



Course Subject, Number and Title

Biology/Botany/Zoology 153 – Introductory Biology

Credits 3

Canvas Course URL

<https://canvas.wisc.edu/courses/118428>

Meeting Time and Location

Lecture 1: 11:00 MWF – 105 Psychology

Lecture 2: 12:05 MWF – 105 Psychology

INSTRUCTORS AND TEACHING ASSISTANTS

Instructors - Titles and Names

Prof. Donna Fernandez
B215 Birge Hall
430 Lincoln Dr
(608) 262-9033

Prof. Marc Wolman
213 Zoology Research Bldg.
1117 Johnson St
(608) 890-1962

Prof. David Abbott
C203 Primate Center
1223 Capitol Court
(608) 698-1953

Instructor Availability

In-person and on-line office hours will be announced in lecture and posted on the course Canvas site.

Instructor Email/Preferred Contact

dfernand@wisc.edu

mawolman@wisc.edu

abbott@primate.wisc.edu

Coordinators

Jean Heitz – Lecture 1 – jgheitz@wisc.edu – Rm 230 Noland Hall

Julie Collins – Lecture 2 – jecollins4@wisc.edu – Rm 236 Noland Hall

Teaching Assistant Information

A list of all TA names, office hours and contact information will be provided on the course Canvas site.

OFFICIAL COURSE DESCRIPTION

Course Description

First semester of a two semester course designed for majors in biological sciences. Topics include: cell structure and function, cellular metabolism (enzymes, respiration, photosynthesis), information flow (DNA, RNA, protein), principles of genetics and selected topics in Animal Physiology.

Requisites

None.

HS chem or concurrent registration in college chemistry strongly advised.

Instructional Mode:

All face-to-face

Credit Hours:

This 3-credit class meets three times weekly for 50-minutes for lecture, plus 75 minutes per week for discussion section. Over the course of the fall/spring semester, students are expected to do a total of about 150 hours learning activities which include class attendance, reading, studying, preparation, problem sets, and other learning activities.

LEARNING OUTCOMES

Course Learning Outcomes

Introductory Biology 151/153-152 is a two semester introductory sequence for majors in the biological sciences. Emphasis will be placed on learning, understanding and being able to use key biological concepts and the scientific method. The study of modern biology is not only a matter of assimilating factual information. Learning how to use that information for problem-solving, posing hypotheses and interpreting experimental results is also critical to understanding biology as a science. The lectures examine key concepts. Discussions allow you to more fully investigate these. In the laboratory, you will need to use the scientific method and apply a number of the concepts from lecture to carry out the various activities. In addition, labs stress the development of written and oral presentation skills. These are required to successfully communicate scientific concepts and your research findings to others.

General Learning Goals and Objectives (in no particular order)

- Develop a broad knowledge base sufficient to understand, connect, & synthesize the Vision & Change core concepts: Evolution; Structure and Function; Information Flow, Exchange, and Storage; Pathways and Transformations of Energy and Matter; Systems.
 - Students will be exposed to topics that cover the breadth of the field of biology, the scope of biology (atoms to ecosystems), and about the many ways to be a biologist.

- Make connections to other scientific disciplines. Students will:
 - use other scientific disciplines (e.g., chemistry, physics, and math) to understand biology, and make conceptual and content linkages with those disciplines.
 - understand the importance of collaboration between biology & other scientific disciplines.

- Make connections to society at large. Students will understand:
 - the scientific underpinnings of current issues
 - why biological knowledge is essential to global citizenship

- Develop practical skills necessary for a professional biologist. Students will advance their:
 - teamwork skills
 - laboratory skills

- quantitative analysis skills
- Develop communication proficiency. Students will be able to:
 - write logically and with clarity and style about important questions in biology
 - articulate persuasively, both orally and in writing, focused, sophisticated, and credible arguments
 - understand and explain results effectively
 - approach evidence with probity and intellectual independence
 - find and use source material appropriately with proper citation
 - read and understand primary scientific literature
 - understand the difference between primary and secondary scientific literature
- Become proficient in problem-solving through engaging in the process of science. Students will become proficient in:
 - developing testable hypotheses and aligning methods with a hypothesis
 - using biological knowledge/concepts to solve novel problems
 - identifying/asking questions & determining how to answer them
 - integrating disparate information
- Gain interest in the field of biology. Students will gain an appreciation for all topics in biology, not just their own intended major or career path.

GRADING

Introductory Biology 153 is a 3 credit course required for some majors in Engineering. Attendance in lecture and discussion is mandatory. **Intro Bio 153** students must have a passing score ($\geq 60\%$) in the lecture + discussion portions combined, and obtain a score of $>50\%$ in *each of these portions individually* in order to receive a passing letter grade in the course.

- The lecture portion of the course will comprise 90% of the final grade.
 - Combined, the lecture exams and in-class activities count for 90% of the final course grade.
- The discussion is worth 10% of the final grade (graded portions of discussion will be primarily in the form of quizzes and short essays).

The course is graded on a standard scale as noted below.

- 90-100% = A
- 88-89.99% = AB
- 80-87.99% = B
- 78-79.99% = BC
- 70-77.99% = C
- 60-69.99% = D

Please note that our course is **NOT** graded on a curve. It is not necessary to do this, and, in fact, would result in lower grades across the entire course if we did so – yes, truthfully. Also, please note that we do NOT round scores up.

Questions regarding graded work

Any questions regarding grading of any exams, quizzes, or assignments must be addressed within **one week** following the return of the graded work. The grader reserves the right to address only the graded item in question or the entire exam, quiz, or assignment. Absolutely **no** reconsideration of graded work will be permitted following the submission of final letter grades in this course unless it concerns a technical issue regarding grade recording.

REQUIRED TEXTBOOK, SOFTWARE & OTHER COURSE MATERIALS

Textbooks & Other Required Materials

- How Life Works textbook
 - At the campus bookstore, purchase an access card to the How Life Works etext and Launchpad for \$58 list. The ISBN is 9781319198084. It should cost \$58.00. This is a special price and URL for Intro Bio students.
 - If you want a 3 hole punched paper copy in addition you can purchase LaunchPad access with the etext plus a Loose-Leaf text at the campus bookstore for \$100. The ISBN for this package is 9781319198138.
- An iClicker is required for this course. Used/older versions are acceptable.

Look for the full lecture schedule on the course Canvas site.

Canvas & Weekly Emails – Mandatory Reading each week

A weekly newsletter is sent to the classlist each week and is also posted to Canvas. Other notifications about the course are also sent via email periodically. All students are responsible for the information contained in these communications and are expected to check them regularly. If you have any difficulty doing so, contact us immediately. **These bulletins are required reading and contain essential information regarding homework, course policies, exam scheduling, and other matters.**

LECTURE EXAM SCHEDULE

Exam I	Mon. Oct. 8: 8:15 – 9:45 pm	Location: To Be Announced (TBA)
Exam II	Fri. Nov. 9: 5:30 – 7:00 pm	Location: TBA
Exam III	Fri. Dec. 14: 7:25 – 9:25 pm	Location: TBA

Exam Review Schedule

Exam 1: Sun. Oct. 7, 5 to 7 pm - Location: To Be Announced (TBA)

Exam 2: Wed. Nov. 7, 8:15-9:30pm - Location: TBA

Exam 3: Wed. Dec.12, 5 to 7 pm - Location TBA

Exam Policy

• **Exam Conflicts:** University policy specifies that exams cannot disrupt classes held during regularly scheduled times. If you have an exam for another course that conflicts with your lab, discussion, or lecture period in Intro Bio 152, you must request an alternate exam time from your professor. Likewise, we will provide alternate exam times for students with legitimate course conflicts of this nature.

- **Alternate exam times** will be offered prior to each exam for students with documented course conflicts.
- **No Electronic Devices** (including phones or calculators) will be permitted in the exam rooms. Any math required will involve simple calculations performed by hand.
- **Note Cards** will be permitted in the last half of exam sessions. Blank cards will be provided approximately one week prior to the exam. All information on the card **MUST** be written by hand (i.e., not from a printer)
- **There will be no late make-up exams** except for extreme cases, such as a death in the family, serious illness, legal, or University-related conflicts. Most make-up exams will be in an oral or modified essay format at the professor's discretion. Contact the course coordinators for scheduling. This policy also applies to any other graded instruments of the course.
- In the unlikely event of a disturbance during an exam, you will be expected to observe the following rules.
 - Follow the directions of your proctors and exit the building in an orderly fashion.
 - Wait at a safe distance outside, in a single location as instructed by you proctor.
 - While waiting to return to the testing room, do not check your notes or discuss the exam with your peers. If caught doing so, you will receive an automatic deduction of 20 points from your exam grade.
 - If you are able to return to the testing room, you will be given extra time amounting to the duration of the alarm plus 10 minutes to compensate for the disturbance.
 - If you are unable to return to the testing room, your coordinators will schedule a make-up exam. This exam will contain different questions and we reserve the right to change the format (short answer, fill-ins, etc).

Students Requiring Alternate Instructional Accommodations including UW Athletes, McBurney, etc.

If you should need instructional accommodations for any course activities, please see your coordinator to make any necessary arrangements. **Students are expected to inform the coordinator of their need for instructional accommodations by the end of the third week of the semester**, or as soon as possible after a scheduling problem or disability has been incurred or recognized.

Honors

- **Honors:** In 151/153, the honors option is an outreach project. We partner with the Wisconsin Institutes of Discovery and our honors students develop interactive presentations on biological topics for elementary and middle school students which they present at Saturday Science events. In the process, you will increase your mastery of complex biological information and improve your communication skills by translating this information for a younger audience. We meet on Wednesdays (either 9:00-9:45am or 4:00-4:45pm) for several weeks and then students continue to work in small groups outside of class to complete their projects. If you are interested in the Honors option, send an email to Julie Collins (jecollins4@wisc.edu) by Friday, Sept 14th at 5pm indicating whether you prefer the 9:00 am or 4:00 pm Wednesday meeting time. She will get back to you with the room location, etc. **To register for Honors credit** in this course, update your registration via the

Student Center. Instructions can be found here:
<https://honors.ls.wisc.edu/currentstudents/adddrop>

- If you are registered for this course for Honors but are not fulfilling the requirements for that designation, you can drop the Honors credit via My UW.

RULES, RIGHTS & RESPONSIBILITIES

- See the Guide's to [Rules, Rights and Responsibilities](#)

ACADEMIC INTEGRITY

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to studentconduct.wiscweb.wisc.edu/academic-integrity/.

CODE OF CONDUCT

- **General** – *Particular issues (other than the obvious ones regarding cheating) that deserve special statement here are discussion attendance and i>Clicker use. Because both of these items represent a portion of your final grade in our course, if you sign in for someone else in discussion or use someone else's i>Clicker, you are in violation of the Student Code of Conduct and subject to any penalties associated these infractions.*
- **Plagiarism** - This issue is taken very seriously on this campus and within this course. Important information regarding plagiarism is found at <https://writing.wisc.edu/Handbook/QuotingSources.html>
- Please familiarize yourself with this. We assume that you are fully aware of the definition of plagiarism and the ramifications of conducting it at this school.
- **Cheating** - We also take cheating very seriously. If we find that you are cheating, we will respond with the utmost severity. It will certainly affect your grade negatively, and may also lead to further disciplinary action from the Dean. The consequences may well affect your whole future. Employers do not want to hire dishonest people. So, DO NOT acquire that label.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

McBurney Disability Resource Center syllabus statement: "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the

semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA." <http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php>
For more information on the many services available on campus see the McBurney Resource Center at 263-2741 or www.mcburney.wisc.edu.

DIVERSITY & INCLUSION

Institutional statement on diversity: "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world." <https://diversity.wisc.edu/>

Course Designations and Attributes

General education; Honors available.

Instructional Mode

all face-to-face

Credit Hours are met by the Course

via the Traditional Carnegie Definition – For every one hour (i.e. 50 minutes) of classroom or direct faculty/instructor instruction students will also put in a minimum of two hours out of class over approximately 15 weeks, or an equivalent amount of engagement over a different number of weeks.