GENERAL BIOLOGY (BIOL 101) COURSE SYLLABUS - Spring 2013
Instructor: Dr. Dorothy A. Ginnett

Welcome to your General Biology course! I hope you enjoy your journey of discovery and learning about the amazing biodiversity of life on planet earth.

COURSE GOALS:

This non-majors general biology course will engage you in the process of scientific inquiry. We will explore the diversity of life on planet earth and investigate current issues of science and biotechnology that impact modern society. The course units will focus on: scientific inquiry, cell biology, evolution, genetics and biotechnology, biodiversity, animal behavior and ecology.

COURSE THEMES:

Scientific Inquiry	Homeostasis
Evolution	Interdependence of Living Systems
Biodiversity	Science, Technology and Society

LEARNER OBJECTIVES for BIOL 101 include:

1. Understand the basic principles of the science of Biology.
2. Explore the process of scientific inquiry.
3. Apply biological principles and an understanding of scientific inquiry to the evaluation of current biomedical and environmental issues.
4. Reflect upon the interaction of science, technology and society and understand the impact of biology on modern life.

INSTRUCTOR CONTACT INFORMATION and OFFICE HOURS:

Lecture Instructor: Dr. Dorothy A. Ginnett, Wildlife Ecologist
Lab Instructor: Dr. Dorothy Ginnett (section 2)
Email: dginnett@uwsp.edu Office: TNR 377
Office Hours: Tues. 12 – 12:50 p.m. & Thurs. 3 – 3:50 p.m. (or by appointment)
Phone: (715) 346-4183

Lab Instructor: Tanya Copas (sections 1 & 3)
Email: tcopas@uwsp.edu (I may not check my email after 5pm or on weekends)
Office Hours: Wed. 11 a. m. – 12 p.m. in TNR 480A (or by appointment)
Phone: (715) 346-2159

COURSE SCHEDULE:

Lecture: Tuesday & Thursday, 4:00 p.m. - 5:15 p.m., SCI A121

Lab Section 1: Monday 1 p.m. – 3:50 p.m., TNR 254. Instructor: Tanya Copas
Lab Section 2: Tuesday 1 p.m. – 3:50 p.m., TNR 254. Instructor: Dr. Dorothy Ginnett
Lab Section 3: Wednesday 1 p.m. – 3:50 p.m., TNR 254. Instructor: Tanya Copas

Please note: The course is fully enrolled. Due to lab space restrictions, you must attend your scheduled lab section time/date. Prior instructor permission required to attend other lab sections.

FINAL EXAM SCHEDULE: **Tuesday May 14th from 5 p.m. –7 p.m. in SCI A121**
Please notify me by Tuesday April 30th (e.g. 2 weeks in-advance), if you will require any final exam schedule accommodations due to 3 or more final exams on the same day.
UWSP Registration & Records Policy - "If you have three or more examinations on the same day, or if you have other problems with the examination schedule, your instructors may, at their discretion, change the schedule for you." (from http://www.uwsp.edu/reg-rec/ExamSched.aspx).

REQUIRED TEXTBOOKS:

1. **BIOL 101 Lecture Text** - Required Text, UWSP Bookstore – Rental.
   Campbell BIOLOGY: Concepts and Connections. 7th Edition (2012). Reece, J. B., Taylor, M.R. Simon, E.J. and Dickey, J.L. Pearson-Benjamin Cummings Publishers.
2. **BIOL 101 Lab Manual**. Required textbook purchase, UWSP Bookstore.

LEARNING RESOURCES:
D2L (Desire to Learn) On-line Course Materials: Your BIO 101 D2L course website can be accessed via http://www.uwsp.edu/d2l/Pages/default.aspx with your UWSP student login and password. There is a ***"Raise Your Hand"*** discussion forum site for general course related questions. The D2L course site is accessible to all students registered in the course.

UWSP Tutoring Services: Course tutor information will be announced approximately week 3. There is a fee for this service, but fee waivers are available.

COURSE GRADING:	**Points**
Lecture (60% grade) :	
Lecture Exams (3 x 60 pts each.)	180 pts.
Final Lecture Exam (cumulative)	120 pts.
Laboratory (40% grade):	
Lab Pre-labs & Write-Ups	100 pts.
Lab Project	100 pts.
TOTAL POINTS	***500 pts***.

Course Points Earned, Percentage and Final Grade: Your performance will be evaluated by satisfactory mastery of the course objectives and course material. You will not have to compete against other students for a grade. Challenge yourself to do your best scholarly work.

Grades will be based on the following percentages of total points accumulated in lecture and lab:

Grade	***Percentage***	***Total Points***	***Grade***	***Percentage***	***Total Points***
A	95.0 – 100 %	475 - 500	C	73.0 – 76.49 %	365 - 384
A-	90.0 - 94.49 %	450 - 474	C-	70.0 – 72.49 %	350 - 364
B+	87.0 - 89.49 %	435 - 449	D+	65.0 – 69.49 %	325 - 349
B	83.0 - 86.49 %	415 - 434	D	60.0 – 64.49 %	300 - 324
B-	80.0 - 82.49 %	400 - 414	F	0 - 59.49 %	0 - 299
C+	77.0 - 79.49 %	385 – 399			

Note: Percentage scores will be rounded-up from the decimal place by standard scientific rounding rules. The table above already reflects this rounding (e.g. 89.5 % rounded up to 90 %).

COURSE QUESTIONS: I encourage you to engage actively in your learning. Please do not hesitate to voice your general course questions during lecture/lab classes, stop by during office hours to chat, or post your questions to the BIOL 101 D2L Raise Your Hand discussion forum. Important! Check this forum to see if your question has already been answered.
For more private concerns related to absences/family emergencies, please contact me via phone, e-mail or in-person during office hours.

COURSE ANNOUNCEMENTS & CONTENT: Important course announcements made during lecture and lab will be posted to D2L Course News or Content and/or sent via e-mail to all enrolled students. Course content will be posted to the D2L site after the lecture/lab to facilitate your study and review. ***Please Note*** – this is your first place to check for make-up work for missed classes.

COURSE POLICIES:

Academic Integrity: Students are expected to conduct themselves in accordance with the principles of academic integrity (i.e. refraining from cheating, copying. plagiarism or any other form of misrepresentation of their work), respect for the teaching and learning environment, and respect for diverse perspectives. Academic misconduct is subject to penalties outlined in University System-wide Policy (UWS Chapter 14).

Professionalism: A professional demeanor and active engagement in the learning process is expected of all students attending the course. The classroom teaching/learning environment is enhanced by an attitude of mutual respect for the contributions of your classmates and the instructor. As a courtesy to your classmates and instructor, all electronics should be turned-off while in the classroom. Please also avoid chatting to neighbors during lecture as this negatively impacts the teaching & learning environment.

Netiquette: The rules of etiquette, or civil discourse, apply to all online course discussions, such as the ***Raise your Hand*** discussion forum in D2L.

Class Participation/Attendance: Active class participation and regular attendance are vital components of your learning experience. Attendance is not required in college; however, *you are responsible* to make-up missed lecture or lab content and assignments on your own time.

Homework Assignments and Readings: Advance preparation for class sessions will be facilitated by textbook and lab manual readings. You will find this work to be of critical importance for keeping-up with the rapid pace of a biology class.

Exams and Quizzes: This is an integrated lecture/lab course, so expect that lab exams may include lecture content and vice-versa. Formats may include multiple choice, short essay and problem-solving. Additionally, Biology exams are cumulative, as knowledge builds over time.

Exam Attendance: Exams must be attended at the scheduled dates and times. Arrangements for make-up exams will only be made with *documentation* of emergency circumstances (i.e. severe personal/family illness or death in family), and the instructor must be notified prior to the exam.

Due Dates: Late assignments will receive a 10% per day point deduction if submitted within 3 days of the scheduled due date. Late assignments will not be accepted after this 3 day period.

INSTRUCTOR ABSENCE and/or CLASS CANCELLATIONS:

In the rare event of an instructor's personal illness or family emergency resulting in an unavoidable class cancellation, I will post the day's alternative assignment on the D2L class site as soon as possible, so that the class does not lose valuable instructional time. I will also contact the Biology department to post notices on the lecture/lab doors of any class cancellation, and if possible, with send out an e-mail/D2L notice of the cancellation. If there is a severe weather situation impacting the Stevens Point area, and UWSP classes are not cancelled, please use your best judgment about your personal safety when considering traveling to campus. If you cannot make it to campus, please check D2L for the day's content postings.

Dr. Ginnett's Study Tips for Science:

1. Be an **active participant** in your learning.
   Attend all lectures and labs. Take detailed notes. Engage your mind in the course material ("unplug" distracting electronic devices). Ask thoughtful questions in lecture & lab. Use office hours.
2. **READ!**
   Complete all assigned readings each week. Use active reading techniques – take notes, ask questions, make flashcards, etc.
3. **Organize your time**.
   Schedule daily study time for the course. General guideline for college-level, minimum of 2 hours study time/hour in-class.
4. **Review notes daily after class**.
   Best strategy to *maximize long-term memory retention*. Fill-in gaps in notes, immediately after lecture, while fresh in short-term memory. Add reading notes & illustrative examples.
   Note questions to ask the next class.
5. **Synthesize information**.
   Make connections between course topics and to the real world. How does your new learning connect to prior learning?
6. **Discover your best learning-style.**
   Auditory, Visual, Kinesthetic? Find what works best - flash cards, flow charts, online tools, study groups, etc
7. **Exam preparation.**
   Review your excellent course notes (see # 4 above) Summarize notes further.
   Synthesize and make cross-connections.
   Practice with regular self-quizzes (online textbook site) on topics covered.
   Dissect your quiz results and problem-solve to enhance learning.
   Review those concepts you missed to increase understanding.
   Other strategies - study group, online quiz tools, flow charts, flash cards, etc.

GENERAL BIOLOGY (BIOL 101) TENTATIVE LECTURE & LAB SCHEDULE
Dr. Ginnett, Spring 2013

Week	***Date***	***Lecture & Lab Topic***	***Readings & Assignments***
1	Tues. Jan. 22	Introduction & Course Syllabus Exploring Life.	Ch. 1, Biology text, pp 1 - 13
	Thurs. Jan. 24	Biochemistry of Life	Ch. 2 & 3, Biology, pp. 16 - 48
	Week 1 – No labs	----------	----------
2	Tues. Jan. 29	Cell Structure & Function	Ch. 4 & 5, Biology, pp. 50 - 86
	Thurs. Jan. 31	Cell Structure & Function	Ch. 4 & 5, Biology, pp. 50 - 86
	Week 2 Lab	*LAB SAFETY, MICROSCOPY & SCIENTIFIC METHOD-DAPHNIA*	*LAB MANUAL - LAB B & LAB C* *LAB WRITE-UP*
3	Tues. Feb. 5	Energetics - Photosynthesis & Cellular Respiration	Ch. 6 & 7, Biology, pp. 88 - 121
	Thurs. Feb. 7	Cell Reproduction, Cell Cycle, Mitosis & Meiosis	Ch. 8, Biology, pp 124 - 149 Review & Study for Exam 1
	Week 3 Lab	*INTRODUCTION TO THE CELL CONVEYING BIOLOGICAL INFO*	*LAB MANUAL - LAB F & LAB A* *LAB WRITE-UP*
4	Tues. Feb. 12	***EXAM 1***	----------
	Thurs. Feb. 14	Genetics of Chromosomes Molecular Biology – DNA	Ch. 9, Biology, pp. 152 – 178 Ch. 10, Biology, pp. 180 – 206
	Week 4 Lab	*EXPLORING ENZYMES*	*LAB MANUAL – LAB E* *LAB WRITE-UP*
5	Tues. Feb. 19	Gene Expression Biotechnology & Genomics	Ch. 11, Biology pp. 208 – 228 Ch. 12, Biology pp. 230 – 250
	Thurs. Feb. 21	Animal Systems - Reproductive & Endocrine	Ch. 26 & 27, Biology, pp. 516 - 560
	Week 5 Lab	*DNA, ASEXUAL REPRODUCTION & CELL CYCLE*	*LAB MANUAL – LAB H* *LAB WRITE-UP*
6	Tues. Feb. 26	Evolutionary Theory & Population Genetics	Ch. 13, Biology, pp. 254 - 274
	Thurs. Feb. 28	Evolution of Species	Ch. 14, Biology, pp. 276 - 290
	Week 6 Lab	*SEXUAL REPRODUCTION, MEIOSIS, GENETICS & INHERITANCE*	*LAB MANUAL – LAB I* *LAB WRITE-UP*
7	Tues. Mar. 5	Evolutionary History & Classification	Ch. 15, Biology, pp. 292 - 315 Review & Study for Exam 2
	Thurs. Mar. 7	Biodiversity: Viruses, Bacteria, Protista & Fungi	Ch. 16, Biology, pp. 330- 338 & Ch. 17, Biology, pp. 355 – 362 & Ch. 10, Biology pp. 200 – 201
	Week 7 Lab	*MODELING NATURAL SELECTION*	*LAB MANUAL – LAB Q* *LAB WRITE-UP*
8	Tues. Mar 12	***EXAM 2***	----------
	Thurs. Mar 14	Animal Systems - Immune System & Disease	Ch. 24, Biology, pp. 484 - 502
	Week 8 Lab	*BIO LOGICAL CLASSIFICATION MICROORGANISM CULTURE*	*LAB MANUAL – LAB J & LAB K* *LAB WRITE-UP*

GENERAL BIOLOGY (BIOL 101) TENTATIVE SCHEDULE - Spring 2013 (continued)

Week	***Date***	***Lecture Topic***	***Lecture Reading in LIFE text***
9	Tues. Mar. 19	Biodiversity – Plantae, Plant Form & Function	Ch. 17, Biology, pp. 340 - 356 & Ch. 31, Biology, pp. 620 - 640
	Thurs. Mar. 21	Biodiversity – Plantae Plant Nutrition & Transport	Ch. 32, Biology, pp. 642 - 658 Study for Exam 3
	Week 9 Lab	*DIVERSITY: BACTERIA, PROTISTA & FUNGI*	*LAB MANUAL – LAB L* *LAB WRITE-UP*
-------	***SPRING BREAK***	***SAT. MARCH 23 –SUN. MARCH 31***	***----------***
10	Tues. Apr. 2	Biodiversity – Plantae Plant Control Systems	Ch. 33, Biology, pp. 660 - 675 Study for Exam 3
	Thurs. Apr. 4	Animal Systems – Unifying Concepts, Structure & Function	Ch. 20, Biology, pp. 412 - 426 Study for Exam 3
	Week 10 Lab	*PLANT DIVERSITY I: NON-VASCULAR & VASCULAR SEEDLESS*	*LAB MANUAL – LAB M* *LAB WRITE-UP*
11	Tues. Apr. 9	***EXAM 3***	***----------***
	Thurs. Apr. 11	Biodiversity – Invertebrate Animals	Ch. 18, Biology, pp. 364 - 386
	Week 11 Lab	*PLANT DIVERSITY II: SEED PLANTS, FLOWERS & FRUITS*	*LAB MANUAL – LAB N* *LAB WRITE-UP*
12	Tues. Apr. 16	Animal Systems – Nutrition & Digestion Control of Temperature & Water	 Ch. 21, Biology, pp. 428 – 450 Ch. 25, Biology, pp. 504 - 514
	Thurs. Apr. 18	Biodiversity – Vertebrates & Human Evolution	Ch. 19, Biology, pp. 388 - 409
	Week 12 Lab	*ANIMAL DIVERSITY I: THE INVERTEBRATE ANIMALS*	*LAB MANUAL – LAB 0* *LAB WRITE-UP*
13	Tues. Apr. 23	Animal Systems – Gas Exchange & Circulation	Ch. 22 & 23, Biology, pp. 452 - 482
	Thurs. Apr. 25	Animal Systems – Nervous, Sensory & Muscular	Ch. 28, 29, 30, Biology, pp. 562 - 617
	Week 13 Lab	*DIVERSITY V: THE VERTEBRATE ANIMALS*	*LAB MANUAL – LAB P* *LAB WRITE-UP*
14	Tues. Apr. 30	Ecology Biosphere & Climate Change	Ch. 34, Biology, pp. 678 - 696
	Thurs. May 2	Evolutionary Adaptations to Environment - Animal Behavior	Ch. 35, Biology, pp. 698 - 736
	Week 14 Lab	*FIELD ECOLOGY* *(SCHMEECKLE FIELD TRIP)*	*LAB MANUAL – LAB U*
15	Tues. May 7	Ecology – Organisms, Populations, Communities and Ecosystems	Ch. 36 & 37, Biology, pp. 722 - 758
	Thurs. May 9	Ecology - Conservation Biology	Ch. 38, Biology, pp. 760 - 778
	Week 15 Lab	*FIELD ECOLOGY – TREE ID*	*LAB MANUAL – LAB S*
16 - Final	***Tues. May 14th***	***FINAL EXAM***	**5 –7 p.m. in SCI A121** Study for Final Exam