

Students who miss the final exam for any reason must schedule a meeting with the course instructor and the Academic Dean to discuss the nature of the absence, and determine an appropriate course of action.

A minimum score of 70% is required to individually pass the midterm and final exams. Less than 70% on either exam will result in course failure. Students who fail the midterm or final exam, will be offered a remediation exam, which will be on the same material but more challenging. Failure to pass remediation will result in course failure and requirement to re-register and repeat the course.

GRADING SCALE: 100-90% A, 89-80% B, 79-70% C, 69% and below F

SPECIAL NOTES

Lecture notes can be downloaded at the yahoo group for this course. You will need notes beginning with the first class:
<https://groups.yahoo.com/neo/groups/ECTOMBIOLOGY/info>

Please join this group to have access to the notes, exam reviews and on line article

If you have difficulty joining, please send me an email and I will send an invitation (drwthornton@hotmail.com)

Professionalism and Full and Prompt Attendance: To pass any course (separate from academic performance) all students must meet requirements for professionalism in coursework. Professionalism includes full and prompt attendance: Students who miss more than 2 class meetings in a 10-week course will earn an F in that course. Additionally, students who arrive more than 15 minutes to class or leave class before it ends will be marked tardy. Two tardies equal one absence. NOTE: Students who leave and return to class late from a break or leave during the class (especially if this is repeated) or who disrupt the class in other ways may be referred to the Academic Dean for professionalism.

CLASS ONE (The syllabus is subject to change at the discretion of the instructor.)
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Course Introduction; Charles Darwin - The Origin of Species; The Scientific Method

Chapter 1 - Atoms and Molecules

Chapter 2 - Water

Chapter 3 - Organic Molecules

CLASS TWO

Chapter 4 - Cells: An Introduction

Chapter 5 - How Cells are Organized

Chapter 6 - How Things Get In and Out of Cells

CLASS THREE

Chapter 7 - The Flow of Energy

Chapter 8 - How Cells Make ATP

Chapter 9 - Photosynthesis

CLASS FOUR

Chapter 10 - Cell Reproduction

Chapter 11 - Sexual Reproduction

Chapter 12 - Genetics Chapter

CLASS FIVE

MIDTERM EXAM

Chapter 14 - The Chemical Basis of Heredity

Chapter 25 - Fungi and Plants

Chapter 26 - Invertebrates

CLASS SIX

Chapter 27 - Vertebrates

Chapter 28 - The Human Animal

Chapter 29 - Digestion

CLASS SEVEN

Chapter 30 - Respiration

Chapter 31 - Circulation Chapter 32 - Water and Temperature Balance

Chapter 33 - Immune Response

CLASS EIGHT

Chapter 34 - Endocrine System

Chapter 35 - Nervous System, Pt 1

CLASS NINE

Chapter 36 - Nervous System, Part 2

Chapter 37 - Reproduction

CLASS TEN

FINAL EXAM

CLASS ELEVEN

REFERENCE MATERIAL

FACULTY INFO

Thornton, William

Please check with instructor during class to get updated contact info.

drwthornton@hotmail.com