

BIOL 101 - Survey of Biology
General Information and Syllabus

Course: Biol 101-001

When: MWF 8:10 – 9:10

Where: LA 205

Textbook: *Biology: Concepts and Connections 6th ed* by Campbell, Reece, Taylor, Simon & Dickey
Text Website: www.campbellbiology.com The website is a great study tool containing quizzes, outlines and links to other biology sites. Use this resource as an electronic study guide.

Instructor: Dr. Stanley Wiatr, Office – Room 139 Science Building,
Phone: 657-2018
Office Hours: MWF 11:30-12:00; MF 2:00-2:30 or By Appointment
Email: swiatr@msubillings.edu When using email, please identify yourself in the subject heading with *Biol 101-YOUR NAME* and a brief description of the email. Email without an appropriate subject will not be read!

Course Webpage: Course information will be posted in D2L.

Objectives: The objective of this course is to expose you to the major principles of biology, ranging from molecular and cellular biology through biological diversity to ecosystem ecology and the effect of human activities on this planet.

Outcomes: The most important outcome of this course will be for you to gain an understanding of basic concepts in biology that will help you make informed decisions in your life. Many important issues influencing our lives have a strong biological component, and it is my desire to give you the tools to react rationally and logically to issues such as population growth, cancer and genetic engineering.

Assessment: Exams will be used to test your knowledge of biological concepts presented in this course. The exam format will include multiple choice, True/False and short answer questions.

1. **80% Unit Exams:** Six Unit exams will be given during the semester. The best 5 of these exams will be 80% of your grade. Although exam dates are given in the syllabus, please realize that the exact date is somewhat tentative, depending on class progress. You'll have about 50 minutes for each exam. If you miss a unit exam, it will count as your "lowest" exam.
2. **15% Final exam** – A final comprehensive exam will be given at the end of the semester during finals week. Everyone must take this exam, and there will be no opportunity to reschedule it, so please don't ask to take it earlier for any reason. You will have two hours for the final exam.
3. **5% Discussion sessions & attendance:** You may be asked occasionally to bring in some internet-based information on a specific topic for discussion in class. Attendance will also be taken periodically and used as a means to enhance your grade.

Make-up Exams - A makeup exam will be given for any ONE of the first six exams if a compelling reason exists. A compelling reason is a documented family emergency or illness with a letter of support from the Dean of Students. All makeup exams will be given on Friday December 5, 2006 from 1:00 - 5:00pm.

Grading: Grades will be determined by numerical scores on each test. Unit exams and your final grade may be curved, and I will reserve the right to assign "+ & -" grades. The standards for awarding grades will be: A= 90%-100%, B= 80%-89%, C= 70%-79%, D= 60%-70%, and F <60%

Students with disabilities: Every effort will be made to accommodate students who have university-documented disabilities.

Academic Honesty: You are expected to meet the highest standards of academic honesty and ethics. The exams must be entirely the result of your own effort and represent your understanding of the subject matter. Any cheating or assisting someone else in cheating will result in you receiving an F for the exam and possible expulsion from the course.

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SYLLABUS AND READING ASSIGNMENTS

Text: *Biology: Concepts and Connections 6th ed.* by Campbell, Reece, Taylor, Simon & Dickey

Date	Topic	Reading (Chapter)
Wed 09-Sep	Introduction: The Science of Biology	1
Fri 11-Sep	The Chemistry of Life	2
Mon 14-Sep	Chemistry of Life	2
Wed 16-Sep	Chemistry of Life	2
Fri 18-Sep	Molecules of Cells	3
Mon 21-Sep	Molecules of Cells	3
Wed 23-Sep	Exam 1: Chapters 1, 2 & 3	
Fri 25-Sep	A Tour of the Cell	4
Mon 28-Sep	The Working Cell	5
Wed 30-Sep	The Working Cell	5
Fri 02-Oct	Exam 2: Chapters 4, 5	
Mon 05-Oct	How Cells Harvest Chemical Energy	6
Wed 07-Oct	How Cells Harvest Chemical Energy	6
Fri 09-Oct	Photosynthesis	7
Mon 12-Oct	Photosynthesis	7
Wed 14-Oct	Review	
Fri 16-Oct	Exam 3: Chapters 6 & 7	
Mon 19-Oct	Cellular Basis of Reproduction	8
Wed 21-Oct	Cellular Basis of Reproduction	8
Fri 23-Oct	Patterns of Inheritance	9
Mon 26-Oct	Patterns of Inheritance	9
Wed 28-Oct	Review	
Fri 30-Oct	Exam 4: Chapters 8 & 9	
Mon 02-Nov	Molecular Biology of the Gene	10
Wed 04-Nov	Molecular Biology of the Gene	10
Fri 06-Nov	How Genes Are Controlled	11
Mon 09-Nov	DNA Technology & Genomics	12
Wed 11-Nov	No Class – Veteran’s Day	
Fri 13-Nov	DNA Technology & Genomics	12
Mon 16-Nov	Exam 5: Chapters 10, 11 & 12	
Wed 18-Nov	How Populations Evolve	13
Fri 20-Nov	The Origin of Species	14
Mon 23-Nov	Tracing Evolutionary History	15
Wed 25-Nov	No Class – Thanksgiving break	
Wed 25-Nov	No Class – Thanksgiving break	
Mon 30-Nov	Overview of Evolution of Major Groups of Organisms & selected readings from Chapters 16-19	16, 17, 18,19
Wed 02-Dec	Overview of Evolution of Major Groups of Organisms	16, 17, 18,19
Fri 04-Dec	Exam 6: Chapters 13, 14, 15 & 16-19 in part	
Mon 07-Dec	Ecology: Biosphere & Population Dynamics	34
Wed 09-Dec	Ecology: Communities and Ecosystems	36
Fri 11-Dec	Ecology: Population Growth and Finite Resources	-
Mon 14-Dec	Final Exam: 2:00 – 3:50	