



NORTHWEST
MISSOURI STATE UNIVERSITY
MARYVILLE | KANSAS CITY

Department of Natural Sciences

04-103-(01-10), General Biology Lab, and 1 Credit Hour

Spring 2021

Instructor: Kelsey Bowlin

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Office hrs: Monday 9:00-12:00, Wednesday 8:00-12:00.

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****NOTE:** Northwest utilizes the use of Graduate Assistants to teach this course. This means that often times these labs will be taught by someone besides Ms. Bowlin, you will be given specific instructor details (name/email/office hours) the first week of lab as well as on Canvas.

Co-requisites: Must also be enrolled in General Biology 04-102 unless superseding. Students are evaluated separately in lecture and lab.

Textbook and supplementary materials: You must purchase an access code for Hayden-McNeil Lab Simulations from the University Bookstore the first week of class. The cost of the access code from the University Bookstore is around \$46.65. Access can also be purchased directly from the company online when registering for the course.

HAYDEN-MCNEIL LAB SIMULATIONS BIOLOGY 6

REQUIRED | By HAYDEN-MCNEIL

EDITION: N/A

PUBLISHER: MAC HIGHER

ISBN: 9781319412623

Course description: A two-hour laboratory which must be taken concurrently with BIOL 04-102. This laboratory is designed to reinforce material introduced in lecture and to provide students the opportunity to investigate selected materials more deeply and further understanding in those areas. Within the area of scientific inquiry, reasoning and critical thinking skills will be developed.

Student learning outcomes:

1. Communication

- a. Use research effectively in spoken and written texts

2. Critical Thinking

- a. Assimilate, retain, and interpret information
- b. Utilize information to generate reasonable hypotheses and draw educated conclusions.

3. Managing Information

- a. Access and generate information using contemporary technologies
- b. Present information clearly

Assessment methods:

- a. Short Answer Assignments
- b. Ecology Report

- a. Final Grade

- a. Multiple Choice Answer Quizzes
- b. Final Grade

Instructional methods: The software Hayden-McNeil Lab Simulations will provide online access to a virtual biology lab. The assigned experiments will supplement the material learned in 04-102. Each lab will have an introduction to the material, laboratory exercise with detailed step by step instructions, a short answer lab summary, as well as a multiple choice quiz. You may use the Canvas Course site or email to communicate with your instructor over the material. There is also software help and course help offered through Hayden-McNeil Lab Simulations at <https://macmillan.force.com/macmillanlearning/s/>

Graded course requirements:

1. Lab Experiment Short Answer Quizzes – (177 points)

This portion of the grade will be based upon fourteen short answer reports beginning the week of January 18th.

The reports are administered/submitted through the website <https://courses.hayden-mcneil.com/>. The reports cover the material/experiments from each specific lab. There will be a total of fourteen short answer reports. Every week one lab will be assigned to students. The lab will be available to students for one week. They will open on Mondays at 8:00 am and close on Sundays at 11:59 pm. You will only be able to submit your short answer report **once** per lab. At the end of the semester each student's lowest averaging short answer report of the class will be dropped from the final grade. You will have one attempt at each short answer report, but they are not timed. **There will not be a final exam in 04-103.**

2. Lab Experiment Multiple Choice Quizzes – (228 points)

This portion of the grade will be based upon fourteen multiple choice quizzes beginning the week of January 18th. **The quizzes are administered through the website <https://courses.hayden-mcneil.com/>.** The quizzes cover the material/experiments from each specific lab. There will be a total of fourteen quizzes. Every week one lab will be assigned to students. The labs will be available to students for one week. They will open on Mondays at 8:00 am and close on Sundays at 11:59 pm. At the end of the semester each student's lowest averaging multiple choice quiz will be dropped from the final grade. You will have one attempt at each multiple choice quiz, but they are not timed. **There will not be a final exam in 04-103.**

3. Ecology Article – (50 points)

This assignment is due on **May 2nd**. Guidelines will be discussed on the Canvas Course site with instructions and a posted rubric. Five points are removed each day the paper is late (based on the due date in this syllabus). No late papers will be accepted after May 5th.

***The actual article used will be submitted as part of this assignment by either: copying and pasting the article at the bottom of your written portion OR by attaching screen shots of your article to the bottom of your written portion.**

****If a student misses one of the labs, then this will be the lowest multiple choice quiz/short answer quiz dropped. If more than one lab experiment is missed, only one of the missed labs will be dropped. All others will be entered as "0" in the grade book. Final grades will be posted on Northwest Online and will be adjusted as mentioned above. You should expect to spend on average 3 hours per lab (some will take less time and others will take more time).**

Grading Scale: based on % of **455 (approximate)** possible points:

100-89.5% = A

89.499-79.5% = B

79.499-69.5% = C

69.499-59.5% = D

below 59.499% = F

Course outline/major topics studied

Lab week <i>beginning</i>	Lab Exercise	Assignments/Announcements
January 13 th	Enroll in Virtual Labs through Hayden-McNeil	Can purchase access at the bookstore or directly through website
January 18 th	1 – Introduction to Virtual Labs	1 – Short Answer (8 pts) & Quiz (12 pts)
January 25 th	2 – Scientific Method	2 – Short Answer (12 pts) & Quiz (10 pts)
February 1 st	3 – Cell Structure & Function	3 – Short Answer (10 pts) & Quiz (16 pts)
February 8 th	4 – Biological Molecules	4 – Short Answer (15 pts) & Quiz (24 pts)
February 15 th	5 – Cellular Respiration	5 – Short Answer (5 pts) & Quiz (8 pts)
February 22 nd	6 – DNA	6 – Short Answer (11 pts) & Quiz (9 pts)
March 1 st	7 – Mitosis and Meiosis	7– Short Answer (13 pts) & Quiz (15 pts)
March 8 th	8 – Genetics of Corn	8 – Short Answer (13 pts) & Quiz (15 pts)
March 15 th	9 – Mammalian Tissues	9 – Short Answer (27 pts) & Quiz (21 pts)
March 22 nd	10 – Plant Structure & Function	10 – Short Answer (15 pts) & Quiz (23 pts)
March 29 th	11 – Plant Reproduction	11 – Short Answer (19 pts) & Quiz (18 pts)
April 5 th	12 – Photosynthesis	12 – Short Answer (14 pts) & Quiz (24 pts)
April 12 th	13 – Evolution	13 – Short Answer (8 pts) & Quiz (20 pts)
April 19 th	14 – Ecology	14 - Short Answer (7 pts) & Quiz (13 pts)
April 26 th	Ecology Report Due May 2 nd	50 pts -5 pts per day late

Note: Course schedule is subject to change with instructor notification and students will be responsible for abiding by these changes.

****I do NOT round up/give any extra bonus points at the conclusion of the semester. Any extra credit in the course will be announced and available to ALL students. Your final grade will be a product of the points you have earned from those available during course of the semester. Do not email me at the end of the semester asking for a grade bump, grade round up, or any additional assignments or additional extra credit, I will not respond to these requests. Grades are earned and not given.**

Attendance: Students are expected to attend all classes as specified in the course syllabi for each course. It is the responsibility of the student to promptly notify his or her instructor when unable to attend class. Please refer to the university policy on attendance at <https://www.nwmissouri.edu/policies/academics/Attendance.pdf>

****Note:** There are no face to face meeting times for this course. This course will run 100% online and asynchronously.

Administrative drop: An instructor may request the Office of the Registrar delete a student from a course roster if the student has not met the prerequisite for the course as stated in the catalog, or as a result of non-attendance in the course.

Academic Administrative withdrawal: When it is in the best interest of Northwest Missouri State University for a student to withdraw, a student will be given a W, put on administrative hold, and given notice that they are about to be withdrawn. This action will result in removal of all credits associated with courses that have yet to be completed in the semester in question and the student will be administratively withdrawn from the University. An Administrative Withdrawal does not affect the student's grade point average. Please refer to Northwest Missouri State University's Academic Administrative Withdrawal Policy at: <https://www.nwmissouri.edu/policies/academics/Adding-Dropping-Withdrawals.pdf>

University communications: Students are expected to use their Northwest student email account for any electronic correspondence within the university. Students are also strongly advised to check their email and CatPAWS accounts on a regular basis (**a minimum of twice a day**). Please reach out to your specific lab instructor **first** before contacting Ms. Bowlin, the lab coordinator. When sending email, both respect and proper etiquette is required.

- student's full name
- course section number (there are 10 lab sections, so we need to know which one you are in)

****Please note that Ms. Bowlin will answer emails between 8:00 am-5:00 pm Monday through Friday. Emails sent after 5:00 pm may not be answered until the next day and emails after 5:00 pm Friday may not be answered until after 8:00 am Monday.**

Academic integrity policy: The students, faculty, and staff at Northwest endeavor to sustain an environment that values honesty in academic work, that acknowledges the authorized aid provided by and intellectual contributions of others, and that enables equitable student evaluation. Please refer to Northwest Missouri State University's Academic Integrity Policy at <http://www.nwmissouri.edu/policies/academics/Academic-Integrity.pdf>

****See General Biology Lab's detailed policy below in the Academic Integrity Memorandum.**

Learning or Living Accommodations Request Process: Northwest Missouri State University complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 [ADA] and the ADA Amendments Act of 2008 [ADAAA]. If a student has a documented disability that qualifies under the ADA/ADAAA and requests accommodations, they should review the Accessibility and Accommodations webpage at <https://www.nwmissouri.edu/titleixequity/accessibility/index.htm> for guidance, including the accommodations application and supporting documentation requirements. Contact ada@nwmissouri.edu or 660.562.1873 for further assistance. For the university policy on disability accommodation refer to <http://www.nwmissouri.edu/policies/student/Disability-Accommodation.pdf>

Non-discrimination and anti-harassment policy: Northwest Missouri State University is committed to maintaining an environment for all faculty, staff, students, and third parties that is free of illegal discrimination and harassment. Please refer to the Non-Discrimination and Anti-Harassment Policy at <http://www.nwmissouri.edu/diversity/titlevi.htm>

Family Educational Rights and Privacy Act (FERPA) policy: Family Educational Rights and Privacy Act of 1974, as amended (commonly known as the Buckley Amendment), is a federal law which provides that colleges and universities will maintain the confidentiality of student education records. Please refer to the Family Educational Rights and Privacy Act (FERPA) Policy at <http://www.nwmissouri.edu/policies/academics/Family-Educational-Rights-and-Privacy-Act.pdf>

COVID-19 Classroom Mitigation: Northwest is committed to the health and safety of the University community and has therefore adopted COVID-19 mitigation policies. Every student must wear a face covering (such as a cloth facemask, bandana, scarf, neck gaiter, or medical mask) over their nose and mouth at all times in all academic building spaces, including classrooms (unless directed not to by the instructor), offices, hallways, and restrooms. Face shields may be worn in addition to, but not in place of, a face covering. Students without face coverings will not be allowed in the classroom until they comply with expectations. Students must also follow directions regarding entries, exits and furniture, and maintain at least 6 feet of social distancing whenever possible. Northwest further asks all students to practice good hygiene and not enter academic buildings or attend face-to-face classes when they feel sick or have been instructed to quarantine/isolate; students who miss class should communicate with their instructors. Students who do not comply with these requirements will be subject to standard disciplinary procedures according to the Northwest Student Code of Conduct (i.e. verbal and written warnings followed by a hearing, if necessary). We thank you for doing your part to maintain our learning environment and to protect the health of fellow Bearcats.

Change in Course Delivery:

It is our goal as a University to continue all courses as planned on campus. However, due to unforeseeable impacts of COVID-19, faculty and students must be prepared to move all courses to a remote/online learning format anytime during the semester, either permanently or for a short term. The type of format (synchronous or asynchronous) will be at the discretion of each faculty member. The University and faculty will communicate with students in the event such action is deemed necessary to preserve the health and safety of students and employees.

Disclaimer: Course schedule is subject to change and you will be responsible for abiding by any such changes. Your instructor will notify you of any changes.

Academic Integrity Memorandum

Every enrolled student is required to complete all credit earning assignments (quizzes/short answer reports/ecology report) independently of any and all other students, past or present. If assistance is needed students will seek out aid from the Laboratory Coordinator, the instructor of the course or any of the General Biology Lab graduate assistants. The faculty and staff of the library is also a source that may be used for aid.

Students ARE allowed to complete the virtual labs together as a group. Students are NOT allowed to complete the quizzes, short answer reports, or ecology reports together.

So as to be clear as to what constitutes working independently, enrolled students are not, under any circumstances, to...

Work together to complete any assignment; this includes sitting together while working on a report, discussing how one another is completing a report or simultaneously sharing a common reference document.

Assist another student in completing their assignments or ask for assistance from another student.

Ask to see another student's work or allow another student to see your work. This includes how tables and plots are formatted and how a report is structured

Use direct quotes within any of your assignments. Copying and pasting from the internet into short answer reports is not allowed. Everything must be written in your own words.

Short answer reports and questions should be completed by each student, copying answers from another student's report is also considered a violation of academic integrity.

There are NO exceptions to the items above.

Each student will submit their written assignments to turnitin through the Canvas course site and failure to do so by the due dates assigned will result in earning zero points on the assignment. Each student's paper will be compared to each and every other student's paper, past and present, and **any** incidences of overlap in content, be it a paragraph or uncommon, uniquely constructed sentence, will be interpreted as a violation of the University's policy towards not "obtaining and giving unauthorized aid and information" in addition to being considered an act of plagiarism. Should this occur, all collaborating students will receive a zero on the assignment in addition to being formally charged in violation of academic integrity.

There is never an acceptable circumstance in which collaboration, however superficial, towards completing laboratory assignments and reports is acceptable once data in the laboratory has been obtained. Ignorance of the course policy does not constitute a justification for committing acts considered to be academically dishonest.