

Syllabus for BIOL 111 WS1 Contemporary Biology Department of Biological Sciences Online Winter Session 2025

About the Instructor

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Welcome: Welcome to BIOL 111 WS1, Contemporary Biology. It is my hope that you will enjoy learning about the living world and our place in it. I am truly excited by the opportunity to explore the diversity of life with you.

Bio: I grew up in Perryville, Missouri and attended Southeast Missouri State University where I completed a B. S. and an M.N.S. in Biology. I completed my Ph.D. in Biology at Ohio University where I studied the evolution of gliding locomotion in squirrels. I then completed a two-year postdoc at the University of Pennsylvania, where I researched the evolution of jumping locomotion in frogs before arriving at SIUE in 2005.



I am a Professor of Biological Sciences at SIUE, where I teach an array of

courses in vertebrate zoology and anatomy, including Ornithology, Mammalogy, Wildlife Management, Vertebrate Natural History, Comparative Vertebrate Anatomy, and Human Anatomy and Physiology. I also teach summer field courses to the northern Rockies, Panama, and western Europe/Alps (starting in summer 2024).

My research interests are primarily in the area of vertebrate functional and ecological morphology. Much of my laboratory research at SIUE focuses on the evolution of frog locomotion. Why? Because frogs are a model system for understanding form/function relationships in vertebrates and they are also extremely cool! If you want to learn more about my frog research and see some funny videos of jumping frogs check out my website: https://www.siue.edu/artsandsciences/biology/ressner/

Check out this hilarious True Facts video on our pumpkin toadlet research. These adorable frogs can be as small as a housefly and are among world's smallest vertebrates: <u>https://www.youtube.com/watch?v=IJzWVtHqspM</u>

Here is a link to my website: <u>https://www.siue.edu/artsandsciences/biology/ressner/</u>

Communicating with the Instructor: You may reach me by email: <u>ressner@siue.edu</u> or phone 618-650-2338. My office hours are on Fridays from 10:00 am – 12:00 pm via Zoom. If that time does not work for you, I am happy to identify a mutually agreeable alternative time. I do my best to respond to emails within 24 hours.

About the Course

Course Description: This online course will offer students the chance to learn about biological principles and to understand how they relate to our everyday lives

Course Objectives

- 1. To understand how biology is an important part of our everyday world.
- 2. To learn about basic biological principles such as inheritance, evolution, cell theory, human health, ecology and the environment.

Course Textbook: Belk, C. and V. Borden Maier. 2019. Biology: Science for Life with Physiology, 6th edition available through MasteringBiology or through SIUE Textbook Services. Click <u>here</u> for instructions.

MasteringBiology You will need to register for access to MasteringBiology. You can do this by clicking on the Redshelf link on the left-hand menu. There you will find a code that you will copy and paste into the MasteringBiology registration page. Links to MasteringBiology and registration instructions are provided on the left-hand menu in Blackboard. There is no cost for registering with MasteringBiology.

Grading

Quizzes	85 pts	А	90-100%	484 – 540 pts
Discussion board	70 pts	В	80-89%	429 – 483 pts
Homework	85 pts	С	70-79%	376 – 428 pts
Lecture exam 1	100 pts	D	60-69%	322 – 375 pts
Lecture exam 2	100 pts	F	0-59%	< 322 pts
Lecture exam 3	100 pts			
Total	540 pts			

See the course calendar for reading assignments/lecture topics, as well as due dates for assignments, quizzes, and exams. This calendar is subject to change, and all changes will be announced in class. All questions will come from lecture material and assigned readings in the textbook. The statute of limitations for contesting any graded material (exams, quizzes, etc.) is one week from the date you receive the grade.

Weekly Folders

The assignments for each week are located in the weekly folders accessed on the left-hand menu under the Week 1, Week 2, and Week 3 buttons. There you will folders with the week's Powerpoint lectures (MP4 files) and lecture PDFs, quizzes, discussion boards, homework assignments, and exams. The lectures, quizzes, discussion boards, and homework assignments for the week will be available on Monday mornings by 8:00 am. Weekly exams will be available by Thursdays at 12:00 am and remain open until Sunday nights at 11:59 pm.

Lectures

Lecture content will be available in the weekly folders on the left-hand menu. This will be in the form of narrated Powerpoint lectures in MP4 format. This format is compatible with a wide array of media players and will begin playing automatically once the file is opened. I will also post lectures in PDF format to accompany the MP4 files.

Quizzes

There will be 17 quizzes (5 pts each) during the course (one per chapter). These are generally in multiple choice and/or true-false format and are available in the weekly quiz folders. You will have 6 minutes to complete each quiz and must complete them once you begin taking them. Be sure you read the chapters and listen to the lectures before taking quizzes.

Mastering Homework

There will be 17 online homework assignments (5 pts each) during the course (one per chapter). These will be available through MasteringBiology.

Discussion Boards

You are required to participate in an introductory discussion post as well as two discussion posts per week relating to the week's course material. You will earn up to 10 pts each (70 pts total). The initial post is an exercise, where you will introduce yourself to the class. The remaining discussion board activities are focused on a topic from the week's reading. You'll find a news article that relates to the topic and then post a brief summary (3-4 sentence) and link to the article. You'll then pose a question about the story. After that you're responsible for reading a post from another student in the course and posting a response. There are 3 possible grades for this activity (0 = no or minimal attempt; 5 = completed most but not all requirements; 10 = completed all requirements). You may access the discussion boards by clicking on the weekly assignment buttons on the left-hand menu or by clicking on **Discussion Boards**. **The weekly deadlines for your posts are Thursdays by 11:59 pm. Your response to others' posts will be due Sundays by 11:59 pm.** Details about discussion posts are found in the Discussion Boards link on the left-hand menu or in the weekly folders.

Lecture Exams

Lecture exams will be completed online via Blackboard and will be available from 12:00 am Thursday until 11:59 pm on Sunday. Exams should not be attempted until you have viewed and studied PowerPoint lectures. These can be accessed by clicking on the weekly folder. There will be 3 lecture exams worth 100 pts each (300 pts total). These will be multiple choice exams and you will have 60 minutes to complete the exam and submit your answers. You must complete the exam once it has begun. Be sure you read the chapters and listen to the lectures before taking exams. Exams will close at 11:59 pm on Sundays. Any exams still in progress at that point will be automatically submitted. **Do not wait to start the exam with less than one hour before the deadline! Do not wait to start the exam with less than one hour before the deadline!**

Exams will be proctored with Respondus Monitor and require a webcam and Respondus LockDown Browser (free download). You will be allowed to use the hard copy of your textbook along with hard copies of any resources that I provide you during the exam, including lecture transcripts and PDFs of lecture slides. You may also use personal notes as long as they are printed out and shown to the camera. Use of any other resources, including electronic resources, or assistance from other individuals will be considered cheating.

Missed Exam

If you miss an exam for medical reasons, I must have a written statement to that effect signed by the attending physician. If you missed an exam for a non-medical emergency, submit to the instructor the appropriate written documentation of the emergency. If I decide it was a real emergency, you may be allowed to retake the exam. **Documentation will be accepted only up to one week following the missed exam.**

Late Work Policy

NO LATE WORK IS ACCEPTED. You are expected to start assignments early in the week and schedule regular time to: 1) LEARN the material and 2) COMPLETE the assignments prior to posted deadlines.

Netiquette

You are expected to behave professionally during all interactions with me and with peers enrolled in the course. This extends to all electronic communication. Please show respect for others in discussion boards and other correspondence. Failure to behave appropriately will result in removal from discussion boards and a loss of points for this activity.

Course Requirements

Student Resources

How to succeed in this course: An online student is expected to:

- Participate in the virtual classroom 5-7 days a week
- Be able to work with others in completing projects
- Be able to use terminology properly
- Be able to complete assignments on time
- Enjoy communicating in writing
- Be self-motivated and self-disciplined
- Accept critical thinking and decision making as part of the learning process
- Be able to think ideas through before responding
- Contribute your ideas, perspectives, and comments to course discussions
- Be polite and respectful
- Be willing to "speak up" if problems arise
- Be able to apply what you learn
- Be open minded about sharing life, work, and educational experiences as part of the learning process

Online class behavior/"<u>netiquette</u>":

- **Reflect** before you post an emotional response and reread what you have written to be sure it is professional. Communicate as if your comments are printed in a newspaper.
- **Communicate** effectively.
 - Do not use all caps or multiple punctuation marks (!!!, ???, etc.).
 - Be sure to define or explain acronyms, jargon or uncommon terms so everyone can understand and participate in the discussion.
- Sign your name. Take responsibility for your comments in order to build a strong classroom community.
- **Foster community.** Share your ideas and contribute to ongoing discussions. Make comments that add to, not detract from, a positive learning environment for the course.
- **Be constructive.** Challenge ideas and the course content, but do so in positive ways. It's fine to disagree, but when done politely you stimulate and encourage helpful discussion, and you maintain positive relationships with fellow students.
- Keep the conversation on topic. Online dialogue is like conversation. If there is a particular dialogue going on, please add to it, but if you have something new to say, start a new thread.

Technology Requirements

At a minimum, you will need the following software/hardware to participate in this course:

- Computer with an updated operating system (e.g. Windows, Mac, Linux)—**Do** <u>NOT</u> attempt to take exams, quizzes, etc. with your smartphone.
- Updated Internet browsers (Apple Safari, Internet Explorer, Google Chrome, Mozilla Firefox)
- DSL or Cable Internet connection or a connection speed no less than 6 Mbps.
- Webcam and microphone
- Media player such as, QuickTime or Windows Media Player. Must be capable of playing MP4 files.
- Respondus Lockdown Browser
- Adobe Reader or alternative PDF reader (free): <u>http://get.adobe.com/reader/?promoid=HRZAC</u>
- Java plugin (free): http://java.com/en/download/index.jsp
- Any other specialized software or basic software (e.g., MS Office, etc.). Students can download MS Office at no charge here: <u>http://office365.siue.edu</u>

Technology Capabilities

Students in an online course should be able to:

- Use a word processor, such as MS Word, to compose assignments and communicate with others in class
- Attach files to emails or course areas
- Navigate websites and course materials
- Reach out to tech support staff when issues arise and troubleshoot to resolve problems

Academic integrity/plagiarism

Students are reminded that the expectations and academic standards outlined in the <u>Student Academic Code (3C2)</u> apply to all courses, field experiences and educational experiences at the University, regardless of modality or location. Plagiarism is the use of another person's words or ideas without crediting that person. Plagiarism and cheating will not be tolerated and may lead to failure on an assignment, in the class, or dismissal from the University, per the <u>SIUE</u> academic dishonesty policy. Students are responsible for complying with University policies about academic honesty as stated in the <u>University's Student Academic Conduct Code</u>.

The use of artificial intelligence (AI) tools and applications (including ChatGPT, DALL-E, and others) to produce content for course assignments and assessments is a violation of SIUE's academic policy and is prohibited.

Regular and Substantive Interaction

Regular and substantive interaction (RSI) is required as part of new U.S. Department of Education regulations for distance (online) education and it supports student learning in all learning environments (online, face-to-face, hybrid, hyflex, etc.). SIUE faculty participate in RSI by initiating frequent and timely opportunities to engage with students. Because there are several ways to implement RSI, such as facilitating online discussions, scheduling a Zoom conference with a student, or holding regularly scheduled review sessions before tests, RSI may look different in every class. To learn more about RSI, use the Online Tips links for Faculty and Students in your Blackboard course websites or visit the Faculty Resources for Regular and Substantive Interaction webpage.

Recordings of Class Content

Faculty recordings of lectures and/or other course materials are meant to facilitate student learning and to help facilitate a student catching up who has missed class due to illness or quarantine. As such, students are reminded that the recording, as well as replicating or sharing of any course content and/or course materials without the express permission of the instructor of record, is not permitted, and may be considered a violation of the University's Student Conduct Code (3C1), linked here: https://www.siue.edu/policies/3c1.shtml.

Diversity and Inclusion

SIUE is committed to respecting everyone's dignity at all times. In order to learn, exchange ideas, and support one another, our virtual and physical classrooms must be places where students and teachers feel safe and supported. Systems of oppression permeate our institutions and our classrooms. All students and faculty have the responsibility to co-create a classroom that affirms inclusion, equity, and social justice, where racism, sexism, classism, ableism, heterosexism, xenophobia, and other social pathologies are not tolerated. Violations of this policy will be enforced in line with the SIUE Student Conduct Code.

The <u>Inclusive Excellence, Education, and Development Hub</u> is an excellent resource for students for support and community. Any person who believes they have experienced or witnessed discrimination or harassment can contact Lindy Wagner, Assistant Vice Chancellor for Inclusive Excellence, Education and Development at (618) 650-3179 or <u>linwagn@siue.edu</u>.

Departmental Commitment

The Department of Biological Sciences is committed to providing an educational and experiential environment that fosters inclusive participation by all students and faculty. This commitment is reflected in curricular design, communication of research opportunities, and coordination of advising and mentoring. The Department seeks to increase and maintain inclusivity at all levels of undergraduate and graduate education, recognizing that the Biological Sciences impact almost all aspects of human society and that multiple views and approaches produce the best Science.

For questions regarding the Department's commitment to curricular and experiential inclusion and equity, please contact the Department Chair (Dr. Jake Williams, (618) 650-2118, <u>jasowil@siue.edu</u>).

SIUE Land Acknowledgement Statement

Southern Illinois University Edwardsville exists in and serves a region that includes the lands of the Kiikaapoi (treaty in Edwardsville, 1819); The Illinois Confederacy, including the Peoria, Kaskaskia, Michigamea, Cahokia, and Tamaroa (treaty in Edwardsville, 1818); Dhegiha Siouan peoples; and others. We affirm their contemporary and ancestral ties to the land and their contributions to this place. In alignment with the academic mission of the institution, we are committed to building responsible relationships with indigenous communities through the development of educational pathways and opportunities for indigenous students and the advancement of research and knowledge about indigenous peoples, cultures, and histories.

Pregnancy and Newly Parenting Policy

This policy and procedure are established to ensure the protection and equal treatment of pregnant students, students with pregnancy-related medical conditions including as a result of the termination of pregnancy, and students who become new parents including parents adopting or fostering to adopt for the first 12 weeks a child is in the home, in accordance with Federal and State guidelines and regulations. "New Parents" refers to a parent who has recently welcomed a newborn or adopted a child or is fostering to adopt a child and needs support to mitigate the disruption in academic progress within the first 12 weeks of parenting or a parent that needs support due to medical necessity attributed to pregnancy or delivery of a child; care of newborn; or lactation within the first year of child's life or legal adoption/fostering. Visit <u>Policies & Procedures - Student Rights and Conduct - Newly Parenting Policy - 3C15</u> to view the full policy and learn how to request accommodations through the Office of Equal Opportunity, Access, and Title IX Coordination (EOA).

Technology Privacy Information

We will be using Blackboard in this course. View the <u>Anthology Blackboard Privacy Statement</u> to review how your data is being used and stored.

Additional Support

Services for Students Needing Accommodations

Students needing accommodations because of medical diagnosis or major life impairment will need to register with Accessible Campus Community & Equitable Student Support (ACCESS) and complete an intake process before accommodations will be given. Students who believe they have a diagnosis, but do not have documentation, should contact ACCESS for assistance and/or appropriate referral. The ACCESS office is located in the Student Success Center, Room 1203. You can also reach the office by emailing us at <u>myaccess@siue.edu</u> or by calling <u>618-650-3726</u>.

If you feel you would need additional help in the event of an emergency situation, please notify me. We will then consult with our department's safety officer, Dr. Tom Anderson (<u>thander@siue.edu</u>, <u>618-650-3907</u>), to discuss specific needs for assistance and identify an appropriate plan and evacuation route.

Academic and Other Student Services

As an enrolled SIUE student, you have a variety of support available to you, including:

- Lovejoy Library Resources
- Academic Success Sessions
- <u>Tutoring Resource Center</u>
- <u>The Writing Center</u>
- <u>Academic Advising</u>
- Financial Aid
- <u>Campus Events</u>
- Counseling Services

If you find that you need additional support, please reach out to me and let me know.

Cougar Care

Dealing with the fast-paced life of a college student can be challenging, and I always support a student's decisions to prioritize mental health. Students have access to counseling services on campus (Student Success Center, 0222). Make an appointment by visiting <u>cougarcare.siue.edu</u> or by calling <u>618-650-2842</u>.

Student Success Coaches

<u>Student success coaches</u> work across campus to serve the SIUE student population with the tools and resources to adjust to and meet the demands of the college experience. Success coaches provide direct services such as time management support and referrals to campus resources. If you find yourself in need of academic or personal support, or in a situation that is preventing you from being successful in the classroom, please utilize <u>Starfish</u> to connect with a coach as soon as possible. The sooner you engage, the sooner you can access the information or tools you need that may help you get back on track.

Technical Support

Since this class uses Blackboard as an online learning platform, you are expected to have reliable Internet access on a regular basis. It is your responsibility to address any computer problems that might occur. Such problems are not an excuse for delays in meeting expectations or for missing course deadlines.

Contact ITS at <u>618-650-5500</u> or at <u>help@siue.edu</u> with any technical concerns. You can also check the functionality of University systems, including Blackboard, at the <u>ITS System Status page</u>, or search the <u>ITS KnowledgeBase</u> for various how-to and troubleshooting guides.

Subject to change notice

All material, assignments, and deadlines are subject to change with prior notice. It is your responsibility to stay in touch with your instructor, review the course site regularly, or communicate with other students, to adjust as needed if assignments or due dates change.

Course Calendar

Lecture Date	Торіс		
Week 1:	Ch 1 Introduction to the Scientific Method		
12/16-12/22	Ch 2 Water, Biochemistry and Cells		
	Ch 3 Nutrients and Membrane Transport		
	Ch 4 Enzymes, Metabolism, and Cellular Respiration		
	Ch 5 Photosynthesis and Climate Change		
	Ch 6 DNA Synthesis and Mitosis		
Week 1	Discussion post 1 (Introductory post), Discussion post 2 (Pseudoscience),		
Assignments	Discussion post 3 (Climate Change). Initial posts due Thursday, 12/19 by 11:59 pm.		
	Responses due Sunday, 12/22 by 11:59 pm. 6 chapter quizzes and homework		
	assignments due Sunday, 12/22 by 11:59 pm. Lecture exam 1—Opens Thursday,		
	12/19 at 12:00 am. Closes on Sunday, 12/22 at 11:59 pm. NOTE: EXAM MUST BE		
	SUBMITTED BEFORE DEADLINE!		
Week 2:	Ch 7 Meiosis and Human Reproduction		
12/23-12/29	Ch 8 Mendelian Genetics		
	Ch 9 Complex Patterns of Inheritance and DNA Profiling		
	Ch 10 Gene Expression, Mutation, Stem Cells, and Cloning		
	Ch 11 The Evidence for Evolution		
	Ch 12 Natural Selection		
Week 2	Discussion post 4 (Gene Editing), Discussion post 5 (Evolution). Initial posts due		
Assignments	Thursday, 12/26. Responses due Sunday, 12/29 by 11:59 pm. 6 chapter quizzes and		
	homework assignments due Sunday, 12/29 by 11:59 pm. Lecture exam 2—Opens		
	Thursday, 12/26 at 12:00 am. Closes on Sunday, 12/29 at 11:59 pm. NOTE: EXAM		
	MUST BE SUBMITTED BEFORE DEADLINE!		
Week 3:	Ch 13 Species and Races		
12/30 -	Ch 14 Biodiversity and Classification		
1/5	Ch 15 Population Ecology		
	Ch 16 Community and Ecosystems Ecology		
	Ch 17 Climate and Biomes		
Week 3	Discussion post 6 (Biodiversity), Discussion post 7 (Human Impacts). Initial posts		
Assignments	due Thursday, 1/2 by 11:59 pm. Responses due Sunday, 1/5 by 11:59 pm. 5		
	chapter quizzes and homework assignments due Sunday, 1/5 by 11:59 pm. Lecture		
	exam 3—Opens Thursday, 1/2 at 12:00 am. Closes on Sunday, 1/5 at 11:59 pm. NOTE: EXAM MUST BE SUBMITTED BEFORE DEADLINE!		