

Welcome to the laboratory portion of Major Concepts in Biology I (BIOL 1101L), introductory biology for students majoring in the biological sciences. The laboratory is intended to reinforce the concepts and information presented in the lecture portion of the course and to provide you with opportunities to:

- ✓ Gain transferable skills.
- ✓ Familiarize yourself with the language of biology and science.
- ✓ Use and improve your critical reasoning, analytical, and communications skills.
- ✓ Partially satisfy Objective 5 of the General Education Requirements.

Learn your laboratory instructor's name and keep a record of his or her contact information:

Instructor | _____ Section | _____

E-mail Address | _____ Office hours | When: By Appointment Where: _____

Take the syllabus quiz in Canvas to read about and acknowledge the following:

- Occupational Health & Safety
- Academic Integrity
- Attendance Policy

Attendance & Communication Policy (<https://www.isu.edu/biology/biolab/student-behavior/attendance--communication/>):

Attendance

For the first lab of the semester, it will be considered an UNEXCUSED ABSENCE if a student:

- Does not attend the laboratory for which they are registered,
- Registers after labs have begun, OR
- Attends a lab section for which they are not registered although they are registered for another section.

For the duration of the semester, students are expected to:

- Arrive on time,
- Stay for the entire lab,
- Attend the laboratory section for which they are enrolled, and
- Contact the lab instructor four business days BEFORE a lab is missed to request an excused absence. **Excused absences** are granted for university-sponsored extra-curricular activities only and the student must provide a note from their coach, trainer, etc. **Unexcused absences** cannot be made up.

Communication

When students communicate with their instructor using e-mail they are required to use the ISU Academic Communication guidelines (<https://www.isu.edu/advising/atoz-index/academic-communication/>) as well as specific rules 1-4 or the instructor is NOT required to respond. Instructors are also not required to respond to an e-mail if it is about an assignment that is due in 2 business days or less OR an absence that has already occurred or will occur in less than two business days.

1. Subject must include the course number (i.e. Biol 1101L) AND the section number for which you are registered (i.e. 01, 02 etc.),
2. A greeting that includes your instructor's name,
3. A concise paragraph that explains your situation and/or asks a question, and
4. A salutation that includes your full name AND Bengal ID number.

IMPORTANT NOTE: The **lab syllabus** and **entire manual** must be printed by the student before the first lab.

Disruptive Behavior (<https://www.isu.edu/biology/biolab/student-behavior/disruptive-behavior/>):

You are expected to behave in a congenial and respectful manner as you participate in all laboratory activities. Disruptive behavior will not be tolerated. This syllabus is your first warning. Examples of disruptive behavior include but are not limited to:

- Not following laboratory rules and safety.
- Behavior that impedes another student's ability to learn such as talking out of turn, texting, talking on your cell phone, etc.
- Disrespectful, rude, or threatening behavior directed toward a classmate or instructor.
- Cell phones or other electronic devices may not be used; they need to be turned off and placed with your personal belongings on the shelves provided. If others need to contact you at any time, give them the telephone number of the Biology Office (282-3765) or Public Safety (282-2515).
- Eating and drinking in the lab.
- Inappropriate use of any electronic devices.

Grades

The points accumulated in laboratory will be scaled to **25% of your final grade** for the course. Your laboratory grade can help your overall grade for the course, so apply yourself responsibly:

☐ **Lab Notebook (pencil, mini-stapler, hole-punch are also needed):**

You will bring a 3-ring binder to lab to create a laboratory notebook consisting of the lab syllabus, assigned journal article, handwritten terms and definitions, and all completed and to-be completed task sheets. Your lab instructor will review your notebook each week and points will be awarded; be sure to keep it up-to-date. You will turn in the completed notebook during Lab 15.

- ☐ **Pre-quizzes:** you will have a quiz during the first ten minutes of each lab using the pre-quiz sheet provide by your instructor. The quiz will cover the important terms and any information from the task sheet before completion. If you are late, you cannot take the pre-quiz.
- ☐ **Post-quizzes:** you will have a quiz during the last ten minutes of each lab using the post-quiz sheet bundle provide by your instructor. The quiz will cover the important terms and any information from the task sheet before AND after completion If you do
- ☐ **Task sheets:** Complete the lab task sheets using information found within the task sheets themselves, supplies offered in lab, and the course textbook. If you do not stay for the entire lab period and do not hand in your completed task sheet, you cannot take the post-quiz.
- ☐ **Extra Points:** complete by the submission date and time using the assigned materials. Late submissions will not be accepted.
- ☐ Do not participate in academic dishonesty. Academic Integrity expected of all students. **Academic dishonesty** (<https://www.isu.edu/biology/biolab/student-behavior/attendance--communication/>) in any form is unacceptable. Academic dishonesty includes cheating (e.g. providing or using unauthorized materials) and plagiarism (e.g. representing another's work as your own). Penalties for cheating and plagiarism include reduction in grade for the assignment, grade of F in the course, and dismissal from the University.
- ☐ **ANY violation of laboratory rules and safety** (<https://www.isu.edu/biology/biolab/instructor-training/lab-safety/>) **will result in a zero for all lab grades on the day the violation occurred.**

Graded items	Quantity	Points	
		Each	Total
Lab Notebook	15	5	75
Pre-Quizzes	15	10	150
Post-Quizzes	14	10	140
Task sheets	15	30	450
Extra points	Used to offset points missed due to unexcused absences	70	

Laboratory Safety & Rules (<https://www.isu.edu/biology/biolab/student-behavior/laboratory-rules/>):

- ✓ No food or drink allowed.
- ✓ Coats, bags, purses, backpacks, etc. must be stored on the shelves provided on the side of the room. Do NOT keep them next to you at your workstation. Only your binder with syllabus, task sheets, pencil, colored pencils, and mini-stapler should be with you at the workstation. Mobile electronic devices (excluding the ISU lab computers and equipment) are NOT allowed in the lab. If a student has one on his/her person OR anywhere near their seat they will receive a zero on their quiz and/or task sheet. They must be placed in your bag or coat and stored on the shelves provided.
- ✓ Mobile electronic devices (excluding the ISU lab computers and equipment) are NOT allowed in the lab. If a student has one on his/her person OR anywhere near their seat they will receive a zero on their quiz and/or task sheet. They must be placed in your bag or coat and stored on the shelves provided.
- ✓ Standard lab attire is required:
 - work shirt that covers the upper torso and arms,
 - lower body clothing that covers the leg to the knee (e.g., pants, skirt, coveralls, lab coat) and fully protects exposed skin
 - shoes that have a closed toe AND heel (i.e. NO flip flops or sandals).
- ✓ Long hair must be restrained (i.e., braided, tied in a pony tail, etc.) for safety reasons.
- ✓ Random assigned seating is required during each lab.
- ✓ Before and after each lab, wipe down all student benches, computer keyboard and mouse, microscope knobs and eyepieces, and all other equipment that is touched during lab with the correct cleaning supplies.
- ✓ Instructors must also wipe down the instructor benches, computer keyboard and mouse, microscope knobs and eyepieces, projector remote, as well as any other equipment they use during lab the correct cleaning supplies.
- ✓ Participation in lab is required. If the lab instructor observes that a student is not actively participating in the completion of the task sheet, the student will receive a zero on the task sheet.
- ✓ Notify your instructor of unsafe conditions such as broken glassware or water on the floor.
- ✓ Never pour chemical reagents down the sink drain unless instructed to do so.

Academic Success / Reasonable Accommodations

Idaho State University is committed to providing equal opportunity in education for all students. If you have a diagnosed disability or if you believe you have a disability (physical, learning, hearing, vision, psychiatric) that might require reasonable accommodation in this course, please contact the Disability Services Center, Rendezvous Building, Room 125 (208-282-3599). It is the responsibility of students to contact instructors during the first week of each semester to discuss appropriate accommodations.

How to Succeed in this Course

- ✓ Take responsibility for your own education:
 - Always attend lecture and laboratory.
 - Take notes and review your notes after class each day so you are sure you understand them before lab. Check your notes for accuracy by comparing them to a colleague's or the textbook. If you have questions, ask your instructor.
 - Read the assigned materials before lab.
 - Review and think about what you have heard and read.
- ✓ Visit your laboratory instructor during his or her office hours and "talk biology." Learn about what they are doing in their research programs.

Schedule for BIOL 1101L (subject to change):

DATES	LAB	TOPIC		DUE DATES
August 26 – 29	1 ^A	Software Install, Generative AI, & Journal Articles (Terms due)		<ul style="list-style-type: none">• Task sheets and quizzes – DURING the lab in which they are assigned.• Extra points terms – BEFORE the lab for which they were assigned.• Lab Notebook – DURING each lab
September 2 – 5	2	Introduction: Microscopy & Cells (Terms due)		
September 9 – 12	3	Unit I: Urinalysis	Part 1. pH & Conductivity (Terms due)	
September 16 – 29	4		Part 2. Macromolecules	
September 23 – 26	5		Part 3. Diffusion & Osmosis	
September 30 – October 3	6	Unit II: Energy & Metabolism	Part 1. Enzymes & Respiration (Terms due)	
October 7 – 10	7		Part 2. Fermentation	
October 14 – 17	8		Part 3. Photosynthesis	
October 21 – 24	9	Unit III: Cellular Reproduction	Parts 1 & 2. DNA (Terms due)	
October 28 – 31	10		Part 3: Molecular Analysis of Cancer	
November 4 – 7	11		Parts 4 & 5. Cell Cycle	
November 11 – 14	12	Unit IV: Genetics	Parts 1 – 3. Meiosis & Simple Genetics (Terms due)	
November 18 – 21	13		Parts 4 & 5. Population Genetics	
December 2 – 5	14	Unit V: Evolution & Ecology	Parts 1 – 3. Evolution (Terms due)	
December 9 – 12	15		Parts 4 & 5. Ecology	

^ABring your laptop to lab this week.