

BSC 1005 - GENERAL EDUCATION BIOLOGY

COURSE SYLLABUS

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REQUIRED TEXT

Biology-Concepts & Connections, Neil A. Campbell

COURSE DESCRIPTION

The MDC General Education Biology course will introduce the student to the many basic biological concepts that abound in our understanding of life. Focus will be on principles of molecular biology, evolution, genetics, diseases and other problems that humans face in the environment. This course was designed to stimulate interest and increase comprehension in the diversity of life that exists on our planet. The student will develop skills in inquiry, observation and analysis of biological features.

ASSIGNMENTS & COURSE GOALS

The lecture schedule lists the discussion topics for each week's meetings. Students are expected to keep up with these textbook readings and course objectives. A list of course goals are available on the professor's web page (see below).

CLASSROOM OUTLINES

Students must bring to class a printout of every chapter outline, which may be found on the instructor's web page at (<http://faculty.mdc.edu/dmaser>) They are located under the section named "Outlines" and will print from PowerPoint. If needed, a free download of PowerPoint is available in the same "Outlines" section.

GRADING SCALE

500 pts 5 best exams @ 100 pts. each
150 pts 5 best quizzes @ 30 pts. each
650 pts

A 650-585
B 584-520
C 519-455
D 454-390
F 389 →

TESTS

Six (6) major exams and 6 quizzes will be given. Your lowest quiz grade and your lowest exam grade will be dropped, so that only your best 5 quiz scores and your 5 best exam grades will be averaged. There are **NO MAKE-UPS FOR A MISSED QUIZ OR EXAM**, as they will become your lowest grades and then will be dropped.

Make-ups for a **second** missed exam or quiz are not given unless the student submits upon his/her return to class a doctor's note, hospital bill, a court appearance notice or the like that **clearly** indicates the student was incapacitated or unable to attend on the day of the exam.

ATTENDANCE

Students are expected to attend each scheduled class meeting on time. An absence or late arrival on the day of a quiz or exam will result in a zero, which becomes your lowest quiz or exam grade, and then will be dropped (not made up).

The instructor reserves the right to drop any student who has missed 3 classes. Students are reminded that it is their responsibility to withdraw if they wish to receive a W for the course.

Incompletes will not be given, except in the case of hospitalization or a similar emergency situation on the day of the final exam only.

SERVICE-LEARNING

Students will have the opportunity to participate in Service-Learning as an optional extra-curricular learning activity. Completion of a Service-Learning contract will result in extra credit toward the student's final grade average (2 pts. per hour worked to a maximum of 30 hours). The activity must be agreed to by the professor before the student begins the project. All activities must relate to course content and course objectives and goals. The Center for Community Involvement (Room 3410) can provide you with a list of nonprofit organizations and will guide you through the Service-Learning process. To reflect upon the experience as it related to the course, a 3-page summary report will be submitted one class meeting before the final exam.

LECTURE & READING SCHEDULE

Chemical Basis of Life

Molecules of Cells – Organic Chemistry

Intro. to the Cell

Energy & the Cell

Cellular Respiration

Photosynthesis

Cell Reproduction/Division

Inheritance & Mendel

Molecular Biology of the Gene

Control of Gene Expression

DNA Technology & Genomics

How Populations Evolve

The Origin of Species

Tracing Evolutionary History

Microbial Life: Prokaryotes & Protists

Plants & Fungi Colonize the Land

Evolution of Animal Diversity

Human Evolution

Biosphere: Earth's Diverse Environments

Behavioral Adaptations

Population Dynamics

Communities & Ecosystems

Conservation Biology