# Bio 101 Introduction to Biology w/ Lab, 4cr

**Fall 2007**

**Instructor:** Janice Lapsansky  
**Lecture:** MWF 0800-0850, AH 100  
**Office Hours:** BI 305, MW 9-11, and by appt.  
**Office Phone:** 650-7337  
**Prerequisite:** Math 102 or higher  
**Required Texts:**  
2) Bio 101 Laboratory Manual. WWU Copy/Duplicating

## WEEK OF  |  TENTATIVE LECTURE ASSIGNMENT  |  LAB ASSIGNMENT  
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Sept 26 (W)  | Biology is a method of knowing/learning about the living world.... Ch. 1  | No lab this week  
Oct 1  | Living things are (at least!) physical and chemical machines.... Ch. 2, 3  | Introduction to the Science of Biology  
Oct 8  | **Quiz I (M)** Cells (no matter how simple) demonstrate a division of labor for an array of functions.... Ch. 4  | Movement of Water & other Materials in Biological Systems  
Oct 15  | Reproduction is both precise and unpredictable... Ch. 8, 9, 12  | Ecological Studies I  
Oct 19 (F)  | **EXAM I: Ch. 1-4, 8, 9**  |  
Oct 22  | The struggle for order in an environment of constant change… Ch. 24, 16 (pp. 246-257)  | Ecological Studies II  
Oct 29  | **Quiz II (M)** No one acts alone, and everyone has an impact… Ch. 39-41  | Microscopic Investigations I  
Nov 5  | Living things are programmed to make organized energy transformations... Ch. 5, 6  | Microscopic Investigations II  
Nov 9 (F)  | **EXAM II: Ch. 5, 6, 16, 24, 39-41** *(Last day for course withdrawal)*  |  
Nov 12 (M)  | Veteran’s Day Holiday - no classes  |  
Nov 14 (W)  | Fuel for thought…& exercise, & digestion, &… Ch. 7  | Introduction to the Scientific Method: Human Physiology  
Nov 19  | **Quiz III (M)** Recognizing patterns: "favorite recipes", & explaining your uniqueness… Ch. 10, 11  | No lab this week  
Nov 22, 23  | **Thanksgiving Holiday - no classes**  |  
Nov 26  | Genes: conductors of a brilliant masterpiece... Ch. 13  | Investigating Genotypes and Phenotypes: FlyLab  
Dec 3  | Theory and supporting evidence describe our understanding of the origin and evolution of life on earth... Ch. 17, 18  | Bioethics: Debate & Class Discussion  
Dec 10 (M) 3:30-5:30  | **EXAM III: Ch. 7, 10, 11, 13, 17, 18**  |
BIOLOGY DEPARTMENT MISSION STATEMENT:
Our mission is to provide an outstanding learning environment that integrates education, scholarship, and service to actively engage students in the biological sciences and to foster their development as lifelong learners.

COURSE GOALS: To introduce students to the fundamental principles, current concepts, and methods in biology through their investigation and discussion of living processes at the chemical, cellular, organism, and ecosystem levels.

COURSE DESCRIPTION: As an introduction to biological science, this course illustrates the interdependence of many scientific disciplines, and emphasizes the methods of scientific inquiry (esp. deductive reasoning and modeling) as a way of answering a variety of questions about the living world. It is designed to serve non-science majors, as well as students for whom this is a prerequisite for their future biology courses. Success in this class will require some memorization, problem solving, and integration of the subject matter with your personal experiences and/or current events. Understanding biology either in this course or in your everyday life requires the use of a specialized, well-practiced vocabulary, and a context that is developed through your active participation in lecture and laboratory meetings. This syllabus includes the tentative schedule of lecture material. You are expected to pre-read* the assigned chapters before the lecture meeting, and come prepared to ask questions about the reading or the previous lecture. Similarly, you are required to read the laboratory assignment prior to your arrival in the lab, complete pre-lab assignments, and in doing so, be ready to learn. Investments of time and energy in advance will increase the chance that the class will not only meet your expectations, but you will also be satisfied with your performance.

The lab component of this course operates nearly independently of the lecture, although they are designed to complement each other. Undergraduate and graduate student teaching assistants are utilized in the lab to introduce exercises, guide your study, and grade assignments. They are resources important to your success in this course. Please respect the work that they do for you, and don’t hesitate to ask them for assistance with lecture or lab material. The schedule of laboratory exercises and evaluations is provided in the lab manual, and will be further explained by your lab TA.

* Pre-reading involves a careful survey of chapter contents, with special attention paid to section headings, figures, boxed information including key concepts and objectives, bulleted items, new terms printed in bold face, etc. The purpose of pre-reading lecture material is to provide you with a conceptual context and an introduction to the vocabulary so that you may actively participate in lecture, and obtain the greatest benefit from your lecture time investment!

LEARNING OBJECTIVES:
Class activities and evaluations are designed to help you meet the following learning outcomes. With your active participation in this class, you will be able to
- demonstrate your knowledge and application of the material presented in class, lab, and course materials
- discuss the methods used to develop knowledge and understanding in biology
- frame questions and answer problems using the language and methods of biology
- integrate and relate concepts introduced in this class to topics you may be exposed to in other aspects of your life, including your academic and professional career goals

EVALUATION & GRADING:  

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>3 Lecture exams (75 pts ea)</td>
<td>225 pts</td>
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<tr>
<td>3 Lecture quizzes (25pts ea)</td>
<td>75 pts</td>
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<tr>
<td>Lab</td>
<td>100 pts</td>
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<tr>
<td>Total points possible</td>
<td>400 pts</td>
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GRADING SCALE:  

<table>
<thead>
<tr>
<th>Percentage</th>
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<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
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<tr>
<td>70-79</td>
<td>C</td>
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<tr>
<td>60-69</td>
<td>D</td>
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<tr>
<td>Below 60%</td>
<td>F</td>
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(Students who choose P/F as a grading option must achieve at least 74% to pass)
Lecture exams will consist of multiple choice, true/false, and matching questions, using scan-tron answer sheets. Please bring a #2 pencil to class on exam days. Exam questions will test your knowledge of the subject matter discussed in class, and may be related to lab material. They are designed to fairly evaluate your knowledge, understanding and application of course material without “tricks”. Quizzes are a mix of similar objective questions, and are taken individually, but you may discuss your answers with a partner in class.

COURSE POLICIES:

Enrollment Policy: You are currently enrolled in this course and only you can change this. If you fail to complete all of the assignments, or stop coming to class and do not officially withdraw, you will receive a failing grade. This policy is in place due to the fact that demand for this class often exceeds space availability, and to facilitate responsible and timely decisions regarding enrollment.

Academic Dishonesty Policy: Western Washington University students are responsible for reading, understanding and following the policy and procedures regarding academic dishonesty as set forth in the WWU Academic Dishonesty Policy and Procedure (see Appendix D of the University Bulletin).

Missed Exam and Late Work Policy: It is the student’s responsibility to complete all assignments and take all exams/quizzes on time. Lab practical exams CAN NOT be made up. Lecture exams and lab quizzes may be rescheduled ONLY if discussed with me BEFORE the scheduled date, or, in the event of illness or other emergency, you have the appropriate documentation from a health professional or the Office of Student Life. (Contact me directly or leave a message in the Biology office.) It is also your responsibility to contact me as soon as you return to school. Failure to do so may jeopardize your chance of a make-up test. Late assignments are usually penalized 10% for each day late.

Reasonable Accommodation Policy: It is the policy of Western Washington University to provide reasonable accommodation to the known physical, sensory, or mental limitations of qualified individuals except where such accommodation would impose undue hardship on the institution. To request accommodation, students must contact WWU disAbility Resources for Students at 360.650.3844 or www.drs.wwu.edu.

Please let me know if you have any questions about information presented in this syllabus.