

Syllabus for BIOL 111 WS1
Contemporary Biology
Department of Biological Sciences
Online
Winter Session 2023

## 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 conducted comparative locomotion research on flying squirrels, tree squirrels, and chipmunks. I then completed a two-year postdoc at the University of Pennsylvania, where I researched frog locomotion 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, 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 and Panama. Prior to my arrival at SIUE, I taught courses in Field Zoology and Ecology, Field Botany and Ecology, Wildlife of Ohio, and Nature Interpretation at Zane State College.

My research interests are in vertebrate functional and ecological morphology, and wildlife ecology. Much of my laboratory research at SIUE focuses on the evolution of frog locomotion. Here is a link to my research on jumping in pumpkin toadlets, which are among the world's smallest vertebrates! https://www.science.org/doi/10.1126/sciadv.abn1104.

My field research is varied and has included habitat modeling studies of forest birds, as well as grassland and shrubland birds in the Mississippi River floodplain on lands managed by the U.S. Army Corps of Engineers. I am also involved in studies of habitat use and movement patterns in Southern Flying Squirrels and Eastern Box Turtles. Since 2015 I have been involved in conservation research on a state-threatened amphibian, the Illinois Chorus Frog.

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

**Communicating with the Instructor:** You may reach me by email: <u>ressner@siue.edu</u> or phone 618-650-2338. We can also meet via Zoom.

#### **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, 6<sup>th</sup> edition available through MasteringBiology or through SIUE Textbook Services. Click here 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.

## **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**

## **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): <a href="http://get.adobe.com/reader/?promoid=HRZAC">http://get.adobe.com/reader/?promoid=HRZAC</a>
- 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: <a href="http://office365.siue.edu">http://office365.siue.edu</a>

#### **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

**Technical Support:** Since this is an online course, 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 618-650-5500 with any technical concerns.

# **Course and University Policies**

#### **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/"netiquette":

- **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.

**SIUE Plagiarism Policy:** "The University recognizes plagiarism as a serious <u>academic</u> offense. Plagiarism, the act of representing the work of another as one's own, may take two forms. It may consist of copying, paraphrasing or otherwise using the written or oral work of another without acknowledging the source, or it may consist of presenting oral or written course work prepared by another as one's own.

Normally a student who plagiarizes shall receive a grade of F in the course in which the act occurs. The offense shall also be reported to the Provost. In addition, any graduate student who has been found to have committed an act of plagiarism may be dropped from his or her graduate degree program by his or her department. A student who is reported a second time shall be suspended from the University for a period of not less than one term. Should a student who has been suspended for plagiarism be readmitted and be again found guilty of the offense, he/she shall be permanently expelled from the University.

This policy statement shall appear in the University catalogs and course announcements, shall be called to the attention of advisers, shall be explained during the program of new student orientation, and shall be published in the <u>Alestle</u> at least once during the beginning of each fall term.

The Provost and Vice Chancellor for Academic Affairs is charged with administrative responsibility for handling complaints, allegations, or grievances against students concerning plagiarism, according to the <u>Student Academic Code</u> (<u>Policy 3C2</u>).

#### **ACCESS**

If you have a documented disability that requires academic accommodations, please contact the Office for Accessible Campus Community & Equitable Student Support (ACCESS) for coordination of your academic accommodations. The ACCESS office is located in the Student Success Center, Room 1270 and is open Monday - Friday from 8:00 a.m. - 4:30 p.m.

You may contact ACCESS by calling (618) 650-3726 or sending an email to <a href="mayaccess@siue.edu">myaccess@siue.edu</a>. In order to request accommodations in an online course, students with disabilities will need to present an electronic copy of their DSS ID Card prior to application of those accommodations. To request an electronic ACCESS ID card, email <a href="mayaccess@siue.edu">myaccess@siue.edu</a> prior to requesting the accommodation of the instructor.

Any student in this course with a disability that requires assistance during emergency building or room evacuations will be accommodated. Students must identify themselves by contacting Dr. Susanne DiSalvo (<a href="mailto:sdisalv@siue.edu">sdisalv@siue.edu</a>, 618-650-5928) so that an appropriate plan can be put in place.

## **Our Statement on Inclusivity and Equity**

#### **Institutional Commitment**

SIUE is committed to respecting everyone's dignity at all times and dismantling systems of oppression that permeate institutions in our society. 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. All students and faculty have the responsibility to co-create a classroom that affirms inclusion, equity, and justice, where racism, sexism, classism, ableism, heterosexism, xenophobia, and other forms of discrimination are not tolerated. Violations of this policy will be enforced in line with the SIUE Student Conduct Code (https://www.siue.edu/policies/3c1.shtml).

The Center for Student Diversity & Inclusion (https://www.siue.edu/csdi/) is an excellent resource for support and community. If you experience or witness discrimination or harassment, you can reach out to Ms. Jamie Ball, director of the Office of Equal Opportunity, Access and Title IX Coordination (https://www.siue.edu/eoa/), by e-mail at jball@siue.edu or by calling 618-650-2333. You can also report bias incidents using this online form (https://www.siue.edu/birt).

## **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. Vance McCracken, (618)650-3928, vmccrac@siue.edu).

#### **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.

## **Grading**

Quizzes	85 pts	Α	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.

# **COVID-19 Pandemic Policies Related to Classroom Instruction (Spring 2023) Health and Safety**

The measures outlined below are <u>required</u> and any student who does not comply may be in violation of the *COVID-19 People-Focused Health and Safety Policy*, as well as the University's *Student Code of Conduct*.

The full text of the *COVID-19 People-Focused Health and Safety Policy* can be found here: <a href="https://www.siue.edu/policies/Covid.shtml">https://www.siue.edu/policies/Covid.shtml</a>

## Classrooms, Labs, Studios, and Other Academic Spaces

Under current University policy, SIUE will only require masking in campus healthcare settings. See, https://www.siue.edu/about/announcements/coronavirus/safety-guidelines-support/index.shtml. Individual faculty of record may determine that masking will be required in their classrooms and are asked to communicate accordingly with students. Face masks may be required in other campus sites following guidance from governing regulatory agencies.

• Students who forget to wear a face covering when masking is required will be reminded of their obligation to comply with SIUE's COVID-19 People-Focused Health and Safety Policy and temporarily asked to leave the class until they are able to conform to the policy. Students who forget or lose their face coverings when masking is

- required may may be able to obtain replacements from a friend, a faculty member, or a nearby departmental office. Face coverings are also available for purchase in the Cougar Store (MUC).
- Students who refuse to wear a face covering when masking is required will be asked to leave the classroom and referred to the Dean of Students for non-compliance with community health and safety protocols. Repeated non-compliance may result in disciplinary actions, including the student being administratively dropped from an on-ground/face-to-face course or courses without refund if no alternative course format is available.
- If a student has a documented health condition which makes wearing a face covering medically intolerable, that student should contact ACCESS to explore options with the understanding that ACCESS will not grant accommodations which excuse the need for a face covering while on campus or in the classroom. ACCESS will work with qualifying individuals to find reasonable alternatives, whenever such solutions are available. Please call or contact the ACCESS Office via email to schedule an online appointment to discuss potential alternatives. ACCESS office (Student Success Center, Room 1203, 618-650-3726, and <a href="mayaccess@siue.edu">myaccess@siue.edu</a>).

## **General Health Measures**

Students and employees are expected to review the siue.edu/coronavirus website (<a href="https://www.siue.edu/about/announcements/coronavirus/">https://www.siue.edu/about/announcements/coronavirus/</a>) to better understand prevention strategies and safety expectations.

- Students and employees are expected to maintain healthy hygiene practices.
- Students and employees are expected to follow COVID-related guidelines and directions.
- Students and employees are expected to conduct a daily health self-assessment and isolate themselves if COVID-related symptoms are present. COVID-related symptoms include:
  - o Fever (100.4 degrees or above) or chills
  - o Cough
  - o Shortness of breath or difficulty breathing
  - o Fatigue
  - o Muscle or body aches
  - o Headache
  - o New loss of taste or smell
  - o Sore throat
  - o Congestion or runny nose
  - o Nausea or vomiting
  - o Diarrhea

## **Academic Integrity**

Students are reminded that the expectations and academic standards outlined in the Student Academic Code (3C2) apply to all courses, field experiences and educational experiences at the University, regardless of modality or location. The full text of the policy can be found here: https://www.siue.edu/policies/3c2.shtml.

## **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: <a href="https://www.siue.edu/policies/3c1.shtml">https://www.siue.edu/policies/3c1.shtml</a>.

## Potential for Changes in Course Schedule or Modality

As the COVID-19 pandemic continues, there remains a possibility that planned classroom activities will need to be adjusted. Depending on circumstances and following state-issued recommendations, potential changes include alterations to distancing requirements, course modality (e.g., transition from face-to-face to online, hybrid, or hy-flex, mask wearing, in-course activities, etc). These changes would be implemented to ensure the successful completion of

the course while preserving health and safety. In these cases, students may be provided with an addendum to the class syllabus that will supersede the original version. If the course schedule or modifications significantly alter expectations, a new syllabus will be issued.

## **Course Calendar**

Lecture Date	Topic		
Week 1:	Ch 1 Introduction to the Scientific Method		
12/19 – 12/25	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, 12/22 by 11:59 pm.		
	Responses due Sunday, 12/25 by 11:59 pm. 6 chapter quizzes and homework		
	assignments due Sunday, 12/25 by 11:59 pm. Lecture exam 1—Opens Thursday,		
	12/22 at 12:00 am. Closes on Sunday, 12/25 at 11:59 pm. <b>NOTE: EXAM MUST BE</b>		
	SUBMITTED BEFORE DEADLINE!		
Week 2:	Ch 7 Meiosis and Human Reproduction		
12/26 – 1/1	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, 12/29. Responses due Sunday, 1/1 by 11:59 pm. 6 chapter quizzes and		
	homework assignments due Sunday, 1/1 by 11:59 pm. Lecture exam 2—Opens		
	Thursday, 12/29 at 12:00 am. Closes on Sunday, 1/1 at 11:59 pm. NOTE: EXAM		
	MUST BE SUBMITTED BEFORE DEADLINE!		
Week 3:	Ch 13 Species and Races		
1/2 – 1/8	Ch 14 Biodiversity and Classification		
	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, 1/5 by 11:59 pm. Responses due Sunday, 1/8 by 11:59 pm. 5		
	chapter quizzes and homework assignments due Sunday, 1/8 by 11:59 pm. Lecture		
	exam 3—Opens Thursday, 1/5 at 12:00 am. Closes on Sunday, 1/8 at 11:59 pm.		
	NOTE: EXAM MUST BE SUBMITTED BEFORE DEADLINE!		