

## Welcome to Biology 101!

**Course Number:** BIOL 101 (CRN 80152, 95904, 96678)

**Course Title:** Our Biological World

Science, Math, Technology Division

4 units

MWF, 10:10-11:00. Room: 4170

Lab. Room 7238.

Wednesday (CRN 80152 + 96678) 4:00-6:50 PM

Friday (CRN 95904) \_\_\_\_\_ 12:10-3:00 PM

Course Prerequisites: Eligibility for ENGL 846 or ESOL 400.

Course Classification: Transfer credit: UC; CSU (B2, B3).

**Course Description:** Study of biology as it relates to humans and their environment, with special emphasis on ecological interrelationships, evolution and genetics, and topics of current importance. Recommended for non-science majors to fulfill laboratory science transfer requirement.

**Philosophy:** Lewis Thomas said “*Man is embedded in nature. The biologic science of recent years has been making this a more urgent fact of life. The new, hard problem will be to cope with the dawning, intensifying realization of just how interlocked we are.*” Biology is part of all of our lives: as humans and as citizens and voters. Many of the issues we deal with each day, such as health, genetic counseling, energy alternatives, and land use, deal with biology. In this course you will learn basic principles of biology and to objectively apply them to your decisions on nutrition, medicine, and the environment. In addition to learning how science is done, the lab requirement is designed to help you learn to collect data and apply that information to problem solving.

**Instructor:** Dr. Christine Case

Please contact the instructor at any time with questions concerning the course, an assignment, an upcoming quiz, etc. I’m at Skyline every weekday, my office hours are posted at [skylinecolleg.edu/case](http://skylinecolleg.edu/case)

Office: 7214

Phone: 650.738.4376

E-mail: [case@smccd.edu](mailto:case@smccd.edu)

**Student Learning Outcomes:** After completing this course, you will be able to:

1. Demonstrate an understanding of the scientific method and the ability to use appropriate models to solve problems.

2. Apply the knowledge of biological science to distinguish between observations, inferences, relationships, and testimonials under investigation.
3. Demonstrate the ability to use scientific knowledge to assess personal and environmental health.
4. Use the scientific knowledge and skills necessary for active citizenship.

**Attendance:** Regular attendance is expected at every meeting. Role will be taken during each class meeting. When students must be absent because of illness or emergencies they should contact the instructor in advance. A student may be dropped for missing six lecture class meetings or two labs. Responsibility for making up work missed because of absence rests with the student.

The instructor’s presentation and class discussion will provide current information, highlight major concepts, and help you develop critical thinking and problem-solving skills.

Unannounced quizzes and participation points will be given.

**The Grade of W:** You may wish to withdraw from this class. If you withdraw prior to 9-2-19 nothing will appear on your record. If you withdraw between 9-2-19 and 11-13-19, a *W* will appear on your transcript. You will receive a *W* for exceeding six absences *prior* to 11-13-19. Anyone exceeding six absences *after* 11-13-19 will get a final grade of F.

**Required student preparation:** Come to class with the required assigned textbook and prepared with Wordlists and assignments. Plan to spend a minimum of two hours outside of class for each hours in class to learn and make satisfactory progress in class. Therefore, **you must study Biology \_\_\_\_\_ hours/week outside of class.** Lectures, labs, small group activities, and quizzes constitute the main activities of the class.

**Requirements:** Papers are due on the assigned dates, late papers will not be accepted. All tests and quizzes must be taken on the designated days, make-ups will not be given.

All assignments, two midterms, and one final examination must be taken for a passing grade. All Lab Reports and lab post tests



must be completed to earn a passing grade; laboratory will account for 40% of the grade.

GRADING	A	≥ 88%
	B	75-87%
	C	60-74%
	D	45-59%
	F	≤ 44%

*Class conduct policy:* You are also responsible for adhering to the Code of Student Conduct outlined in the College Catalog. Cell phones *must be turned off* during class. No extraneous conversation during class.

*Academic honesty.* Plagiarized lab reports and papers will receive a score of zero. The work you submit must be your own. The Skyline College Catalog has a complete statement defining cheating and plagiarism.

*Disability.* In coordination with the Disability Resource Center office, reasonable accommodation

will be provided for eligible students with disabilities. For more assistance, please contact the DRC Bldg 5, Room 5132 or call 650-738-4228.

*Skyline College* is committed to maintaining a safe and caring college environment. A District website has been developed to provide you with important information about sexual misconduct and sexual assault <smccd.edu/titleix/>.

### Textbooks - Required

Belk, C. and V. Borden Maier. *Biology: Science for Life, with Physiology*, 6th ed. San Francisco: Pearson, 2019.




Case, C. L. *Our Biological World*. Skyline College.



**Study Aids.** Study questions for each topic in the Lecture Schedule can be found at the **BIOL 101 web site:** <http://skylinecollege.edu/case/> These questions will help you study for tests.

## LECTURE SCHEDULE

**Go to [skylinecollege.edu/case](http://skylinecollege.edu/case) for materials. Be sure to download the wordlist for each topic, read the study aids/hints, and take the *Wordlist quiz*.**

Date	Topic	Reading*	✓Wordlist quiz
Week 1	Introduction. <i>Do the online assignment.</i> Wordlist 1: What is science?	Chapter 1	_____
Week 2	Wordlist 2: Biodiversity	Chapter 14	_____
Week 3	Wordlist 3: Natural Selection	Chapters 11 & 12	_____
Week 4	Wordlist 4: Biomes & Ecosystems	Chapters 16 & 17	_____
Week 5	Wordlist 5: Populations	Chapter 15	_____
To be announced	<b>TEST</b>		
Week 6-7	Wordlist 6: Energy	Chapter 3, §2.4, §5.3, & §19.1	_____
To be announced	<b>TEST</b>		
Week 9	Wordlist 7: Air: Gas exchange	§5.1 & §20.1	_____
Week 10-11	Wordlist 8: Homeostasis: Water	§2.7, §3.3, Fig 5.3, §19.2	_____
To be announced	<b>TEST</b>		
Week 12-13	Wordlist 9: Immunology	Chapter 21 & §20.2	_____ 
Week 14-15	Wordlist 10: Molecular Genetics & Biotechnology	Chapters 6, 7, 9, & 10	_____ 
Week 15-16	Inheritance	Chapter 8	
Dec. 13	<b>FINAL EXAMINATION</b>	8:10-10:40 AM	_____ 

[\*Belk, C. and V. Borden Maier. *Biology: Science for Life, with Physiology*, 6th ed. San Francisco: Pearson, 2019.

## Laboratory

Laboratory attendance and participation are important to develop critical thinking and analytic reasoning skills, to reinforce biological concepts, and to learn how scientific data are collected. These skills are important for making personal decisions regarding nutrition, health, and natural resource use. Read the material in your lab. manual before coming to class so that you can work efficiently.

### Recommended laboratory supplies

Binder to hold your lab. manual  
Colored pencils

### Laboratory Instructor: Shari Bookstaff

Please contact Shari with questions about lab. She will be in lab during every lab session. Office hours are posted at <http://doorcard.smccd.edu>.

Email: [bookstaffs@smccd.edu](mailto:bookstaffs@smccd.edu)

### Procedure

1. Read the Study Guide in your lab manual before coming to lab.
2. Watch the slide show attentively and listen carefully to instructions before doing the lab.
3. Perform the experiments and record your data.
4. When you have completed the study guide, turn it in and take a post-test. Lab reports are **due** at the next lab following completion of the experiments.

**Post-tests must be taken online.** Login to your Canvas account and go to Biology 101. Each post-test will be available one week past the lab due date. You may take each post-test a maximum of three times. Your highest grade will be counted.

5. Have your lab Study Guide stamped and turn it in after completion.
6. Study guides are worth 15 points each. The Grade Option Activities (GOA), which are available with each lab, are worth 10 points each.
7. Study guides and GOAs are at the beginning of lab on the week following your scheduled lab. **One point per day will be deducted for late labs. Labs more than 2 weeks late will not be accepted. GOAs must be turned in with the lab. Pages must be stapled together.**
8. If you miss a lab. and you are unable to make it up, you may still watch the slide show, complete the Study Guide, and earn a maximum of 10 points for the Study Guide and five points for the GOA. All **unstamped labs** will be graded on this scale.

### Lab Sessions

Wednesday (CRN 80152 + 96678) 4:00-6:50 PM  
Friday (CRN 95904) \_\_\_\_\_ 12:10-3:00 PM



*getting warmer*

## LABORATORY SCHEDULE

KEEP THIS SCHEDULE IN A BINDER WITH YOUR LAB. MANUAL.<sup>1</sup> Read the assigned lab. exercise prior to coming to class. Lab. exercises are due by the **Friday** following assignment of each exercise. Please note the due dates. One point per day late will be deducted. Labs must be turned in during Open Lab.

Date assigned	Experiment Title <sup>1</sup>	Reading <sup>2</sup>	Date due	Study guide score	Post test score
8-14	8-16	<i>Do the assignment on Canvas.</i>			
8-21	8-23	Experimenting with the Scientific Method	Ch. 1		
8-28	8-30	Metrics, Microscopes, & Cells	§3.2 & §5.4		
9-4	9-6	Ecological Adaptations of Tracheophytes	Ch. 26		
9-11	9-13	Symbiosis <sup>3</sup>	§16.2		
9-18	9-20	Nutrition	Ch. 4		
9-25	9-27	Urban Parks <sup>4</sup>			
10-2	10-4	Photosynthesis and Respiration	§4.2 & §5.3		
10-9	10-11	<i>Do the assignment on Canvas<sup>4</sup>. No class on 10-9</i>			
10-16	10-18	Enology	§4.2		
10-23	10-25	Water Pollution <sup>5</sup>	§25.3		
10-30	11-1	Environmental Justice <sup>4</sup>			
11-6	11-8	Controlling Infections <sup>5</sup>	§12.1 & §14.2		
11-13	11-15	Genetics	Ch. 7		
11-20	11-22	Animal Fertilization	Ch. 8		
12-4	12-6	Special Senses	Ch. 24		

<sup>1</sup> Case, C. L. *Our Biological World: Laboratory Manual.*

<sup>2</sup> Belk, C. and V. Borden Maier. *Biology: Science for Life, with Physiology*, 2019.

<sup>3</sup> Grade Option Activity for this week is on the BIOL 101 website <skyl

<sup>4</sup> See Canvas for details.

<sup>5</sup> Computer simulations are on the BIOL 101 web site <skylinecollege.e

