

LIFE 103: Biology of Organisms

Spring 2024

Section 002

Mon/Wed/Fri, 3:00-3:50 p.m.

Behavioral Sciences, A101

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Office Hours: **To Be Announced**

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This syllabus is subject to change by departmental or instructor notification

I. COURSE DESCRIPTION AND ORGANIZATION

LIFE 103 provides an overview of life on Earth, the evolutionary relationships among major groups of organisms, and the structural and functional characteristics of these organisms. LIFE 103 is intended primarily for students majoring in any of the biological sciences or life science-related fields. There is tremendous biological diversity on Earth, and good biologists should have an appreciation of this diversity. The topics to be covered are listed in the course outline. Some topics will be emphasized more than others. As a result, the specific lecture dates and the time spent on each topic are approximate and are subject to change.

The course meets for three 50 minute lectures per week and one 3-hour laboratory session per week. You should be signed up for a lab. If labs are full, keep trying to register on RamWeb: some spots will open up in the first weeks of the semester as others drop. No overrides are given if the labs are full (due to fire regulations). **Lab starts on the first week of classes.**

II. LEARNING OUTCOME GOALS FOR LIFE 103

After completing LIFE 103, students will have the abilities to:

- Describe the general life cycles of bacteria, protists, fungi, non-vascular and vascular plants, and various phyla of animals
- Identify the anatomical structures of the major clades of life
- Describe the anatomy and physiology of organisms in the three domains of life
- Place an organism into the general taxonomy of life

III. TEXTBOOK, LAB MANUAL, AND WEBSITE

A. LIFE 103 TEXTBOOK: *Understanding Biology*, (4th ed.) by Mason *et al.*

*To reduce your course material cost, this course is participating in the **Inclusive Access Program** using **Connect for Mason's 4th Edition**, which will include online homework and access to the full text. All enrolled students are automatically included in this program. **Please read the applicable information at the end of the syllabus carefully.***

B. Lab Manual: All content will be delivered via your Canvas Lab Section website

C. Canvas Course Website: Access the website at <http://info.canvas.colostate.edu/login.aspx>
You will need an **eID** (electronic ID at CSU, consisting of a username and a password) to access the website. If you are registered, the course will appear in your "Courses" listing (located at the upper-left side of the page). You will have access to any materials that are posted on the web site for students (such as this syllabus, homework assignments, lecture notes, exam grades, and class announcements). **Please check this website regularly.**

IV. GRADING

Connect Homework:	25%	<i>Drop lowest 2 scores</i>
Regular Exam Average:	30%	<i>Drop lowest score</i>
Comprehensive Final Exam:	20%	<i>May not be dropped</i>
Laboratory Grade:	25%	<i>May not be dropped</i>
FINAL GRADE:	100%	

Grades are based only on regular exams, the final exam, online Connect homework, and the lab grade. (***Note*: There are no other opportunities for extra credit**).

There will be 4 exams: 3 regular exams and 1 final exam. All 4 exams will cover any information discussed in lecture as well as relevant information given in the textbook. **All exams** are administered **in this lecture hall** either during **scheduled class time** or **according to the final exam schedule**. Exams are machine-graded, so you must bring and use a **#2 pencil** or a **ballpoint pen** to complete each exam, and you must also bring your **CSU student identification number**.

DROPPED EXAM GRADE: One exam grade will be dropped. If your lowest exam score is one of the Regular Exams, we will drop that exam. **You cannot drop the entire Final Exam grade. There will be no make-up exams or early exams. If you miss an exam, you will receive zero (0) points for that exam!** Students who plan to miss an exam due to participating in a University-sanctioned event need to see the lecture instructor **well before the exam** to make other arrangements.

There will be **12 online Connect homework assignments** that will be administered **via our Canvas page**. Each homework assignment may cover any information discussed in lecture as well as relevant information given in the textbook. **Each homework is due at 3:00pm on the given due date (see schedule for due dates)**. Your lowest 2 homework assignment grades will be dropped automatically when your final grade for the course is calculated.

GRADING SCALE

Grade	Score	
A+	100%	to 96.67%
A	< 96.67%	to 93.33%
A-	< 93.33%	to 90%
B+	< 90%	to 86.67%
B	< 86.67%	to 83.33%
B-	< 83.33%	to 80%
C+	< 80%	to 76.67%
C	< 76.67%	to 70%
D	< 70%	to 60%
F	< 60%	to 0%

V. POLICIES

- a. Attendance - **Student attendance and participation in this course are essential to learning the material.** Students are expected to attend each class and laboratory session, be on time, and stay for the entire session. **Failure to attend will negatively affect your grade.**
- b. Classroom conduct – Students are expected to assist in maintaining a classroom environment that is conducive to learning and is respectful to the instructor and the other students. Within the classroom, students are prohibited from making offensive remarks or engaging in any form of disruptive activity. Inappropriate behavior in the classroom may result in a request to leave the class at the instructor's discretion.

VI. ACADEMIC INTEGRITY

Academic misconduct (such as plagiarism, cheating or fabrication of information) is a violation of the regulations of the University and will be reported to the Office of Conflict Resolution and Student Conduct Services. Student responsibility for academic integrity is discussed in the CSU General Catalog for 2023-2024, which can be found at <https://catalog.colostate.edu/general-catalog/>.

VII. TIPS ON HOW TO DO WELL IN LIFE 103

This course is **fast-paced** and covers a **large amount of material**. The exams **will be challenging**, and the majority of the lecture portion of your final grade will come from these exam grades. As a result, in order to do well in this course, you should **attend every lecture** and **take a lot of notes**. As the exams will cover primarily lecture material, high-quality notes will be critical for your success in this course. The lecture slides will be provided on the course Canvas website, and it is suggested that you **print them out** and bring them to class for note-taking purposes. **Reading the textbook chapters** before each associated lecture is required and will be extremely beneficial in understanding the lecture content. In order to fully-digest the content covered in this course, you must set yourself up for success by **not falling behind**; it may not be possible for you to catch up. **DO NOT WAIT UNTIL THE LAST EVENING BEFORE THE EXAMS TO BEGIN STUDYING....!!** Plan to spend 2-3 hours of home study for every hour in the classroom.

Welcome to LIFE 103, good luck, and have a great semester!!

VIII. TENTATIVE SCHEDULE OF TOPICS AND REQUIRED READING

(Changes to the schedule will be announced in class and posted in Canvas.)

Week	Dates	Evaluation	Lecture Topic	Chapter
1	Jan 15	No Class	Martin Luther King Jr. Day	None
	Jan 17		Course Introduction	Syllabus
	Jan 19		Phylogeny	22
2	Jan 22	Homework #1 (Ch22)	Phylogeny / Bacteria & Archaea	22/23
	Jan 24		Bacteria & Archaea	23
	Jan 26	<u>Homework #2 TBD</u>	Protists & Algae	24
3	Jan 29	<u>Homework #2 TBD</u>	Fungi	25
	Jan 31		Origin of Land Plants: Bryophytes - Mosses	26
	Feb 2	Homework #3 (Ch26)	Ferns and other Seedless Vascular Plants	26
4	Feb 5		Diversity of Angiosperms & Gymnosperms	26
	Feb 7		Gymnosperms	26
	Feb 9	EXAM 1	Exam 1	None
5	Feb 12		Angiosperms	26
	Feb 14		Angiosperms	26
	Feb 16	Homework #4 (Ch29)	Plant Structure and Development	29
6	Feb 19		Plant Structure and Development	29
	Feb 21		Plant Structure and Development	29
	Feb 23	Homework #5 (Ch31)	Resource Acquisition	31
7	Feb 26		Resource Acquisition	31
	Feb 28		Soil and Plant Nutrition	31
	Mar 1	Homework #6 (Ch30)	Angiosperm Reproduction	30
8	Mar 4		Signal Transduction	31
	Mar 6		Signal Transduction	31
	Mar 8	EXAM 2	Exam 2	None
9	Mar 9-17	No Class!!	SPRING BREAK...!!!	None
10	Mar 18		Animal Diversity and Evolution	
	Mar 20		Animal Diversity and Evolution	
	Mar 22	Homework #7	Animal Taxa: Invertebrates	
11	Mar 25		Animal Taxa: Invertebrates	
	Mar 27		Animal Taxa: Invertebrates	
	Mar 29	Homework #8	Animal Taxa: Vertebrates	

12	Apr 1		Animal Taxa: Vertebrates	
	Apr 3		Body Structure and Function	
	Apr 5	Homework #9	Regulating Internal Environments	
13	Apr 8		Dietary Strategies and Digestion	
	Apr 10		Dietary Strategies and Digestion	
	Apr 12	EXAM 3	Exam 3	None
14	Apr 15		Circulation & Gas Exchange	
	Apr 17		Circulation & Gas Exchange	
	Apr 19	Homework #10	The Immune System	
15	Apr 22		The Immune System	
	Apr 24		Osmoregulation & Excretion	
	Apr 26	Homework #11	Osmoregulation & Excretion / Hormones	
16	Apr 29		Hormones / Animal Reproduction	
	May 1		Animal Reproduction	
	May 3	Homework #12	<i>Flexible Day</i>	
17	May 6 4:10 pm – 6:10 pm	FINAL EXAM (BSB A101)	FINAL EXAM: Section 4 (~3/4 of the questions) + Sections 1 – 3 (~1/4 of the questions)	None

IX. CONNECT AND ITS USE IN LIFE 103

For this course, you will be required to purchase McGraw-Hill Education Connect® access for *Understanding Biology*, (4th ed.) by Mason *et al.* You may choose not to buy a print text since Connect contains the full reading experience. Please be aware if you purchase a used textbook you will still need to purchase Connect access to complete required assignments that make up **25% of your total course grade**.

Connect is an easy-to-use homework and learning management solution that embeds learning science and award-winning adaptive tools to help you get the best results in this course. It is designed to create a personalized pathway for your success, making every minute you study more effective. Using adaptive technology, Connect pinpoints exactly what you know and don't know yet, and seamlessly offers up learning resources in real time to help you focus your study time. Connect contains the interactive eBook and study tools, giving you anytime access to course resources and assignments.

How to get Registered on Connect:

To begin, you need to **purchase Connect access**.

Purchase from Connect integrated in Canvas:

Purchase online directly from our Canvas course homepage by **clicking on the first assignment**.

Purchasing Connect online is the best value for your required course materials – typically half the price of the printed textbook bundle. A low-cost print-upgrade option is also available via Connect if you find yourself wanting a print companion at some point during the semester. This will be a full color binder-ready version of the text shipped at no charge.

Expectations and Policies Related to Course Assignments:

All course assignments will be scheduled, completed and recorded in Connect. **All students are required to complete every assignment by the due date listed.**

Getting Technical Support:

If having trouble registering or accessing Connect, please contact McGraw-Hill's Customer Support for the fastest help. Live chat, email, and phone support are available almost every hour of the day.

Website: <http://www.mhhe.com/support>

Phone: (800) 331-5094

Hours (EST) Sunday: 12 PM - 12 AM Monday - Thursday: 24 hours

Friday: 12 AM - 9 PM Saturday: 10 AM - 8 PM

Ensure your computer meets system requirements by going to this link:

<http://connect.mheducation.com/connect/troubleshoot.do>

X. INCLUSIVE ACCESS PROGRAM

ACCESS INSTRUCTIONS FOR STUDENTS:

- You will be granted access to McGraw Hill's Connect on the first day when you access CONNECT via your instructor's CANVAS shell.
- If you (the student) choose to opt out of the program provided by the CSU Bookstore, you must purchase the access code on your own. The price through Inclusive Access is the best price available so you will likely pay a higher price for purchasing access elsewhere.
- If you choose not to opt you will have access to the materials for the duration of the semester.

PRICING and BILLING INFO

- After the add Add/Drop date the charge for the materials at the Inclusive Access price will be billed to your CSU student account, (unless you have chosen to opt out of the program).
- The price through Inclusive Access is the best price available.

Opting Out of Inclusive Access

- If you choose an alternate method of access to the online content and homework platform, you must opt out of the Inclusive Access program prior to the Add/Drop date to avoid billing.
- Once opted out, you must purchase the access code on your own to the homework platform and e-text.
- If you opt out by accident, you can email kurt.kaiser@colostate.edu to have access re-instated and billed. Include your name, department, course, section and student number in your request.

Dropping the course

- If you drop the course *prior to* the Add/Drop deadline, you will automatically be opted out and will not be billed.
- If you drop the course *after* the billing deadline, you will have **5 days** to notify the Inclusive Access team to request a refund.