



U200-115L: Human Biology Lab

Course Format: Online

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Course credits: 1

Pre/Corequisites: Concurrent enrollment in or completion of U200-115 Human Biology with a C or better or the equivalent recommended; Appropriate for advanced high school and first-year or higher college students.

Course Description: This course investigates the structure and function of the human body as related to areas of health and disease. You will study the: chemistry of life, organization and regulation, cardiovascular, nervous, reproductive, immune, respiratory, digestive, and lymphatic systems; infectious diseases and epidemiology, human evolution, ecology, human interactions with ecology, and population dynamics through labs.

Required Course Materials

Textbook

- Mader, S. & Windelspecht, M. (14th Ed.). (2016). *Human Biology (WCB General Biology)*. New York, NY: McGraw-Hill Education. ISBN-13: 978-1259245749

Hardware

- For some assignments, you will need to upload a scanned document of completed work. If you do not have access to a scanner, you can take a picture, and upload the picture in place of a scanned document.

Lab Materials

- A list of materials required for each lab will be provided to you. The labs have been designed so that you can use house-hold items that are already located around your house, and can be performed with as little of cost as possible. You can expect to spend around \$100 if you needed to buy all materials on this list.

Course Learning Objectives

- Perform at home and virtual laboratory experiments.
- Collect data using the appropriate scientific standards and units.
- Draw conclusions from experimental data.

Course Overview

MODULE #	MODULE TOPIC	EVALUATED ACTIVITIES
Unit 1: Atoms to Organ Systems		
1	The Scientific Method	<ul style="list-style-type: none"> • Syllabus Quiz • Scientific Method Lab
2	DNA Extraction and Enzymes	<ul style="list-style-type: none"> • DNA Extraction and Enzymes Lab
3	Osmosis and Cellular Respiration	<ul style="list-style-type: none"> • Osmosis and Cellular Respiration Lab
4	Integumentary System	<ul style="list-style-type: none"> • Integumentary System Lab
Unit 2: Blood, Lymph, and Pathogens		



5	Cardiovascular System: Heart and Blood Vessels	<ul style="list-style-type: none">• Heart Anatomy and Physiology Lab• Heart Anatomy and Physiology Lab Lab Report
6	Blood Typing	<ul style="list-style-type: none">• Blood Typing Lab
7	The Immune System	<ul style="list-style-type: none">• Immune System Lab
8	Disease and Epidemiology	<ul style="list-style-type: none">• Disease Detective Lab
Unit 3: Eat, Breathe, Reproduce, and Control		
9	Digestion and Nutrition	<ul style="list-style-type: none">• Digestion and Nutrition Lab
10	Respiratory System	<ul style="list-style-type: none">• Respiratory System Lab
11	Nervous System	<ul style="list-style-type: none">• Nervous System Lab• Nervous System Lab Report
12	Frog Dissection	<ul style="list-style-type: none">• Frog Dissection Lab
Unit 4: Humans and the Environment		
13	Natural Selection	<ul style="list-style-type: none">• Phylogenies and Natural Selection Lab
14	Ecology and Ecosystems	<ul style="list-style-type: none">• Ecosystem Lab
15	Population Dynamics	<ul style="list-style-type: none">• Population Dynamics Lab

Evaluation Methods

Your final grade will be based on your performance on the following:

1. Syllabus Quiz = 10 points
 2. Module Labs (15 total) = 461 points
 3. Module Lab Reports (2 total) = 50 points
- Total = 521 points**

Syllabus Quiz

This short quiz will be required to ensure that you begin the course with a solid grasp of course management and operations, along with what is expected of you.

Module Labs

There are a total of fifteen labs in the course, one for each module. The type of lab will vary, depending on module content material. Some you will complete in-person, and others will require the use of a virtual lab. Points will vary from 20 to 50 points, based on the activities required in the lab.

Module Lab Reports

As a lab course, you will be expected you demonstrate the skill of writing a lab report. The first module will help you learn how to draft a lab report. In later modules, you will be expected to create your own experiment, and write a full lab report. These are worth 25 points apiece. **Note:** Lab reports will be submitted to a separate dropbox folder from the lab folder. These will be located in the Lab Reports section of the dropbox.



Grading Scale

The following grading scale is used to evaluate all course requirements and determine your final grade:

A = 93–100	B = 83–87.9	C = 70–77.9	D = 60–69.9
AB = 88–92.9	BC = 78–82.9		F = Below 60

Pass/Fail Option

Students who enroll in an Independent Learning (IL) course under the pass/fail option will receive a final grade of S in place of a final grade equivalent to an A, AB, B, BC, or C and a final grade of U in place of a final grade equivalent to a D or F.

Program Policies and Statements

Course Faculty Statement: The IL program enlists qualified UW faculty to develop and facilitate IL courses within their content area of expertise. There are two categories of IL faculty: Course Authors lead course development, and Course Facilitators support students enrolled in IL courses. Similar to course instructors, Course Facilitators evaluate and provide feedback on submitted coursework and respond to student inquiries regarding course content or evaluation.

Please note that, while typically occurring during summer months, Course Facilitator transitions can occur at any time even when students are in the process of completing an IL course. Students will be notified of any Course Facilitator changes via email and communication embedded in their online course. Our goal is to make Course Facilitator transitions as smooth as possible to avoid disrupting students in the process of completing a course.

Evaluation of Student Work Statement: Course Facilitators are committed to providing students with timely feedback of submitted work. Students should expect to receive feedback within 3 business days, exclusive of holidays. For example, if a student submits an assignment on Thursday, that student should expect to receive feedback on the assignment from a Course Facilitator by midnight on Tuesday of the following week. On occasion, a Course Facilitator may experience higher-than-usual volumes of submitted work from students enrolled in the course and may need additional time for evaluation. Course Facilitators will notify students of any anticipated delays via email and communication embedded in their online course. Students should reach out to our Student Services team at il@uwex.edu with any concerns regarding the timeliness of Course Facilitator feedback.

Student Work Submission Policy: Students are strongly encouraged to wait for Course Facilitator feedback on submitted work before proceeding in the course to ensure that their work aligns with expectations and to allow time for revisions, if needed. We therefore discourage students from submitting multiple items for feedback at once. Students who submit multiple items in the same day can expect to receive feedback on the first submission within 3 business days, exclusive of holidays. Remaining work will be evaluated in order of submission with an adjusted timeline. For example, if a student submits 3 written assignments on Tuesday, the student should expect to receive feedback on the first assignment on or before midnight on Friday, on the second assignment 3 business days after that, and on the third assignment 3 business days after that. Please note that opportunities for revision are at the discretion of the Course Facilitator.



Grade Appeals Policy: Students who wish to appeal an assignment, quiz, exam, or any other grade should follow the IL grade appeals policy:

1. Email a written statement, outlining your appeal and addressed to your Course Facilitator who assigned the grade, to our Student Services team at il@uwex.edu. If a disputed grade is the result of a clerical or computational error, the Program Manager of IL at UW-Extension may adjust the grade under appeal after consultation with the Academic Coordinator of the department responsible for facilitating your course. If the appeal falls outside of clerical or computational error, your Course Facilitator will respond to your appeal in writing (attached to an email) within 3 business days, exclusive of holidays.
2. If you are not satisfied with your Course Facilitator's response to your appeal, you may email a written statement of appeal to the Program Manager of IL at UW-Extension at il@uwex.edu. The Program Manager will refer the matter to a hearing committee, appointed by UW-Extension's Dean of Continuing Education, Outreach and E-Learning, as well as the academic dean of the UW institution having major responsibility for the IL course in question.
3. The hearing committee will request relevant information from the Course Facilitator in response to your appeal, including the grading criteria used. The hearing committee will then forward its decision, which will be final, to UW-Extension's Dean of Continuing Education, Outreach and E-Learning (or designee), who will share the decision with the Program Manager of IL and the Academic Coordinator of the department responsible for facilitation of your course. The Program Manager of IL will notify you of the final decision.

Course Pacing Statement: All IL courses offered by UW-Extension follow an asynchronous, self-paced model that affords students flexibility to enroll in courses at any time outside of traditional academic calendars and set their own learning schedule upon enrollment. Students have 12 months* from their course registration processing date to complete their course, with an option to extend in 3-month intervals up to a total of 18 months with approval and associated fees.

**Concurrently enrolled high school students who are taking an IL course to both meet a high school requirement and gain college credit or who are enrolled through Wisconsin's Youth Options program have a set deadline for course completion (typically 3 months).*

Course Pacing Recommendations: This course includes a pacing guide to support course completion within 3 months. Similar to a traditional on-campus course, each credit hour of an IL course correlates with class hours. Students are expected to put in 2 to 3 hours of work on the course per week for every class hour. For example, a 3-credit IL course would correspond to 9 to 12 hours per week over a 3-month period (3 hours of class time plus 6 to 9 hours of additional study time per week). Similarly, a 4-credit IL course would correspond to 12 to 16 hours per week over a 3-month period (4 hours of class time plus 8 to 12 hours of additional study time per week). Students aiming to complete this course at a slower pace can adjust the pacing guide accordingly (e.g., adjusting the weekly effort from 9 hours per week to 6 hours per week). Students aiming to complete this course at a quicker pace than the minimum course pace listed below must seek prior approval by submitting a written request to our Student Services team at il@uwex.edu. The Student Services team will collaborate with your Course Facilitator and respond to you within 3 business days with an approval or denial of your request, including next steps for you to follow.

- Minimum Course Pace: 6 Weeks
- Maximum Course Pace: 18 months (includes two approved extensions and associated fees)



Course Sequence Policy: The Course Author(s) strategically designed this course to maximize student learning in alignment with course objectives. As such, students are strongly encouraged to proceed through the course and complete all requirements following the sequence in which they are presented. Course Facilitators will evaluate only those course requirements completed and submitted by the student.



Any skipped course requirement will earn a point value of 0 unless the student secures pre-approval from the Course Facilitator to complete the course requirement out of sequence.

For example, if a student skips a required course assignment from Module 4 and moves on to submit the next required course assignment from Module 5, the student earns a grade on the Module 5 assignment and earns a 0 on the Module 4 assignment.

Final Grade Policy: Students may request and, upon approval, pay for extensions in 3-month intervals up to a total of 18 months from their original date of registration to secure additional time to complete outstanding course requirements. When an extension is granted, Course Facilitators will calculate final grades for these students upon expiration of the 15- or 18-month window or upon completion of the course, whichever happens first.



All students who enroll in an IL course and who do *not* submit a formal request for withdrawal or transfer to another IL course during their initial 12-month period after registration will earn a final course grade based on all submitted course requirements. The process for submitting the formal request is located on the [Policies](#) page of the IL website.

Accessibility Statement: Students with documented disabilities have the right to request information and necessary accommodations from the University as stipulated in Section 504 of the Rehabilitation Act and in the Americans with Disabilities Act. Students interested in requesting academic accommodations must contact our Student Services team at il@uwex.edu or 1-877-UW-LEARN (895-3276) to begin the application process. Please be advised that the eligibility determination process and, upon approval, implementation of accommodations could take several weeks. It is important for students to be proactive and initiate the process early in order to ensure that accommodations are in place by the time they will be needed.

Academic Integrity Statement: Academic integrity is critical to the mission of the UW-Extension and the IL program. Students are expected to be independently familiar with [University of Wisconsin System's Student Academic Disciplinary Procedures](#) and to recognize that their work in the course is to be their own original work that truthfully represents the time and effort applied. Violations are most serious and will be handled in a manner that fully represents the extent of the law and that suits the seriousness of its violation.