



Introductory Biology 152: MWF 12:05 – 105 Psychology – Spring 2017
Lectures begin Wed. January 18. Labs and Discussions begin
Monday Jan 23.

Course Summary and Philosophy:

Introductory Biology 151/152 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.

Lecturers:	David Baum Rm 340 Birge Hall (608) 265-5385 dbaum@wisc.edu	Simon Gilroy B117 Birge Hall (608) 262-4008 sgilroy@wisc.edu	Jon Pauli 221 Russell Laboratories (608) 890-0285 jnpauli@wisc.edu
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Course Coordinators: Jean Heitz jgheitz@wisc.edu Rm 230 Noland Hall 263-2186

Teaching Assistants: See Lab and Discussion Schedules posted on L@UW.

TA Offices: Lab TAs, Rm 216 Noland Hall; Discussion TAs, Rm 546 Noland Hall

TA office hours will be announced in lab and discussion sections and posted on L@UW after Jan 27.

Textbooks & Other Required Materials

- **Biology** 10th Edition, by Campbell and Reece – You can use **either** the hardcopy or three-hole punch version – available at University Books Store or Underground Books
- **TopHat Account** – Required – see instructions on L@UW under [Content] “How to ...”
- **Available Wed. Jan 18** -- One lab manual: Spring 2017 combined versions of *Practicing Biology* (for Intro Bio 152) and *Experiencing Biology*, sold at University Book Store, State Street.

Lecture, Lab and Discussion Sections

This is a 5 credit course. Attendance in lecture, lab and discussion is mandatory. In calculating your final grade for the course, students in 152 whose grades average less than 50% in either the lecture or the lab portion of the course will be given a grade of F for the course as a whole.

- The lecture portion of the course will comprise 60% of the final grade. Each lecturer will assign 20% of the final grade in the course. TopHat participation and lecture quizzes or other activities may make up a part of this 20%. Specific information will be provided by each lecturer.
- The lab will comprise 34% of the final grade. Your lab TA will explain how the labs will be graded.
- Discussions are mandatory and attendance and graded activities in discussion will comprise 6% of your final course grade. Your discussion TA will explain how the discussion will be graded.

Introductory Biology 152 is a Communications B course. Therefore, it is expected that students will have successfully completed or be exempted from their first communications course (Comm A) before enrolling in this course.

Learn@UW & Weekly Emails – Mandatory Reading each week

A weekly newsletter is sent to the classlist each Friday and posted to Learn@UW. 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.

Professional Email Etiquette

Students are expected to communicate with their faculty, coordinators, TAs and fellow students in a professional manner. This includes using appropriate phrasing and punctuation, addressing your recipient courteously, and voicing any concerns in a respectful manner. Also note that we generally do not respond to questions that are easily answered with information posted on Learn@UW or in a previous email.

Lecture Exam Schedule

Exam I	Evolution Exam	Wed.	2/22 - 8:00-9:30 pm	Location: To Be Announced
Exam II	Plant Exam	Tues.	4/04 - 8:00-9:30 pm	Location: TBA
Exam III	Ecology Exam	Thurs.	5/04 - 8:15-9:45 pm	Location: TBA

Students Requiring Alternate Instructional Accommodations including UW Athletes

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.

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. In addition, 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. For more information on the many services available on campus see the McBurney Resource Center at 263-2741 or www.mcburney.wisc.edu.

Exam Policy

- **There will be no late make-up exams** except for extreme cases such as a death in the family or an illness. All late make-up exams will be in the oral or modified essay format. See your coordinator for scheduling a make-up exam.
- **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.
- **No electronic devices** will be allowed during exams, including calculators. Any calculations required as part of an exam will require only basic math skills that you should be competent in at this time.
- In the unlikely event of a disturbance during an exam, you will be expected to observe the following rules. Failure to do so will negatively impact your grade.
 - 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 your 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).

Grading Scale (for lecture and lab)

90-100% = A

88-89.99% = AB

80-87.99% = B

78-79.99% = BC

70-77.99% = C

60-69.99% = D

Additional information on course policies regarding late assignments, etc. will be available on the L@UW web site.

Honors

- The Mentored Research option is the Honors option for Intro Bio152. If you are doing mentored research you are eligible for Honors in 152. If you are doing Library Research for your IP and want to take the course for Honors, see your coordinator. If you want to take this

course for Honors and have not registered for Honors credit or if you are registered for this course for Honors and are not doing Mentored Research, you can add or drop the Honors credit via My UW. In order to register for Honors credit in this course, you need to update your registration via My UW and Web Enrollment. Log in to My UW, click on enrollment, click on web enrollment, select the current semester, click on update classes, select your Intro Bio 152 course, click on honors, click submit, read the information that pops up, click OK, it should say “successful”.

Lecture Syllabus

▼Week	▼Day	▼Date	▼Lecture Title	▼ Assignments & Readings
1	Unit 1 - Evolution - Dr. David Baum			
	W	1/18	Darwin and evolution	462-470
	F	1/20	Common ancestry and evidence for evolution	471-479; Recommended Reading 1
2	M	1/23	Tree thinking	547-550; Required Readings 2
	W	1/25	Trait evolution/Introduction of population thinking	480-487; Required Readings 3
	F	1/27	Genetic Drift	487-490 and Evolution quiz 1 opens - deadline 11:45pm Sunday 1/29
3	M	1/30	Natural selection	491-495
	W	2/01	Natural selection	491-495
	F	2/03	Adaptation	495-496 and Evolution quiz 2 opens - deadline 11:45pm Sunday 2/05
4	M	2/06	Phylogenetic inference and the tree of life	551-558
	W	2/08	Speciation	500-516
	F	2/10	Human evolution	740-748 and Evolution quiz 3 opens - deadline 11:45pm Sunday 2/12
5	M	2/13	Animal diversity	530; 668-671; 676-678
	W	2/15	Eukaryotic diversity	587-693; 605
	F	2/17	Origin of eukaryotes	109-111; 577-580; Optional Reading 4
	M	2/20	Origin of life	Required Reading 5

Unit 2 - Plant Biology - Dr. Simon Gilroy - 14 Lectures				
6	W	2/22	Introduction to plants	
	2/22 Wed. - Evolution Exam - 8 to 9:30 pm			
	F	2/24	Origin of land plants	Ch 29
7	M	2/27	Origin of land plants	Ch 30
	W	3/01	Plant anatomy	Ch 35:35.1 Ch 6: 6.4, 6.5, 6.7 Ch 10: 10.1
	F	3/03	Plant structure	Ch 35: 35.1-35.3
8	M	3/06	Plant growth	Ch 35: 35.1 - 35.4 and Plant Quiz 1 opens - deadline 3/09 Thurs at 11:45pm
	W	3/08	Transport	Ch 36: 36.1-36.2
	F	3/10	Water/gas relations	Ch 36: 36.3-36.6 Ch 10: 10.3-10.4
9	M	3/13	Plant nutrition	Ch 37 and Plant Quiz 2 opens - deadline 3/16 Thurs at 11:45pm
	W	3/15	Plant reproduction	Ch 38: 38.2
	F	3/17	Seed germination & development	Ch 38
10	Spring Break 3/20 through 3/24			
11	M	3/27	Tropism and Hormones	Ch 39: 39.1-39.2; Auxin receptor reading and Plant Quiz 3 opens - deadline 3/30 Thurs at 11:45pm
	W	3/29	Hormones	Ch 39: 39.2
	F	3/31	Environment – Light, rhythms, stress, defense	Ch 39: 39.3 - 39.5
Unit 3 - Ecology - Dr. Jon Pauli - 14 Lectures				
12	M	4/03	Introduction to Ecology and begin Macroecology	Ch 52, pp 1157-1164
	T	4/04	4/04 Tues. - Plant Biology Exam - 8 to 9:30 pm	
	W	4/05	Macroecology : climate change and terrestrial biomes	Ch 52, pp 1165-1170; Ch 56, pp 1272-1274
	F	4/07	Macroecology : aquatic biomes and patterns of diversity and productivity	Ch 52, pp 1171-1181; Ch 55 pp 1235-1238
	M	4/10	Behavioral Ecology: communication, movement and learning	Ch 51, pp 1133-1142 and Ecology quiz 1 opens - deadline 11:45pm Thurs 4/13

13	W	4/12	Behavioral Ecology: foraging ecology	Ch 51, pp 1143-1154
	F	4/14	Behavioral Ecology: reproductive ecology	
14	M	4/17	Population Ecology: abundance and dispersion	Ch 53, pp 1184-1186 and Ecology quiz 2 opens - deadline 11:45pm Thurs 4/20
	W	4/19	Population Ecology: density and dynamics	Ch 53, pp 1190-1201
	F	4/21	Population Ecology: demography, dispersal and metapopulations	Ch 53, pp 1186-1190; 1201-1205
15	M	4/24	Community Ecology: interspecific interactions and niches	Ch 54, pp 1208-1222; 1226-1227 and Ecology quiz 3 opens - deadline 11:45pm Thurs 4/27
	W	4/26	Community/Ecosystem Ecology: trophic structure and energy flow	Ch 55, pp 1232-1241
	F	4/28	Community Ecology: trophic cascades	Ripple and Beschta, 2005 (Bioscience)
16	M	5/01	Ecosystem Ecology: biogeochemical cycling	Ch 55, pp 1242-1248
	W	5/03	Applied Ecology	Ch 56, pp 1254-1269
	R	5/04	5/04 Thurs. - Ecology Exam - 8:15 to 9:45 pm	