Recent Announcements



Human Biology Lab-first week of classes

(https://canvas.geneseo.edu/courses/29796/discussion_topics/200678)

If you are receiving this announcement, you are currently enrolled in a section ...

Jan 19, 2023, 9:54

on:

Posted

AM

202301-BIOL-104-08: N/Human Biology Laboratory

Jump to Today



Human Biology Laboratory Section 08

Instructional Team

Laboratory Instructor: Dr. Betsy Hutchison

്ടോ: ISC 359

Email: hutchison@geneseo.edu

Office hours: Tues & Thurs 2-3 pm; Wed 12:30-1:30

Course Coordinator: Tom Reho

Office: ISC 113

Email: reho@geneseo.edu (mailto:reho@geneseo.edu)

Phone: (585)245-5632

The following is a synopsis of the syllabus. It is not a complete syllabus and more information can be found by downloading and printing out a copy of the entire syllabus. You can find a copy of the syllabus at this link: https://canvas.geneseo.edu/courses/29796/files/2489661? wrap=1)

Required Material

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

SimBio

You will be required to sign up and pay for the SimBio: How Diseases Spread lab simulation. Access to this simulation has to be purchased directly through SimBio. The cost for this simulation is \$6.00 and you can follow the instructions on how to sign up and pay for this simulation here: <u>SimBio How</u>

<u>Diseases Spread Access (https://canvas.geneseo.edu/courses/29796/pages/simbio-access)</u>.

Laptop Computer

You will be required to have a laptop computer for the human biology lab. You will need to download two programs to your computer to successfully complete the lab. You will need to have at least 1 laptop computer per group (lab bench) to use during the lab.

- 1. You will need to create an account on the SimBio Simutex website to complete a distance learning exercise
- 2. You will need to down load the Logger Pro software from the Verneir Software and Technology so you can run the data acquisition technology used in both the in person and distance learning portions of the lab.

Instructional Team

The human biology laboratory is a large non-major's class that serves over 100 students during a normal semester. The large nature of the class requires the use of an instructional team to function. The team is led by the laboratory coordinator and individual sections are taught by both Faculty Instructors and student Undergraduate Laboratory Instructors.

<u>Laboratory Coordinator</u>: Tom Reho is the laboratory coordinator for Biol 104. The Laboratory coordinator is responsible for overseeing all labs and working closely with the Faculty and Undergraduate Laboratory Instructors in the delivery of each week's exercise. The laboratory coordinator is ultimately responsible for all decisions relating to the laboratory, including grades and any other unforeseen issues/modifications that may manifest themselves during the semester for those sections taught by a ULI. The easiest way to contact the Laboratory Coordinator is by email and when contacting him please include your lab section in any correspondences.

<u>Faculty Instructors</u>: Faculty Instructors are full-time faculty in the Biology Department that oversee lab sections. Faculty Instructors are responsible for all decisions relating to the laboratory, 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.

<u>Undergraduate Laboratory Instructor (ULI)</u>: ULI's are upper level Biology/Biochemistry majors who are responsible for the day to day operation of the lab including pre-exercise introductions, running the lab, answering questions and grading all assignments. Each ULI is required to have office hours to answer questions related to the lab. It is highly recommended you utilize these office hours to answer any questions you may have.

<u>Undergraduate Laboratory Assistant (ULA)</u>: ULA's are secondary instructional personnel in your lab who are usually Biology/Biochemistry majors with an interest in teaching laboratories. These students are a second source of information that you can utilize when the ULI is working with other groups. The ULA is a valuable resource to utilize during the lab period but they can not address any questions or issues dealing with Canvas or grades.

The primary contact in the human biology laboratory should be the ULI assigned to your lab section. This ULI should be your initial contact for all lab related questions. If you are unsatisfied with the ULI's response or answer please reach out to the laboratory coordinator.

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.

Course Goals & Content

The Human Biology Laboratory (Biol 104) may be very different from your previous Biology laboratory courses in that it stresses the scientific process in Biology more than facts and details. The main goal of this lab is help you understanding how problems in biology are addressed so that you can begin to understand how scientists reach their conclusions and make informed decisions in the future.

Through the successful completion of this laboratory you should be able to:

- have an understanding of the scientific method and the way it is used in a scientific venue and your everyday life
- observe changes in several physiologic parameters and utilize these observations to generate novel questions. Generate experimental designs to answer these novel questions.
- · run experiments and generate, analyze and interpret data
- present data and conclusions

The content of the laboratory course will rarely match-up with the material taught in the lecture class. You will be expected to learn some new content that will be introduced in both the lab handouts and the

lab itself. The amount of new material presented will be kept to a minimum but expect the need to learn some material each week.

Statement on Health and Wellbeing in the COVID-19 era

COVID-19 has impacted our learning environment in many ways, and it will continue to do so during the spring 2023 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 pandemic 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 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, either excused or unexcused, will fail** unless they withdraw and take the lab again the next time it is offered.

In the context of public health and the COVID-19 pandemic it is important that we do what we can to protect both yourself and those around you. If you are feeling unwell the day of your lab, please do not attend. It is better to remain at home when not feeling well rather than to attend class and risk spreading illness to others. If you need to miss a lab due to a COVID related requirement please contact both your ULI and the Course Coordinator, preferably prior to the start of your lab. You are allowed to miss a total of three labs prior to being unsuccessful in lab which should allow you to remain at home if feeling ill. 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.

It is important that during our in-person classes we all adhere to some basic processes to help keep each other safe. These processes may be inconvenient but are the latest public health guidance we have.

Be proactive in contacting your instructional team about your absences and be certain you contact the Dean of Students if you expect to be out for an extended period of time.

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.

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 nine 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 be weighted equally or not. Below you will find the performance categories and the total points available for each category.

Performance Categories

| Performance Category | Points Available |
|---------------------------------|------------------|
| Quizzes | 15 Points |
| Capstone Quiz and Data Analysis | 10 Points |
| Lab Submissions | 25 Points |
| Homework/Graphing Exercises | 5 Points |
| Peer Review | 5 Points |
| Participation | 5 Points |
| Writing Science Assignment | 10 Points |
| Final Presentation Peer Review | 3 Points |
| Final Presentation | 22 Points |

Assignments

Unless arranged differently with your ULI, all assignments are to be uploaded into your sections Canvas page. There will be at least one assignment due every week. This is done for two reasons, 1) to keep you on track and 2) to not inundate your ULI with so much grading at one point as to over burden them. Unless noted assignments are due at the beginning of your lab period. Late assignments will be accepted and graded according to the following penalties.

Late 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 % | 100% | 050/ | 00.25% | 0F 7F0/ | 04 50/ | 77.250/ | 72 50/ | E00/ |
|----------|------|------|--------|---------|--------|---------|--------|------|
| Possible | 100% | 95% | 90.25% | 85.75% | 81.5% | 77.35% | 73.5% | 50% |

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 ULI 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 ULI 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 so it is important to hand something in prior to these deadlines because anything is better than a zero.

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. 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 Friday's at 12 am 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 during the semester. Students absent from lab the week peer review is completed may complete this review but they must contact their instructor with in a week

to do so. Do not expect your instructor to contact you to complete this review as it is on you to reach out to do so. More detail on Peer Review can be found in your syllabus

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.

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 Distribution

| Grade | Percentage | Grade | Percentage |
|-------|------------|-------|------------|
| А | ≥94% | C+ | 77-79% |
| A- | 90-93% | С | 74-76% |
| B+ | 87-89% | C- | 70-73% |
| В | 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 $(83.4\% \rightarrow 83\%, 79.52\% \rightarrow 80\%)$. Individual assignment grades will not be rounded.

Important College Policies

Student Accommodations

SUNY Geneseo is dedicated to providing an equitable and inclusive educational experience for all students. The Office of Accessibility will coordinate reasonable accommodations for persons with physical, emotional, or cognitive disabilities to ensure equal access to academic programs, activities, and services at Geneseo. Students with letters of accommodation should submit a letter to each faculty member and discuss their needs at the beginning of each semester. Please contact the Office of Accessibility Services for questions related to access and accommodations.

www.geneseo.edu/accessability-office

Erin Hall 22

(585)245-5112

Note: Students who receive accommodations should give their letters to the course coordinator as early in the semester as possible to discuss individual needs. Delay in handing in the accommodation letter may lead to a delay in implementation and accommodations cannot be implemented retroactively.

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
(http://www.geneseo.edu/handbook/academic-dishonesty-policy)

Exceptions

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

**NOTE: Week of assignment is the Monday of the week. The actual due date is the day of your particular lab.

Lab Schedule and Quiz Dates

| Week Number | Week Starting: | Lab Exercise | Quiz |
|----------------|------------------------------|---|---------------|
| 1 | January 23 rd | Introduction to the lab and Tools Used in Biology | |
| 2 | January 30 th | Hypothesis Testing | Practice Quiz |
| 3 | February 6 th | Calorimetry | Quiz I |
| 4 | February 13 th | Skin Temperature Recovery Lab | Quiz II |
| 5 | February 20 th | Heart Rate and Blood Pressure as Vital Signs | Quiz III |

| 6 | February 27 th | Diversity Summit: No Inperson LabsComplete SimBio On-Line Web Tutorial | Quiz IV### |
|----|------------------------------|--|---------------|
| 7 | March 6 th | Introduction to the EKG | Quiz V |
| 8 | March 13 th | Spring Break- no labs | |
| 9 | March 20 th | Monitoring the Neural Reflex | Quiz VI |
| 10 | March 27 th | Grip Strength and Muscle Fatigue | Quiz VII |
| 11 | April 3 rd | The Dive Reflex | Quiz VIII |
| 12 | April 10 th | Independent Experiment- Introduction | |
| 13 | April 17 th | Independent Experiment - Work Week | |
| 14 | April 24 th | Peer Review of Independent Experiment | |
| 15 | May 1 st | Final Presentations | |
| | By May 11 th | | Capstone Quiz |
| | | | |

Due to the diversity summit, for all lab sections Quiz IV will open February 26^{th} at 12 am and close March 3^{rd} at 11:59 pm.

Due Dates for Assignments

**NOTE: Week of assignment is the Monday of the week. The actual due date is the day of your particular lab except when noted.

Due Dates for Assignments

| Week Number | Week Starting: | Assignment(s) Due |
|----------------|-----------------------------|-------------------|
| 1 | January 23 rd | None |

| 2 | January 30 th | 1. Introduction Survey | |
|----|------------------------------|--|--|
| 3 | February 6 th | 1. Lab Submission: Hypothesis Testing 2. Figure Legend Worksheet 3. Tools Exercise-Graph | |
| 4 | February 13 th | Lab Submission: Calorimetry 2. Cranial Length Graph and Analysis | |
| 5 | February 20 th | Lab Submission: Skin Temperature Recovery | |
| 6 | February 27 th | Lab Submission: Heart Rate and Blood Pressure as Vital Signs | |
| 7 | March 6 th | Lab Submission: SimBio-How Diseases Spread | |
| 8 | March 13 th | Spring Break-nothing due | |
| 9 | March 20 th | 1. Introduction to the EKG | |
| 10 | March 27 th | Lab Submission: Monitoring the Neural Reflex | |
| 11 | April 3 rd | Lab Submission: Grip Strength and Muscle Fatigue | |
| 12 | April 10 th | 1. Lab Submission: The Dive Reflex | |
| 13 | April 17 th | Writing Science Assignment | |
| 14 | April 24 th | | |
| 15 | May 1 st | 1. Final Presentation | |
| | By may 11 th | Capstone Data Analysis-Graph | |

Course Summary:

Date Details Due