



**BISC 120Lg: General Biology:
Organismal Biology and Evolution**

- **Online Class** -

make sure you are logged into your USC Zoom account
(usc.zoom.us)

4 units

Monday, Wednesday, Friday

Time: 6:30 pm – 7:20 pm (*likely to change after poll*)

Instructor: Dr. Wiebke Ziebis

Office hours: by appointment via Zoom (please send an email)

Email: wziebis@usc.edu

Lab Manager: Brett Spatola, Ph.D.

Email: spatola@usc.edu

Required Texts:

Lecture

[Campbell Biology 12th ed., 2020.](#)
(11th editions also acceptable)

Website:

<https://blackboard.usc.edu>

(site for course materials, lecture notes, quizzes, additional readings, grades, etc.)

Course Description

This online version of the 4-unit biology course will present several key topics in evolution, ecology, environment, and the diversity of life.

Besides registering for one lecture section and one lab section, you also need to register for the quiz section.

Learning Objectives:

At the end of the course, students will:

- know key concepts of the scientific method
- understand how the scientific method is applied to questions regarding the nature of life on Earth
- know the mechanisms of heredity
- know the theory of evolution
- understand how evolution explains the diversity of life on Earth
- know the defining characteristics of the domains Archaea, Bacteria, and Eukarya, with special attention to plants, fungi, and animals
- understand how the environment and organisms contribute to the evolution of ecological relationships

- understand how the environment has changed and continues to change and how this affects the evolution of life on Earth
- be able to design and conduct scientific investigations
- be able to think critically about how experimental evidence answers a scientific question
- be able to perform biological laboratory techniques

Lecture Quizzes: There will be 12 multiple choice quizzes to be completed on Blackboard during the semester. The quizzes will be posted at 8 pm on Fridays and will remain available until 9:00 A.M. the following Monday. First Bb quiz will be posted on Sep 2nd.

Exams: This course includes three midterm examinations and a final examination. All examinations (midterms and final) are conducted online and may include multiple choice questions, fill in the blanks, matching, definitions, short answers and quantitative problems. The final examination will not be cumulative, effectively serving as a fourth midterm. Three midterms will be given during the Friday quiz section. To be assigned a final letter grade at the end of the course, a student must take at least two mid-term lecture examinations and the final examination and have completed at least 75% of the assigned weekly laboratory activities.

The final examination will not be cumulative, effectively serving as a fourth midterm. Three midterms will be given during the Friday quiz section, and the final exam will be given on Wednesday, Dec 14th at 2:00 pm.

To be assigned a final letter grade at the end of the course, a student must take at least two mid-term lecture examinations and the final examination and have completed at least 75% of the assigned weekly laboratory activities.

Grading: After each examination, grade point cut-offs will be released. There is not an absolute number of points that predetermines a letter grade of A, A-, B+, B, B-, etc. The final letter grade for the course will be assigned on a curve, determined by the total number of points as given below. While there are multiple sections and days offered for BISC 120 this year, your grade will only be based on your performance within this group of students (i.e., T/TH grades will not be pooled with grades from the M/W/F class to calculate final grades).

The point system will total **1000 points**, as follows:

Midterm Exam 1	150
Midterm Exam 2	150
Midterm Exam 3	150
Final Exam (not cumulative)	150
Lecture Quizzes	72
Laboratory Assignments	328

Laboratory scores will be normalized as explained in the laboratory syllabus in order to correct for possible differences in grading between laboratory instructors. Any document associated with grading may be photocopied by the instructional staff.

Schedule of lecture topics (subject to modification of specific topics and reading assignments*)

Day	Quiz	Lecturer	Lecture	Readings
M Aug 22		Ziebis	1 Course Introduction	Course Syllabus
W Aug 24		Ziebis	2 The Scientific Method, The Chemical Context of Life	1.3, 2
F Aug 26		Ziebis	3 Genetic Material and Expression	12.1, 16.1, 17.1
M Aug 29		Ziebis	4 Genetics	13
W Aug 31		Ziebis	5 Mendel and The Gene Idea	14
F Sep 2	Quiz 1	Ziebis	6 Inheritance	15, 18.2
M Sep 5			LABOR DAY – HOLIDAY	
W Sep 7		Ziebis	7 The Darwinian Revolution	22
F Sep 9	Quiz 2	Ziebis	8 Evolutionary Mechanisms I	23, 25.6
M Sep 12		Ziebis	9 Evolutionary Mechanisms II	23, 25.6
W Sep 14		Ziebis	10 The Origin of Species	24
F Sep 16	Quiz 3	Ziebis	11 Study day	
F Sep 16			MIDTERM 1, (lectures 2-10)	
M Sep 19		Ziebis	12 Phylogenetics and	26.1-5.
W Sep 21		Ziebis	12 the Tree of Life	26.1-5.
F Sep 23	Quiz 4	Ziebis	14 Origin of Life	25.1
M Sep 26		Ziebis	15 Introduction to Fossils	25.2-4
W Sep 28		Ziebis	16 a n d History of life on Earth	
F Sep 30	Quiz 5	Ziebis	17 Viruses	19.1-3
M Oct 3		Ziebis	18 Prokaryotes 1	
W Oct 5		Ziebis	19 Prokaryotes 2	27.1-6
F Oct 7	Quiz 6	Ziebis	20 Study day	
F Oct 7			MIDTERM 2, (lectures 12-19)	
M Oct 10		Ziebis	21 Protist diversity	28.1-6
W Oct 12		Ziebis	22 Fungi	31.1-3, 31.5
F Oct 14			Oct 13-14 Fall Recess, no lectures	
M Oct 17		Ziebis	23 Plant Evolution	29
W Oct 19		Ziebis	24 Plant Diversity	30.1-3
F Oct 21	Quiz 7	Ziebis	25 Vascular Plant structure	35
M Oct 24		Ziebis	26 Intro to Animal diversity	32
W Oct 26		Ziebis	27 Invertebrates 1	33
F Oct 28	Quiz 8	Ziebis	28 Invertebrates 2	
M Oct 31		Ziebis	29 The Origin and	34.1-4
W Nov 2		Ziebis	30 Evolution of Vertebrates	34.1-4
F Nov 4	Quiz 9	Ziebis	31 Study day	
F Nov 4			MIDTERM 3, (lectures 21-30)	
M Nov 7		Ziebis	32 Vertebrates continued, Mammals	34.5,6
W Nov 9		Ziebis	33 Human Evolution	34.7
F Nov 11	Quiz 10	Ziebis	34 Nov 11, Veterans Day, no lecture	

M Nov 14		Ziebis	35	Principles of Animal Form	40
W Nov 16		Ziebis	36	and Function	
F Nov 18	Quiz 11	Ziebis	37	Animal Behavior	51
M Nov 21		Ziebis	38	Ecology & Biosphere intro	52
				THANKSGIVING HOLIDAY – NO CLASS	
F Nov 25				THANKSGIVING HOLIDAY – NO CLASS	
M Nov 28		Ziebis	39	Ecology	53,54
W Nov 30		Ziebis	40	Ecosystems and Restoration	55
F Dec 2	Quiz 12	Ziebis	41	Conservation and Global Change	56
W Dec 14				FINAL EXAM (lectures 32-41)	

Course Policies

Policy on Re-grading Exams

If you feel that an error was made in the grading of an exam, you need to do the following: 1) Check the answer key with your TA, 2) Prepare a **printed statement** explaining why you feel your grade was incorrect, and 3) Submit your printed statement, Re-grade Request Form (downloaded from Blackboard) and your original exam to your TA **within one week** of the time the exam was returned to you. The TA will either handle the re-grade or consult with the professors. The entire exam will be re-graded and, as a result, your grade may increase or decrease from a requested re-grade. No frivolous reasons will be accepted for requesting grade changes; stated reasons for a grade change must be legitimate (e.g., error in totaling the score).

Policy on Missed Lecture Exams

No make-up lecture exams will be given in this course. You may be excused from an exam in the event of a documented illness, emergency, or other serious problem beyond your control. *No other excuses for missing exams will be accepted.* If you miss an exam for a legitimate reason, and wish to ask for an accommodation, you should proceed as follows. Within 48 hours of the missed exam, send an email to the Lab Manager a request that you be excused. In the case of illness, this request must include either an official letter from your doctor stating that you were too sick to take the exam, or your doctor's name and contact information with permission for us to contact the doctor for a limited discussion of your condition. If you see a doctor at the USC Engemann Student Health Center, you will need to download, sign, and submit an "Authorization for Disclosure of Medical Information" to give us permission to speak to your doctor. This form can be found at: <https://engemannshc.usc.edu/files/2012/11/Authorization-for-Disclosure-of-Medical-Information-Professors-Limited-Discussion.pdf>. Note that neither you nor the doctor need tell us the nature of your illness. If you miss an exam for non-illness related reasons, you must provide similarly convincing documentation of the emergency to the Lab Manager within a week. If we judge your excuse to be valid, we will give you a grade for the missed exam equal to the average of your grades for the equivalent exams that you did take. Except in extraordinary circumstances, we will make accommodations for only one missed lecture exam. If your excuse is judged not to be valid, or you do not provide it within the allotted time, you will receive a score of zero for the missed exam.

If you miss the final exam and have provided a valid medical excuse to the Lab Manager within 24 hours of the exam time, a final course grade of **Incomplete (IN)** will be recorded and you will be permitted to take a make-up final exam during the following semester.

Policy on Missed Lecture Quizzes

No make-up lecture quizzes will be given in this course. You may be excused from a lecture quiz only in the event of a documented illness.

Extra Credit

No extra credit will be given for special projects, etc.

Impairments Affecting Your Performance

Students occasionally encounter difficulties that affect their academic performance, such as illness, accidents, bereavement, depression, anxiety, learning disabilities, and other problems. If you encounter such difficulties, please bring them to the attention of one of the instructors. We can refer you to sources of help and may be able to offer accommodations. All such discussions will be confidential. Please seek help as soon as you feel your performance is being affected.

Students with Disabilities

Students requesting academic accommodations based on a disability are required to register with the Office of Student Accessibility Services (OSAS) each semester. A letter of verification for approved accommodations can be obtained from OSAS. Be sure that the letter is delivered to the Lab Manager as early in the semester as possible, preferably by January 31, 2022. OSAS office is located in GFS 120 and is open from 8:30 a.m. to 5:00 p.m., Monday through Friday. Their telephone number is 213-740-0776. If a student's approved accommodation is limited to extra time on examinations, the teaching staff of BISC 120 will provide the accommodation. For any other accommodation, such as a private room, reader or a scribe, students must make prior arrangements with the OSAS office 2 weeks before the exam date. For more information please visit the following website:
http://sait.usc.edu/academicssupport/centerprograms/dsp/home_index.html.

Statement on Academic Integrity

The instructors in this course strongly support the ethics of academic integrity. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *Scampus*, the Student Guidebook, contains the Student Conduct Code in Section 11.00: <http://web-app.usc.edu/scampus/1100-behavior-violating-university-standards-and-appropriate-sanctions/>, while the recommended sanctions are located in Appendix A. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>.

Course Website

Students are responsible for logging onto Blackboard (<https://blackboard.usc.edu>) and checking the course website on a regular basis. Postings on Blackboard will be an official source for announcements, course materials, lecture notes, score postings and general discussions. Lecture quizzes will also be completed on Blackboard. Lecture exam scores and lecture quiz scores will be posted under your **LECTURE SECTION**. It is the student's responsibility to immediately notify the Lab Manager in the event of any mistakes, so please check your scores on Blackboard weekly.

Gift Policy

No gifts or presents of any kind are permissible to give to any of the instructional staff.

Changing a Lab or a Lecture Section

During the first three weeks of classes you are responsible for changing your lecture or lab section by dropping your current section and adding your new choice through *USC Web registration System*. You can switch into a new lab section only if it is open (if it has less than 20 students). If a lab section is currently closed you must wait until other students drop before you can switch into that section. No changes are allowed after the third week of classes (*i.e.*, after the second week of lab). You are responsible for printing out your grade report from Blackboard **before** changing sections, as scores may be irrevocably lost from the Blackboard system when students change sections. The same applies if changing lecture or lab sections.

Final Comments

No exceptions will be made to these policies under most circumstances. If you think that the instructor or TA has granted you **any deviation** from the policies in this document, you must obtain their **written agreement** to support that claim.

For ANY administrative questions about ANY aspects of the lecture and laboratory portions of this course, please FIRST CONTACT the Lab Manager, Brett Spatola (E-mail: spatola@usc.edu)

