

BIOLOGY 104 INTRODUCTORY BIOLOGY II
COURSE SYLLABUS - SPRING 2012
PLEASE READ THIS SYLLABUS CAREFULLY!!

COURSE COORDINATOR

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LECTURE INSTRUCTORS

Section 001: MWF 9:30 – 10:20 AM, LH 1 - Dr. S. Bhattarai sbhatta2@gmu.edu
Section 002: MW 4:30 - 5:45 PM, IN 103 - K. Patterson kpatter3@gmu.edu
Section 003: R 4:30 – 7:10 PM, IN 103 - Dr. A. Laemmerzahl alaemmer@gmu.edu

REQUIRED TEXTS

Lecture Text: Campbell, et al. 2009. *Biology: Concepts and Connections*, 7th ed. Pearson Benjamin Cummings, San Francisco.

Lab Manuals: Luther. 2011. *Introductory Biology for Non-majors Laboratory Manual Biology 104*. Hayden-McNeil Publishing, Inc., Plymouth MI.

DESCRIPTION AND OBJECTIVES

Biology 104 is part of the University General Education program and, as such, fulfills, in part, the Natural Science requirement for a 2-semester laboratory science. The General Education program has four goals: 1) to ensure that all undergraduates develop skills in information gathering, written and oral communication, and analytical and quantitative reasoning; 2) to expose students to the development of knowledge by emphasizing major domains of thought and methods of inquiry; 3) to enable students to attain a breadth of knowledge that supports their specializations and contributes to their education in both personal and professional ways; and 4) to encourage students to make important connections across boundaries (for example: among disciplines; between the university and the external world; between the United States and other countries). It is the instructors' hope that we can enable our students to achieve these goals!

Biology 104 is the second of a 2-semester sequence in Introductory Biology designed primarily for non-majors. It begins with an exploration of the concept of animal homeostasis and expands on this by looking into the structure and function of the major animal organ systems, with emphasis on mammalian systems. The second part of the semester includes an examination of the structure and function of higher plants, as well as some major concepts in ecology and conservation biology. Biology 104 is a 4-credit course; therefore students must be enrolled in both a laboratory and lecture section. No credit will be awarded to students who are not appropriately enrolled by the official deadlines.

It is strongly recommended that students successfully complete BIOL 103 *before* taking this course.

GMU e-mail: All George Mason students are issued an e-mail account. Instructors often find it convenient or necessary to e-mail individual students, or the class as a whole. The George Mason in-house policy is to use only the GMU e-mail accounts. Therefore, it is necessary for the students to activate and frequently check their GMU e-mail account to insure receiving messages in a timely fashion.

GMU ID's: All students are issued a GMU photo ID card. Please carry this with you, especially during exams, as it will be necessary for instructors to verify each student's identification. Instructors are not required to honor identification cards other than those issued by the University.

ATTENDANCE AND CLASSROOM BEHAVIOR: Regular attendance in both laboratory and lecture is crucial to successful completion of this course. Studies have shown that students who attend each class perform far better than those whose attendance is irregular. Many important, interesting and subtle points can be made by instructors which may not be presented in the textbook. Instructors may also make announcements regarding changes in scheduling or material to be covered. Therefore, students are expected to attend every lab and every lecture, to arrive on time, and to remain until class is dismissed. **Students are responsible for being aware of all information and announcements presented in class, whether or not they are present.**

Students are also responsible for being sure they are properly enrolled in the course. If a student drops the course, he or she must see to the paperwork him or herself, and in a timely fashion. Instructors will not "automatically" drop a

student who merely stops coming to class.

Attendance in laboratory is mandatory. Laboratory absences will result in a grade of zero for that lab. **Three or more unexcused absences in lab will result in a grade of zero for the entire laboratory portion of the course.** For an explanation of the laboratory make-up policy, please see the heading on Laboratory Policies. Students must heed all warnings and safety precautions issued by their lab instructors.

If something is not clear to you, by all means ask questions! A well-timed question can help everyone in class, even the instructor. Students are also expected to be respectful and considerate of one another as well as their instructors. To that end, please listen when someone else is talking, and turn off all cell phones or other noise-makers while in class or lab. If it is necessary to carry on activities that are not directly related to the material being presented in class, please conduct these activities elsewhere. In order to make the most effective use of both students' and instructor's time and energy, disruptive students may be required to leave the classroom.

STUDENTS WITH DISABILITIES: We are happy to accommodate, in any way we can, students with disabilities. If you feel this would be helpful to you, you must contact the instructor as well as the Disability Resource Center (DRC) at 993-2474. All academic accommodations must be arranged through the DRC.

HONOR CODE: The Biology Department strongly enforces the GMU Honor Code. Students are expected to read and adhere to the George Mason University Honor Code. **Ignorance of the Honor Code is no excuse for infractions thereof.** All work done in lecture and lab (exams, data sheets, quizzes, etc.) must be the sole work of the student. Copying data, falsifying data, cheating on exams and quizzes, failing to credit the work of others are all violations of the Honor Code and will be dealt with most seriously.

CANCELED CLASSES: If an examination is scheduled for a day on which classes are canceled due to weather or any other reason, the examination will be given during the next scheduled class. Call (703) 993-1000 for official notification of canceled classes.

LECTURE EXAMS AND QUIZZES: To evaluate understanding of lecture material, three hourly lecture exams will be given, each worth 100 points; the lowest exam score will be dropped. In addition, there will be a cumulative final exam, worth 120 points, which all students must take. Hourly exams for classes meeting multiple times per week will be given on the last meeting of the week (Thursday or Friday, please see attached Lecture Schedule). For final exam times, see the Lecture and Lab Schedule.

In addition to scheduled lecture exams, there will also be three unannounced 10-point quizzes, the lowest of which will be dropped.

For the hourly and final exams, students will be required to bring with them one or two sharpened pencils with good erasers, a Scantron form No. 882-E, and a valid GMU ID card. The use by students of electronic devices of any type is prohibited during exams. Lecture exams will begin promptly at the scheduled time. Students arriving late to an exam will be seated only at the discretion of the instructor, and will be given no extra time to take the exam. ***Once one student has finished and handed in an exam, no other, late arriving students will be allowed to take the exam - no exceptions!***

Due to the large size of the lecture classes, and because one quiz and hourly exam grade is dropped, absolutely no make-up quizzes or exams, including the final exam, will be given to any student under any circumstances.

Final course grades are usually available via Patriot Web within 48 hours of the final exam. If you wish to have additional information regarding your grade, please provide the instructor with a stamped, self-addressed envelope prior to the final exam, or see the instructor in person after the grading period. **I will not e-mail exam or final course grades!!**

LABORATORY POLICIES

Attendance and Participation: Punctual attendance is required in every lab, and is essential for proper understanding of the material. **Three unexcused absences will result in a total grade of zero for the entire lab portion of your course grade.** Students are expected to fully participate in all exercises, including clean-up of supplies and equipment at the end of each exercise. Notify the instructor immediately if there is any condition which prevents you from participating in a given exercise. Because there can be hazards associated with some laboratory procedures, equipment, and chemicals, all students must follow standard safe laboratory practices as well as any particular precautions and instructions given by the instructor.

Make-Ups: If you unavoidably miss a lab it **may** (or it may not!) be possible to make up the missed lab in another section during the same week. A make-up must be approved by both instructors. Any instructor may refuse to allow a student to make-up in his or her lab if the lab is already at capacity. It is the student's responsibility to see that all graded material is transmitted to the instructor of record. A student will be permitted only 2 make-up's per semester.

Lab Pre-Reading Assignments: A 5-point assignment should be completed before arriving at the laboratory and should be handed to the instructor at the beginning of the laboratory. Late assignments will not be accepted.

Lab Data Sheets: A Data Sheet, located at the end of each Lab Manual exercise, will be collected by the lab instructor at the beginning of the next laboratory exercise. Each assignment will be worth ten points.

COURSE GRADE BREAKDOWN AND CALCULATION

GRADED MATERIAL	POINTS	TOTAL POINTS AND GRADE	
Lecture Exam	100 points	450 - 500 points	A
Lecture Exam	100	430 - 449	B+
Final Exam	120	400 - 429	B
Lecture Quizzes (2 10 pt each)	20	380 - 399	C+
Lab Pre-reading Questions	50	350 - 379	C
Lab Data sheets	110	300 - 349	D
Total	500	0 - 299	F

WHERE TO GET HELP

If you encounter any difficulties in this course, first see either your lecture or laboratory instructor, **immediately!** Do not wait until the end of the semester to ask for help in understanding the material in order to improve your grade - by then, it may be too late! Know your instructors' names, office hours, e-mail addresses and phone numbers; then use them! Do not "be afraid" to ask your instructors for help - that is our job!

The Counseling Center is committed to improving academic and personal skills, and offers many workshops and counseling groups throughout the semester.

Make use of the many rich academic and personal opportunities available at Mason!

**Biology 104 Spring, 2012
Lecture and Lab Schedule**

Week of:	Lecture Topic	Chapters in Text	Lab Exercise
Jan 23	Tissues, Homeostasis	20	Introduction; Safety
Jan 30	Digestive System	21	#1 Musculoskeletal System
Feb 6	Respiratory System	22	#2 Cab Cutter I
Feb 13	Circulatory System LECTURE EXAM I	23	#3 Cab Cutter II
Feb 20	Circulatory System	23	#4 Respiration
Feb 27	Immune System	24	#5 Cardiovascular
Mar 5	Reproductive System	27	#6 The Senses
Mar 12	SPRING BREAK!!	SPRING BREAK!!	NO LABS
Mar 19	Nervous System LECTURE EXAM II	28	#7 Flowers and Fruit
Mar 26	Angiosperm Structure and Function	31	#8 Competition and Predation
Apr 2	The Biosphere, Communities and Ecosystems	34, 37	#9 Conservation Biology and the Tragedy of the Commons
Apr 9	Communities and Ecosystems, LECTURE EXAM III	37	NO LABS
Apr 16	Population Ecology	36	#10 Ecosystems and Watersheds – Water Quality I
Apr 23	Conservation Biology	38	#11 Ecosystems and Watersheds – Water Quality II
Apr 30	Catch-up; Review		

Lecture Instructor _____ Lecture Section _____

Office Hours _____ Contact _____

Lab Instructor _____ Lab Section _____

Office Hours _____ Contact _____

Final Exam:

Section 001 May 14, 7:30 – 10:20 AM

Section 002 May 9, 4:30 – 7:15 PM

Section 003 May 10, 4:30 – 7:15 PM

Safety Reminders!!

No food or drink may be brought into the lab, or consumed there, unless part of the laboratory exercise.

High heels, bare feet, sandals, open-toed shoes, bare midriffs, shorts, sleeveless shirts or excessive bare skin are **not allowed** in the lab.

Report to your instructor any unsafe conditions you notice.

Follow all safety precautions given by your instructor.

Attendance Reminders!!

Be on time and prepared! Quizzes are given at the beginning of lab!

Ask questions to clarify any procedure or principle you are uncertain of.

Permission to make up a lab must be obtained by both instructors. Only 2 make-up's allowed per semester.

Unexcused absences in 3 or more labs cause the loss of all lab points (**eek!**).