

# Human Physiology Lab

BIOL2425

## Instructor Information

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## Course Description

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Hands-on lab investigations of physiological processes. Lab activities include data acquisition and analysis of the cardiovascular, respiratory, digestive, endocrine, immune, and muscular systems. One laboratory session per week.

Pre-Requisite(s): BIOL 2420 w/C grade or better or BIOL 2420 must be concurrent

Semester(s): All

BIO 2425- Lab investigations of physiological processes. Includes data acquisitions, analysis of nervous, endocrine, cardiovascular, respiratory, digestive, urinary, and muscular systems

## Course Presentation

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This course meets once a week in-person (face-to-face) for lab investigations of physiological processes.

Campus: Jordan, JHS

Room: 243

Day/Time: Tuesdays 1:00-3:50 pm

## Communication Plan

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Example language:

- I will respond to email within 48 hours. I will offer feedback on major assignments within one week. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- In this course I will be posting interactive announcements which will offer specific opportunities for class questions and extra credit every other week.
- Additionally, I will be participating in the discussion forums with you to share my perspective within the discipline and to offer some nuances of interpretation that may not be present in your textbook.
- Lastly, we'll be holding small group Q & A sessions, where we can learn from our peers (and faculty) on some of the more difficult units within the course.

## Course Student Learning Outcomes

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- Collect data and analyze data through graphing and by using basic statistics, such as calculation of the mean, median, mode, range, and standard deviation.
- Explain homeostasis and circadian rhythms and their significance to body function.
- Define diffusion and osmosis.
- Describe the enzymatic digestion of lipids, carbohydrates, and proteins.
- Demonstrate the ability to perform an immunoassay, such as the ELISA and understand its use in analyzing patient samples.
- Describe the physiology of skeletal muscles and the endocrine, cardiovascular, and renal systems.
- Determine blood characteristics, such as blood type, hematocrit, and buffering capability.
- Perform electrocardiography.
- Measure lung volumes and capacities.

- Explain the basics of endocrine signaling and feedback loops.

## Required Textbook or Materials

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**Title:** All course material is available on Canvas.

**Subtitle:** Computer with internet access and Chrome or Firefox browser required.

For more information on textbook accessibility, contact Accessibility & Disability Services at [ads@slcc.edu](mailto:ads@slcc.edu).

## Course Learning Environment

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My hope is that all of us together will create a learning environment that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.) To help accomplish this:

- No discrimination is tolerated based on anyone's race, gender, sexuality, religion, abilities, English language proficiency or socio-economic circumstances. Please always choose kindness and patience in our class communications, there is space for all of us here.
- If you have a name and/or set of pronouns that differ from those that appear in your Canvas handle, please let me know so I can address everyone in a way that makes them feel comfortable and safe.
- I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in any of the class materials and discussions (by anyone) that made you feel uncomfortable, please talk to me about it. You can email me directly. I will keep it confidential and strive to correct the situation.
- If you feel like your performance in the class is being affected by an emergency or any other situation outside of class, please let me know so that we can discuss the best course of action. I will not be disappointed in you if you can't complete everything on time, or don't perform to your full potential. I know everyone has a lot

going on, and I understand that sometimes coursework is one of many priorities in your life. But I can't help you unless you communicate with me!

## General Course Policies

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**Attendance:** Participation in the lab course's Canvas site during the first week of the semester is **MANDATORY** and will be determined by your engagement and completion of Syllabus/Course Quiz. This policy is in place because students that do not engage in courses or fall behind in their engagement are not likely to do their best in that course. We want all our students to be as successful as possible. Any student who has not completed this quiz **RISKS BEING DROPPED** from the course. **This may also result in you being dropped from the lecture that is to be taken concurrently.**

**Students are expected to attend all lab sessions. Missing more than two consecutive lab sessions is not permitted, as it will significantly disrupt group projects and negatively impact student overall course grade. Consistent attendance is crucial for successful collaboration and completion of group work. Exceptions will only be considered under extraordinary circumstances with proper documentation.**

**Accessibility and Disability Service** (ADS - formerly DRC): SLCC values inclusive learning environments and strives to make all aspects of the College accessible to our students. If you have a disability and believe you need accommodation to improve access to learning materials or the learning environment, please contact ADS: (phone) 801-957-4659; (email) [ads@slcc.edu](mailto:ads@slcc.edu); (website) <https://www.slcc.edu/drc/Home/index.aspx>. You **MUST** talk with your Lab instructor about your Accommodations so that you can both be on the same page. Note: All timed quizzes are allowing double time (10 minutes) - students without double time are asked to complete these timed quizzes in 5 minutes.

**Drop, Withdraw or Incomplete Grade:** Last day to drop from class with refund is September 11, withdraw without refund is October 22. A grade of "I" (Incomplete) is at the instructor's discretion and can be given if a student is facing extenuating circumstances preventing them from finishing the semester. In order to receive an incomplete, the majority of the course work must be completed (e.g. ~70%) with a passing grade.

**Assignments:** Labs will be available each week on dates listed according to the syllabus schedule. **No makeup or late assignments will be permitted!** This will facilitate timely feedback on your work. Pre-lab reports remain open for one week and close at the beginning of the assigned lab. Students will receive credit based on completion and quality of work. Post-lab reports open when lab time begins and close at the end of lab time. Quizzes are due at the beginning of the lab period (Time limit to 10 minutes). No exceptions! A 50% deduction will be taken from the post lab report if students are more than 30 minutes late to lab.

**Post Lab Reports:** Lab assessments are worth 25 points. These assessments consist of two parts: an oral (informal) assessment and a formal assessment.

***Oral Exam:*** Each week students will be asked by instructor or lab aide a question about that week's lab (and/or connections to previous labs). Oral exams are worth 12 points: 7 points for answering the question posed to them and 5 points for coming on time and staying for the full time. There is a rubric for each week on the dev site.

***Formal Assessment:*** This consist of one essay question designed to evaluate the student's understanding of that week's lab topic. This question is found under the lab protocol and must be submitted by students by the end of the lab in Canvas. As part of that assessment the weekly survey link is also there and part of their grade (see below)

**Quizzes:** Quizzes will be given at the end of the lab to encourage students to come prepared to each lab session. It's important to note that students are not allowed to use their lab materials, nor access the internet while completing the quiz.

Quizzes are proctored and must be completed by the end of the la period. All students, except those with ADA accommodations, should complete the quiz within 5 minutes. To maintain anonymity for ADA Double Time Accommodations, all students will have 10 minutes to complete the quiz.

**Weekly Surveys:** These surveys will continue to allow students to express their preferences and offer feedback on each lab session. These are included in each Lab Protocol and Formal Assessments.

The Physiology of Physiology Students (POPS) Project: This is a large, iterative, group assignment that allows you to conduct a research project that is based on physiological principles. Engagement in undergraduate research promotes critical thinking, problem-solving, information literacy, communication, and collaboration skills. This course follows specific protocols to ensure compliance with the Federal guidelines protecting research participants. Students are required to complete the appropriate Institutional Research Board (IRB) training before starting their research project. IRB application approval is required ONLY for those students who intend to present their project outside SLCC.

**Make up labs:** Students are permitted to make-up ONE lab during the semester but only during the week that the specific lab is being conducted. In other words, if you miss your scheduled lab one week you can go to a different lab section that same week to make it up. You may only do this once per semester. If you have an emergency that prevents you from making it to a make-up lab, contact your instructor as soon as possible to discuss your options.

**Academic Integrity:** Academic Dishonesty is **not** tolerated and includes all forms of cheating and plagiarism as outlined in the Code of Student Rights and Responsibilities and outlined here (this includes no use of AI software for your graded coursework). There is no tolerance for dishonesty. Academic dishonesty includes but is not limited to claiming another person's work or words as one's own, accessing answers to lab reports and quizzes from the Internet, completing quizzes or exams with other individuals etc. Students must put all answers in their own words. **Quizzes are proctor and need to be completed individually by each student.** Penalty for first offense may include a grade of "0" on the assignment or exam and second offense may result in an "E" for the course.

Generative artificial intelligence (AI) software is a rapidly emerging tool that you may be interested in using. If doing so, SLCC students are expected to adhere to the same standards as the Code of Student Rights and Responsibilities statement on plagiarism. Presenting generative AI software content as your own is a violation of academic integrity. If you use generative AI in your work, you must indicate that you have done so.

**SLCC Academic Policies:** SLCC academic policies may be found in the [SLCC 2023-2024 Catalog](#), and the [Code of Student Rights and Responsibilities](#).

**Biology Student Comments and Inquiries:** Biology students can use the inquiry form to leave general comments and feedback, report any ongoing issues, file grade appeals, request add exceptions (after add period is over) and transfers from one course section to another. This form can also be used for any other inquiries outside of these topics but is meant for current or past biology students and will require students to log in with SLCC credentials. <https://www.slcc.edu/biology/student-inquiry-forms.aspx>

## Lab Safety

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### **LABORATORY SAFETY RULES – Human Physiology Lab**

All students are required to follow this safety guidelines and procedures in the laboratory.

- Behave responsibly. No horseplay or fooling around while in lab.
- Do not bring any food or beverages into lab, and do not eat, drink, smoke, chew gum, chew tobacco, or apply cosmetics when in lab. Never taste anything in lab. Do not put anything in lab into your mouth. Avoid touching your face, chewing on pens, and other similar behaviors while in lab. Always wear shoes in lab.
- Unless you are told otherwise by your instructor, assume that all chemicals and solutions in lab are poisonous, and act accordingly. Never pipette by mouth. Always use a mechanical pipetting device to pipette solutions. Clean up all spills immediately, and report all spills to your instructor.
- Wear safety goggles when working with chemicals. Carefully read the labels on bottles and know the chemical you are dealing with. Do not use chemicals from unlabeled container, and do not return excess chemicals back to their container. Report all spills to your instructor immediately.
- Unless your instructor tells you to do otherwise, do not pour any solutions down the drain. Dispose of all materials as per instructions from your instructor.

- If you have long hair, tie it back. Don't wear dangling jewelry. If you are using open flames, roll up loose sleeves. Wear contact lenses at your own risk; contacts hold substances against the eye and make it difficult to wash your eyes thoroughly.
- Your instructor will tell you the locations of lab safety equipment, including fire extinguishers, fire blanket, eyewash stations, and emergency showers. Familiarize yourself with the location and operation of this equipment.
- If anything is splashed into your eyes, wash your eyes thoroughly and immediately. Tell your lab instructor what happened.
- Notify your instructor of any allergies to latex, chemicals, stings, or other substances.
- If you break any glassware, do not pick up the piece of broken glass with your hands. Instead, use a broom and dustpan to gather the broken glass. Ask your instructor how to dispose of the glass.
- Unless told by your instructor to do otherwise, work only during regular, assigned hours when the instructor is present. Do not conduct any unauthorized experiments; for example, do not mix any chemicals without your instructor's approval.
- Do not leave any experiments unattended unless you are authorized by your instructor to do so. If you leave your work area, slide your chair under the lab table. Keep walkways, and desktops clean and clear by putting books, backpacks, and so on along the edge of the room, or in the hall. Keep your work area as clean and uncluttered as possible.
- Don't touch or put anything on the surface of hot plates unless told to do so. Many types of hotplates have no visible sign that they are hot. Assume they are hot.



- Know how to use the equipment in lab. Most of the equipment is expensive; you may be required to pay all or part of its replacement cost. Keep water and solutions away from equipment and electrical outlets. Report malfunctioning equipment to your instructor. Leave equipment in the same place and condition that you found it. If you have any questions about or problems with equipment, contact your instructor.
- Know what to do and whom to contact if there is an emergency. Know the fastest way to get out of the lab. Immediately report all injuries-no matter how minor- to your instructor. Seek medical attention immediately if needed. If any injury appears life threatening, call 911 immediately.
- During the first lab the lab instructor will point out the location and operation of the fire extinguisher, eyewash fountain, safety shower, first aid kit, and fire exits. You need to know the proper use and locations of the safety equipment.

### **Operation of emergency equipment in the laboratory:**

1. Fire extinguisher: To operate a fire extinguisher, apply the P.A.S.S. method (Pull... Aim...Squeeze...Sweep) and perform the following steps: 1. Hold the extinguisher upright and Pull the pin. 2. Stand 8 to 12 feet away from the fire Aim the extinguisher at the base of the fire. 3. Squeeze the top handle to release the extinguishing agent while you Sweep the extinguisher from side to side until the fire is out.
2. Eyewash fountain station: To use the eyewash fountain, perform the following steps: 1. Hold both eyelids open using the thumbs and forefingers of each hand for each eye. 2. Lean head over the fountain. 3. Press the foot pedal to turn on the water. 4. Allow water to make contact with both eyes while rolling the eyeballs in the water to rinse them. 5. Continue to drench the eyes for at least 20 minutes.

3. Safety shower: To use the safety shower, perform the following steps: 1. Stand directly under the shower head. 2. Pull overhead handle attached to shower or turn the shower knobs to turn on the water. 3. Remove any contaminated clothing while drenching the contaminated area. 4. Continue to drench the contaminated body area for at least 15 minutes.
  
4. First aid kit: To obtain a Band-aide or other first aide item at any time during class.
  - At the end of each lab, clean your work area, wash your hands throughout with soap, slide your chair under the lab table, and return all equipment and supplies to the original locations. Do not remove any chemicals or equipment from the lab.
  
  - This lab contains some labs that involve human fluids. Your instructor will cover the health and safety training involving human fluids for the correct disposal. Instructors are required to teach students the importance of handling human fluids in a safe manner. Students who fail to follow the rules will be expelled from class. Human fluids can potentially contain blood borne viruses, such as HIV and hepatitis. Working with blood therefore carries a risk of infection if blood is not handled with care. Do not touch or come in contact with another student's blood. **Students should handle only their own blood!**

## Keys to Success

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**You are an SLCC student and with that comes a lot of resources and perks of your position. Please take advantage of these!**

Please be sure to check out Canvas messages, SLCC Today, and SLCCSafe for the latest information and resources.

Salt Lake Community College's Inbound Team can help staff, faculty, students, and community callers in connecting them to resources and answering most general questions about various areas at the College.

Their number is: 801-957-4073

The Contact Center's Inbound team is a helpful resource to students, faculty, and staff and can help with many questions without referring students to multiple offices for assistance. This team prides themselves on knowing a lot about the College, and if they are unable to help find a resolution, they know the correct places to transfer students to get the assistance they need.

Hours of Operation:

Monday-Thursday- 7:30am-8:00pm

Friday- 7:30am-4:30pm

Saturday- 9am-1:00pm

Services available in languages other than English:

Punjabi, Hindi, Urdu- 7:15am-3:45pm (M-F)

Spanish- 11:00am-5:00pm (M-F)

Arabic- 2:00pm-8:00pm (M-Th) 9:00am-1:00pm (S)

Tongan- 2:00pm-8:00pm (M-Th) 9:00am-1:00pm (S)

SLCC Student Life and Leadership group have a ton of fun events- please consider taking part in one of more of these each semester - the more connected you are the data suggests the better you'll do!

### **Health and Counseling Assistance**

It is important to take care of yourself physically and mentally. College students tend to neglect both. Please be aware that stress, anxiety, and other mental health issues are extremely common among students and seeking help is very important! We are all feeling stress based on everything that we have faced lately and adding the pressures of college on top of that is a lot. Counseling services at SLCC are confidential and low cost. Counseling appointments are \$15/session. If \$15 is a difficulty for you, please let them know. Cost should never be an issue when seeking help. Please contact SLCC Center for Health and Counseling: <http://www.slcc.edu/chc/> If you wish to talk with someone immediately, you may start a free chat or call with a licensed crisis counselor, 24/7 through the SafeUT App (Links to an external site.) or calling 1 (800)273-8255.

## **Food Assistance**

A recent study conducted by the University of Wisconsin and Temple University found that 36% of college students nationwide are food insecure. This is likely higher due to all of the craziness in the world of late. You don't have to be a starving college student or stressed about choosing to buy groceries or pay bills. SLCC has a food pantry for students. Don't feel shy about going to them. The Bruin Pantry is there to assist students struggling with food insecurity. Please check the following link for distribution/pick up procedures as well as info on many other resources available to help you.

## **Financial Assistance**

If you need assistance, we invite you to work with our Financial Aid Office and apply for aid. You can apply for funds up to \$750 to help cover things like rent. Check out SLCCSafe for other financial assistance that may be available.

## **Internet Assistance**

As stated in the previous page, you may be able to check out an internet hotspot through the library. <https://libweb.slcc.edu/wi-fi-hotspots-faq>

## **Textbook Assistance**

This class uses a free Open Source textbook. However, if you are taking other classes that require expensive textbooks, the library has many textbooks on reserve. If they don't have your book, you can ask your professor to talk to the library about getting a reserve copy.

## **Public Transportation**

You are entitled to a FREE UTA card that can be used on the busses, TRAX, and FrontRunner. Click here to learn about this SLCC benefit.

## **Job Assistance**

Career Services at SLCC has worked hard to help students find employment. Please check out the resources below and reach out to them if you need help.

- College Central Network

- College Central Network or CCN has thousands of Job and Internship opportunities for SLCC Students and Alumni. Students can use CCN to browse jobs, upload their resume for edits, and find tools to help them along their search.
- Hot Jobs
  - We researched companies who offer tuition reimbursement. Students can click on Hot Jobs under the Student/Alumni tab to find out who is hiring.
- Employers not on CCN
  - Due to Covid-19, we researched companies who are hiring now. They may not be an approved employer, though we wanted to provide as many options as possible. Students can click on this link here to see who is hiring now: <https://www.slcc.edu/careerservices/companies-hiring.pdf>. This list is also under the Student/Alumni tab.
- MySuccess
  - We have dedicated coaches who help students with finding jobs, their materials to apply for a job, and with mock interviews. Students can make an appointment with a Career Coach over WebEx (video) or phone. We highly recommend you encourage students to make an appointment as it is a competitive market to find jobs during this time. Instructions for making an appointment can be found here.
- Virtual Resources
  - We offer all of our resources virtually and have mapped out how we can support students. They can click here for more information.
- Social Media
  - We have a social media account on Facebook and Instagram. We highly recommend having students follow us to find out the latest information on jobs, internships, and career/major exploration.
    - Email: [careerservices@slcc.edu](mailto:careerservices@slcc.edu)
    - Facebook: [@SLCCCareerServices](#)
    - Instagram: [@SLCC\\_CareerServices](#)

## Description of Assignments/Exams

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Laboratory performance will be assessed based on online course/canvas lab participation which includes quizzes, oral exams (during lab time, which include points for attendance and not coming late or leaving early), formal lab report assessments, and POPS project. Students are expected to participate in lab each week. Students should read the lab objectives and background information prior to the reports and quizzes. Laboratory methodologies will vary from week to week, depending upon the nature of the laboratory exercise and include both individual and collaborative efforts through post lab reports and the POPS project. The laboratory includes both quantitative and qualitative exercises.

<b>Weekly Lab Work</b>	
Syllabus/Course Quiz	7
Signed Consent Form	4
Pre-lab (10 labs/ 5 pts each)	45
*Drop lowest score	
Oral Exam (10 labs/ 12 pts each)	108
*Drop lowest score	
Lab Protocol & Formal Assessment (10 labs/ 13 pts each)	117
*Drop lowest score	
Quizzes (10 labs/ 11 pts each*)	99
*Drop lowest score	
<b>Total:</b>	<b>380</b>
<b>POPS</b>	
Project plan & schedule assignment	10
IRB training and certification quiz	5
Introduction/Citations Section	35
Materials and Methods Section	25
Abstract Section	15
Results Section	35
Discussion/Conclusion Section	50

POPS Presentation	
Project plan presentation	10
PowerPoint/Poster presentation	55
Peer Review	
First Peer Review (By the beginning of Data Collection)	7
Final Peer Review (End of Project)	8
<b>Total:</b>	<b>255</b>
<b><u>Course Total</u></b>	<b><u>635</u></b>

## Grading Scale

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Grades will be assigned based on the following scale:

92% - 100% = A	80% - 82% = B-	66% - 69% = D+
89% - 91% = A-	77% - 79% = C+	62% - 65% = D
86% - 88% = B+	74% - 76% = C	57% - 61% = D-
83% - 85% = B	70% - 73% = C-	Below 57% = E

## Open Labs

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There is a research assignment (POPS Project) in this course. Because you must complete this research project, we are offering weekly Open Labs to help you and your group members with this project. Although attendance to these open labs is not required, they are highly recommended. These open labs will take place in your physiology lab room. Please see the table below for day, time, and location.

### Taylorsville Campus (SI 379)

Monday	Tuesday	Wednesday	Thursday	Friday/Sat

	8:00 – 9:50 am (Jo)	7:00 – 7:50 am (Jo)	8:00-9:50am (Jo)	
	1:00-3:50 pm (Jo)	830-950am (Amber)		
	7-850pm (Sarah)	7-850pm (Kara)		Friday 4-550pm (Sarah)

**Jordan Campus (JHS 243)**

**Mondays** 8:00 am to 2:50 pm with Jo

*Note:* If you plan to come to open lab 20+ mins after open lab starts, please email the Full-Time Physiology Lab Instructor, Jo Feldman (Stosich). She leaves to get other things done if no one shows within the first 20 mins. You can stay as long/short as you'd like within the timeframes listed below.

\*Open Labs may be cancelled for non-attendance\*

[Lab Schedule](#)

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**Lab Schedule**

<b>Date</b>	<b>Topics</b>
Aug 20-22	Introduction  IRB training (certification and assessment); Speed Grouping (to make POPS groups)
Aug 27-29	Lab 1: Homeostasis
Aug 28	<b>Last Day to Add</b>  Fill out UPRC participation form in lab



Sept 3-5	Lab 2: Cell Metabolism
OPEN LABS BEGIN Labor Day: Sept 2	POPS ASSIGNMENT DUE (individual): Peer-reviewed articles due
Sept 10-12	Lab 3: Cell Transport
Sept 11	<b>Last Day to Drop Classes with 100 % Refund</b>  POPS ASSIGNMENT DUE: POPS Project Plan and Schedule
Sept 17-19	POPS Project Plan Presentation
START DATA COLLECTION	<b>*IRB training MUST be completed with 100% on quiz before your presentation or you cannot start data collection!</b>  POPS DRAFT CHECK-OFF DUE: Introduction/Citations First Peer Review
Sept 24-26	Lab 4: Nerve Cells and Electrical Signaling  POPS SUBMISSION DUE: Introduction/Citations  POPS DRAFT CHECK-OFF DUE: Materials & Methods
Oct 1-3	Lab 5: Sensory System  POPS SUBMISSION DUE: Materials & Methods  POPS DRAFT CHECK-OFF DUE: Abstract
Oct 8-10	Lab 6: Endocrine System  POPS SUBMISSION DUE: Abstract (without results portion)
Oct 15-17	<b>FALL BREAK</b>
Fall Break: Oct 17-19	<b>(no labs)</b>
Oct 22-24	Lab 7: Muscle Physiology

Oct 22	Last Day to Withdraw (NO REFUNDS)
Oct 29-31	Lab 8: ECG, Blood Pressure, and Blood Characteristics
*You should have 6 weeks of data	POPS DRAFT CHECK-OFF DUE: Results
Nov 5-7	Lab 9: Spirometry and ELISA
	POPS SUBMISSION DUE: Results
	POPS DRAFT CHECK-OFF DUE: Conclusion/Discussion
Nov 12-14	POPS SUBMISSION DUE: Conclusion/Discussion
LAST WEEK OF OPEN LABS	IN LAB: POWERPOINT and/or POSTER Due
	Final Peer Review
Nov 19-21	Thanksgiving Break
Nov 26-28	Lab 10: Urinalysis
	POPS Assignment Due: Paper Submission
Dec 3-5	PowerPoint Presentations
	UPRC Poster Presentations (extra credit)
	Wed Dec 4 or 5: 10-1120; 1-220; 230-350

## Free STEM Tutoring

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STEM Learning provides free tutoring services and textbook checkout to students enrolled in various courses offered by the School of Science, Math, and Engineering.

Tutoring is provided as a drop-in service only, except in certain circumstances.

Please visit <https://www.slcc.edu/stem/tutoring/index.aspx> for more information!

## College Wide Student Learning Outcomes

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SLCC has identified nine essential capacities all students should strengthen, regardless of academic major or career plans, that will serve students in all aspects of life.

- Acquire substantive knowledge in the intended major and throughout General Education
- Communicate effectively
- Develop quantitative literacies necessary for the chosen field of study
- Think critically
- Express themselves creatively
- Develop civic literacy and the capacity to be community-engaged learners who act in mutually beneficial ways with community partners
- Develop the knowledge and skills to work with others in a professional and constructive manner
- Develop information literacy
- Develop computer literacy

## [How to Navigate to Canvas](#)

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## [Institutional Policies](#)

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As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements.

By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

## Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

## Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)

## Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

## Assignment Schedule

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Due Date	Assignment Name	Assignment Type	Points
	<a href="#">Course Questions Discussion Board</a>	Discussion	0
	<a href="#">Introduce Yourself</a>	Discussion	0
	<a href="#">Introduce Yourself</a>	Discussion	0
	<a href="#">Required Makeup Lab Info (ONLY USE IF YOU ATTEND MAKEUP LAB!)</a>	Quiz	0
8/20	<a href="#">Syllabus/Course Quiz - Fall 2024</a>	Quiz	7
8/24	<a href="#">Student Consent Form</a>	Assignment	4
8/27	<a href="#">Pre-lab 1: Homeostasis</a>	Quiz	5
8/27	<a href="#">IRB Training and Certification Quiz</a>	Quiz	5
8/27	<a href="#">Lab 1 Protocol and Formal Assessment</a>	Quiz	13
8/27	<a href="#">Lab 1: Oral Exam</a>	Assignment	12
8/27	<a href="#">Quiz 1: Homeostasis - 2024</a>	Quiz	11
9/3	<a href="#">Pre Lab 2: Cell Metabolism</a>	Quiz	5
9/3	<a href="#">Lab 2 Protocol and Formal Assessment</a>	Quiz	13
9/3	<a href="#">Lab 2: Oral Exam</a>	Assignment	12

<b>Due Date</b>	<b>Assignment Name</b>	<b>Assignment Type</b>	<b>Points</b>
9/3	<a href="#">Quiz 2: Cell Metabolism 2024</a>	Quiz	11
9/10	<a href="#">Pre Lab 3: Cell Transport NEW FALL 2024</a>	Quiz	5
9/10	<a href="#">Lab 3 Protocol and Formal Assessment 2024</a>	Quiz	13
9/10	<a href="#">Lab 3: Oral Exam</a>	Assignment	12
9/10	<a href="#">POPS Project Plan &amp; Schedule Assignment</a>	Assignment	10
9/10	<a href="#">Quiz 3: Cell Transport 2024</a>	Quiz	11
9/17	<a href="#">First Peer Review</a>	Assignment	7
9/17	<a href="#">POPS Plan- PRESENTATION (informal).</a>	Assignment	10
9/24	<a href="#">Introduction + Citations Section</a>	Assignment	35
10/1	<a href="#">Materials &amp; Methods Section</a>	Assignment	25
10/8	<a href="#">Abstract Section</a>	Assignment	15
11/5	<a href="#">Results Section</a>	Assignment	35
11/12	<a href="#">Discussion/Conclusion Section + Final Research Paper</a>	Assignment	50
11/12	<a href="#">Final Peer Review</a>	Assignment	8

<b>Due Date</b>	<b>Assignment Name</b>	<b>Assignment Type</b>	<b>Points</b>
12/3	<a href="#">Final POPS Oral Presentation</a>	Assignment	55