Biology 104: The Human Biology Laboratory
Course Syllabus: Spring 2024
ISC 147

Instructional team:

Section	Section Coordinator	Email	ULI	Email
(01) 8:30 am – 10:20 am	Tom Reho	reho@	Lance Jensen	lej1
(02) 10:30 am - 12:20 pm	Donald Fox	dfox@	Kaitlyn Samsel	kas101
(03) 12:30 pm – 2.20 pm	Donald Fox	dfox@	Katelyn Jacques	kmj9
(04) 2:30 pm – 4:20 pm	Dr Sam Newberry	snewberry@	Hannah Maden	hrm11

Required Materials.

There are no textbooks for the human biology lab. All material should be found in the modules on your sections Brightspace course. You may choose to download and print out materials or keep them on your laptop.

You will be required to sign up and pay for the SimBio: How Diseases Spread lab tutorial. Access to this simulation will need to be purchased directly through SimBio. There are detailed instructions found in the week 1 module of your sections Brightspace course. You will need to have a SimBio account ready to go by April 20th. The instructional team has a limited knowledge of the technology used by SimBio in the delivery of this web tutorial. Questions about the program will have to be addressed directly to SimBio and waiting to sign up may cause you to miss the assignment deadline if you encounter technical issues with the web tutorial.

Laptop Computer

You will be required to have a laptop computer for the human biology lab. We will utilize lab computers this semester to collect data, but you may need to have your laptop present to analyze data or complete lab submissions.

Introduction and Course Structure

It is the goal of this course to have you begin to think like a scientist while supplementing information you are learning in the Human Biology lecture.

Learning outcomes

By the end of this course you should be able to do the following:

1. Have an understanding of the scientific method and the way it is used in a scientific venue and your everyday life.
2. Observe changes in several physiologic parameters and utilize these observations to generate novel questions. Generate experimental designs to answer these novel questions.
3. Run experiments and generate, analyze and interpret data.
4. Present data and conclusions.

Statement on Health and Wellbeing in the COVID-19 era.

COVID-19 has impacted our learning environment in many ways, and it may continue to do so during the spring 2024 semester. It is important that you take care of yourself and those around you. The health and wellbeing of those around us are of the utmost importance and if you are feeling unwell (physically or mentally) and it is impacting your coursework please reach out to the health center or a member of your instructional team.

The instructional team will do its best to keep up to date on emails and grading, but the ongoing presence of COVID has created demands that are not present during an ordinary semester. There may be times where the instructional team may ask for a little patience in dealing with these unforeseen issues and will ask for a little flexibility or patience on your part.

Face-to-Face in person lab

Laboratories are interactive learning environments that have great value in your active participation in the learning process. It is the hope of the instructional team that you will be an active participant in this process. It is important you attend when not ill and students who **miss more than three labs will fail** unless they withdraw and take the lab again the next time it is offered.
Because we want you to be successful and because we value your contribution to the lab, we expect you to prioritize attendance. If you are experiencing symptoms associated with COVID, or similar illness, on a day we have lab, please take a self-test. If you test negative and feel well enough to attend, put on a well-fitting mask, come to lab, and maintain physical distance as much as possible. If your symptoms do not allow you to attend lab, **stay home (except to go to the health center)**, rest, and take care of yourself.

It is expected that you communicate with the Section Coordinator directly about your absences. We will try to support you to keep up with lab if you are out for COVID-related reasons, but we need you to take responsibility for being transparent and clear in letting us know when you are out and why. Although we will work with you on keeping up, you will miss lab content and extended absences will impact your ability to realize your full potential in this lab. When absent you must contact your Section Coordinator to obtain the laboratory data to complete any assignments missed due to your COVID-related absence. You will not be penalized like an unexcused absence on work resulting from a COVID-related absence but will be expected to turn in assignments at their normal due date. If you are unable to turn in an assignment on time due to your symptoms, please be proactive in discussing this with a member of your instructional team.
For extended absences (i.e., more than a couple of days of classes), you should contact the Dean of Students who can assist with reaching out to your faculty. The instructional team will monitor attendance and note when students are nearing the 3-absence threshold and attempt to come up with a solution for a positive outcome.

Face masks and other Behavior in the Laboratory

Face masks are currently not required in all instructional spaces (including lecture halls, classrooms, and laboratories) and all common spaces in the ISC. This policy may change during the course of the academic semester and we will follow the guidelines set forth by the College's Administration.

Instructional Team

The human biology laboratory is a large non-major's class that serves many students during a normal semester. The nature of the class requires the use of an instructional team to function. As seen on the first page of this document the team is led by the laboratory coordinator and individual sections are led by faculty instructors/section coordinators and student Undergraduate Laboratory Instructors.
Laboratory Coordinator: Tom Reho is the laboratory coordinator for Biol 104. The Laboratory coordinator is responsible for overseeing all labs and working closely with the instructional team in the delivery of each week's exercise. The easiest way to contact the Laboratory Coordinator is by email and when contacting him please include your lab section in any correspondences.
Faculty Instructors/Section Coordinator: Faculty Instructors/Section Coordinators are faculty in the Biology Department that oversee specific lab sections. Faculty Instructors are responsible for all decisions relating to their lab section, including grades and any other unforeseen issues/modifications that may manifest themselves during the semester for their lab section. Each Faculty Instructor will hold office hours and inform students the best way to contact them.
Undergraduate Laboratory Instructor (ULI): ULI's are upper-level Biology/Biochemistry or related major students who work closely with the Section Coordinator. The ULI will assist the section coordinator with all facets of the lab and are a great resource in answering questions. There may be times when the ULI will present prelab materials, methodologies and concepts to the lab section.

Lab groups

Each lab section will be split into lab groups of 2, 3 or 4 students depending on enrollment. Students will be randomly assigned a lab group first day of lab. Lab groups do not generally change during the semester.

Laboratory Operations and Grading

There is a mixture of both individual and group learning activities in this lab that determine a student's performance. Individual assignments, group assignments, peer review and participation all play a role in determining a student's final grade.

There are ten different performance categories that will be totaled to determine a student's final point total. Several performance categories consist of more than one assignment. It should be noted that within a performance category the assignments may or may not be weighted equally. Below you will find the performance categories and the total points available for each category.

Performance Category	Points Available
Quizzes	12 points
Capstone Assignments	10 points
Lab submissions	22 points
Homework/Graphing exercises	5 points
Peer Review	5 points
Participation	5 points
Writing Science Assignment	8 points
Data and Methodology Presentation	8 points
Peer Evaluation of Final Presentation	3 points
Final Presentation	22 points

Assignments

Unless arranged differently with your Section Coordinator, all assignments are to be uploaded into your sections Brightspace page. To keep you on track and up to date there will be at least one assignment due every week. Unless noted, assignments are due at the beginning of your lab period. Late assignments will be accepted and graded according to the following penalties.

Days Late	0	1	2	3	4	5	6	7
Penalty	0	5%	9.75%	14.25%	18.5%	22.65%	26.5%	50%
Total % Possible	100%	95%	90.25%	85.75%	81.5%	77.35%	73.5%	50%

Assignments from missed labs: Students who miss a lab due to a documented illness or other Geneseo credit bearing activities will be allowed to get the data from their Section Coordinator and hand in a lab submission without penalty. Students who miss lab due to a reason other than those outlined above may also get the data from their Section Coordinator to complete a lab submission, but this submission will be graded starting at 50% of the original total. Unless arranged with a member of your instructional team, all work due that results from a missed lab will be subject to the late penalties above if not submitted on the original due date. The missed three lab rule still applies for either excused or non-excused labs.

There may several times during the semester when a deadline is imposed for past work. If such a deadline is necessary, you will be notified at least a week ahead of the deadline date so you may complete late work. Once a deadline has passed you will receive a zero for that assignment. It is important to hand in work even if that work is late. Every point is important and any points on a given assignment are better than no points at all.

Please pay attention to the type of file you are to submit as an assignment. Most of the files you will download will be in a word (.docx) format and will require you to submit them as either a word (.docx) or PDF (.pdf) extension. There may also be times when you will be submitting files in a spreadsheet version (.xlsx)

Quizzes

Notes about quizzes:

1. Unless noted, all quizzes will be on line and will open 24 hours prior to the start of your lab and close at the start of your lab.
2. Quizzes are individual efforts and you will not be able to preview questions prior to starting the quiz.
3. Quizzes will be timed
4. Questions are displayed one at a time and must be answered before you move on to the next question. **Once you answer a question you will not be able to return to that question**. Please be careful as you navigate a quiz as you will receive no credit for skipped questions.
5. Quiz answers will be available for review starting at 12 am the Friday following the day the quiz was taken and continue to the following Tuesday at 12 am. You will have this time (4days) to ask for a quiz to be regraded. **After this 4 day period no quiz grades will be changed.**

Peer Review

Since much of the time you will be working in groups, part of your lab grade will be dependent on peer review. We will conduct peer review several times during the semester. Students absent the day peer review is done may complete this review but need to contact their Section Coordinator within a week to do so. Calculation of peer review percentage points for each instance of peer review uses the following rubric: Each member of the group will have 90 points to distribute to the other members of the group. A person may distribute from 0 to 90 points to any one person but may not distribute the same number of points to any of the members of the group. An individual's peer review percentage is calculated from the total number of points given to that person divided by the total number of points an individual may distribute to the members of his or her group.

For Example: In a group of 4 people each person may distribute 90 points
An individual receives 87 points from his/her group members
Calculate 87/90 to get percentage

To get your individual final peer review total you simply average each instance of peer review percentage. This average is then used to calculate your peer review points.

Participation

Your instructors will also assign points to you based on your participation during the semester and this evaluation will be worth 5 points toward your final grade. This evaluation will depend on how you work within the context of the laboratory, how

prepared you are for class and your participation during class periods. You run the risk of losing participation points is you are consistently late for lab.

You are expected to be on time for lab. It is understandable that things come up and that on a rare occasion you may be a little late. Repetitive late arrivals will result in loss of participation points. If you are more than 15 minutes late that will be considered an unexcused absence and all associated penalties will be assessed. If you know you will be arriving late for a particular lab week these penalties may be waived by contacting your Section Coordinator ahead of time.

Final Grades

Grades will be determined by the total percentage of points available. Letter grades will be determined according to the following point distribution.

Grade	Percentage	Grade	Percentage
A	≥ 94%	C+	77-79%
A-	90-93%	C	74-76%
B+	87-89%	C-	70-73%
B	84-86%	D	60-69%
B-	80-83%	E	0-59%

There is rarely an adjustment to final grades. Your grade is independent of your lab partners and the others in your lab section and there is no quota for a particular grade level. Helping others, not cheating, being successful will not affect your grade and usually leads to a student scoring higher. Final grade totals will be rounded to the nearest whole percentage point when final grades are tabulated (83.4% → 83%, 79.52% →80%). Individual assignment grades will not be rounded.

Communication

Check for course announcements daily to look for clarifications and reminders regarding the human biology laboratory. E-mail is usually the quickest way to get in touch with a member of your instructional team. Your Section Coordinator will make every effort to respond to messages sent during the workday by 5pm the same day. However, be aware that the Section Coordinator checks messages in batches 2-3 times/day, so there may not be an immediate response, even during the workday. Emails sent after 5pm will not be answered until the following workday. E-mails sent on the weekend may/may not be answered depending on the Section Coordinators schedule.

Laboratory Conduct

The laboratory setting is an active learning environment where multiple activities may be happening at the same time. The choices you make have an impact on the learning environment and learning experience of your lab mates. Please follow the following rules when participating in the human biology lab.

1. Arrive on time and remain in lab until a member of your instructional team indicates that it is permissible to leave. It is possible that you may be late for lab. The amount of flexibility due to tardiness is dependent on the instructor leading your lab section. If you are more than 15 minutes late for lab that will be considered a missed lab and all associated penalties will be applied. Repeated failure on your part to be on time for lab may result in lost points for participation.
2. You are expected to attend the lab section you have signed up for. It is difficult to alter the number of students attending labs so switching labs is not allowed. If you need to miss or switch a lab for a school related credit bearing activity we will do our best to allow you to attend a different lab but this request for such an accommodation should be well in advance of the missed lab.
3. Use of laptops and other related technology for class related activities such as note taking, running experiments, and viewing class materials is acceptable. Unacceptable classroom technology use would include, but not limited to, checking email, social media web sites and using your phone for non-class related photos.
4. Turn your phone off during lab period. Students should not be checking texts or other social media during lab. If you need to be in contact with someone during lab via your phone let your instructor know otherwise, please turn your phone off for the 110 minutes of your scheduled lab period.
5. Place coats on the hooks to the left of the door and unused books should be placed out of the way.
6. There is **NO EATING** in the lab.

Important College Policies

Student Accommodations

SUNY Geneseo is dedicated to providing an equitable and inclusive educational experience for all students. The Office of Accessibility (OAS) will coordinate reasonable accommodations for persons with disabilities to ensure equal access to academic programs, activities, and services at Geneseo.

Students with approved accommodations may submit a semester request to renew their academic accommodations. Please visit the OAS website for information on the process for requesting academic accommodations.

Questions? Contact the OAS by email, phone, or in-person:

Office of Accessibility Services
Erwin Hall 22
585-245-5112
access@geneseo.edu

Academic integrity

Academic dishonesty includes cheating, knowingly providing false information, plagiarizing and any other form of academic misrepresentation. College policies and procedures regarding academic dishonesty are available at:
www.geneseo.edu/handbook/academic-dishonesty-policy

It is our goal for you to be successful in the human biology laboratory. When problems arise in completing your work, please make an appointment to talk to a member of your instructional team. There are times when it is possible to identify additional options to solve problems that do not appear here. It is up to you to be proactive in this regard.

Lab Schedule and Quiz Dates			
Week Number	Date	Lab Exercise	Quiz
1	1/24	Introduction and Tools Used in Biology	
2	1/31	Hypothesis Testing	Practice Quiz
3	2/7	Calorimetry	Quiz I
4	2/14	Skin Temperature Recovery	Quiz II
5	2/21	Heart Rate and Blood Pressure as Vital Signs	Quiz III
6	2/28	Grip Strength and Muscle Fatigue	Quiz IV
7	3/6	Monitoring the Neural Reflex	Quiz V
8	3/13	Spring Break: No Classes	
9	3/20	Independent Experiment I introduction	Quiz VI
10	3/27	Independent Experiment I work week	
11	4/3	Data and Methods Presentation	
12	4/10	Independent Experiment II introduction	
13	4/17	Independent Experiment II work week	
14	4/24	Great Day: No in person classes Complete SimBio web tutorial	
15	5/1	Peer Reviews of Final Presentation	
16	5/8	Final Presentation	Capstone Quiz Due by 5/9**

*Quizzes open 24 hours prior to your labs start time and close at the start of your lab.
*Quizzes are timed individual efforts. As you go through your quiz be certain of your answer as you will not be able to return to the question once you move forward.

**Capstone Data Analysis and Graph due by May 9th at 11:59 pm

Due Dates for Assignments		
Week Number	Date	Assignment(s) Due
1	1/24	
2	1/31	1. Introduction Survey
3	2/7	1.Lab Submission: Hypothesis Testing 2. Writing Figure Legends Worksheet 3.Tools Exercise-Graph
4	2/14	1. Lab Submission: Calorimetry 2. Frequency Graph and Analysis
5	2/21	1. Lab Submission: Skin Temperature recovery
6	2/28	1. Lab Submission: Heart Rate and Blood Pressure as Vital Signs
7	3/6	1. Lab Submission: Grip Strength and Muscle Fatigue
8	3/13	Spring Break: No Classes
9	3/20	1. Lab Submission: Monitoring the Neural Reflex
10	3/27	1. Writing Science Assignment
11	4/3	1. Data and Methods Presentation
12	4/10	
13	4/17	
14	4/26	1. Lab Submission: SimBio -How Diseases Spread##
15	5/1	1. Presentation must be done for peer review exercise
16	5/8	1. Final Presentation
	5/9	Capstone Data Analysis and Graph**

Unless noted and arranged by a member of your instructional team, all assignments are to be submitted online in your Brightspace page. Be certain to pay attention to the type of file you are submitting as Brightspace has been instructed to only accept certain types of files.

Lab Submission due by Friday April 26th at 11:59 pm

**Capstone Data Analysis and Graph due by May 9th at 11:59 pm