

BIOL 175 – Dual Credit Human Biology 1



Course Syllabus

Instructor Information

Name: Michelle Carlson

Email: mcarlson@northidahostem.org

Phone: 208-687-8002

Class Location: STEM Projects Building, Room 34

Instructor Access

You can see me when I am not on duty either before school from 7 – 7:45 a.m. or during recess 10-10:15 p.m. Lunch or after school appointments can be made with me on a limited basis. Please be sure to email me so we are both reminded of those appointment times. You may also see me during study hall in 7th period.

Course Description

1 semester (Spring)

2 credits, 4 college credits

Grade 10-12

Form and function of life using the human organism as the specific example. Topics will include: life, evolution, the human organism in the environment, human ecology, human systems including organization, support and movement, processing and transport, integration and coordination, and reproduction and development. Two hours of lecture and Two hours of laboratories per week. Pre-requisites: Completion of Human Biology with a 75% or better in both lecture and laboratory activities as well as completion of Integrated Math II with a grade of 'B' or better, or Administrator Approval.

Registration for college credit will take place in the spring semester. This dual credit course is offered by Lewis-Clark State College (LCSC).

Curricular Information

Required Reading: Anatomy and Physiology, 2e by Betts, et. al. OpenStax, 2022
(if you would like a physical textbook, you can order one printed from Amazon – online textbook version will be provided via website and google classroom)

Additional Resources: Lab manuals and materials will be provided for the students in class or on google classroom

Recommended Resource: Anatomy and Physiology Coloring Book by Anatomy Academy
https://www.amazon.com/Anatomy-Physiology-Coloring-Book-Incredibly/dp/1914207041?ref_=a_st_author_dp

Standards: The following link will take you to the Idaho State Standards for this course: [Idaho Content Standards for Science](#). Out of those standards, this course will cover the following standards:

HS-LS-1.1, HS-LS-1.2, HS-LS-1.3, HS-LS-1.4, HS-LS-1.7

Supplies Required for this Course:

Colored pencils, blue pen

Graph paper

3 ring binder

Gloves (optional paper masks)

Highlighters

Divider tabs

Daily Time and Effort Expectations:

The most common problems that students have is understanding that daily preparation and study are the key to success. Studying for classes involves more than just “cramming the night before a test.” Chapter reviews are provided at the end of each chapter and study resources are also posted on Google classroom for each section of material that we study.

One should expect a **minimum** of 4 hours of outside study per week on this course. Exams and quizzes require additional preparation times above and beyond that minimum.

Suggestions for Success:

The following are suggestions to help you to maintain or improve your grade in Anatomy and Physiology.

1. Show up on time to class EVERY DAY. Tardies and absences contribute to lost learning experiences that cannot be recovered just by making up assignments.
2. Study hard and work well with others. Expect to read or study a minimum of 45 minutes outside of class, 3 days a week.
3. Keep up from the get go. It is nearly impossible to get out of a hole later on.
4. Prepare to participate in class before class begins by reading over your notes you have previously written and read the sections of your text that will be covered PRIOR to the day’s scheduled lecture or activity.
5. Create and use a vocabulary list consistently as you work through each section.
6. Keep your handouts, lecture notes, and study questions organized in a notebook.
7. Always read the assigned material and outline all the main ideas for each section.
8. Study frequently and consistently in small doses. Cramming does not foster long-term understanding that will stick with you.
9. Set up a study group and study with friends.
10. Closely study figures, sidebars, and diagrams from lecture and from your text.
11. If you are having trouble with the material, get help early. Do not wait until test day.
12. Dissection is critical to the understanding of anatomy and physiology. Be prepared to engage fully on dissection days – you cannot succeed in this class without active participation (everybody cuts). Dissection labs cannot be made up.

Google Classroom:

Google classroom will be used primarily as a resource. There may be a few assignments completed online, but most work will be done on paper. A printable calendar will be provided for every unit. Please feel free to print it out to review due dates and upcoming tests and quizzes.

Notebook Checks:

Keeping an organized notebook is vital to understanding the processes and structures that we study in this course. As such, a notebook will be required and evaluated as a part of this course. Please refer to the following items regarding how your notebook will be evaluated.

Human Anatomy and Physiology Notebook Requirements and Grading Rubric

Purpose: To help students be successful and stay organized in human anatomy and physiology by having all notes and handouts, available for reference and study.

- ☛ The final exam is comprehensive, so it is important that you keep everything in your notebook in order to do well on these final exams.
- ☛ A maximum of 220 points will be awarded for a complete and neat notebook.
- ☛ The notebooks will be graded each semester according to the following criteria.

1. ____ (20 points) 3 ring binder that is kept undamaged and is dedicated to human anatomy and physiology. Name, Period, Teacher, is written on the front cover.
2. ____ (100 points) Notebook contains all handouts and class notes that are bound fully in the notebook. Any loose pages have been repaired and placed in the notebook firmly to ensure no slippage.
3. ____ (20 points) Notebook has a complete table of contents with titles, dates, and page numbers. Each unit should be separated with dividers or tabs.
4. ____ (30 points) You have developed clear and effective note-taking strategies, including summaries and drawings for your chosen notetaking method.
5. ____ (50 points) Overall visible effort and commitment made to the notebook. It must be complete, neat, and organized because this is a learner's tool!

Total = _____/220

A = 198-220 B = 176-197 C = 154-175 D = 132-153

Course Schedule:

Unit	# of Weeks	Topics	Chapters	Labs/Activities
<i>Unit 1 - Cells and Chemistry</i>	4.5	<i>Introduction to Anatomy & Physiology Chemistry Cells, DNA and Cell Life Cycles Protein Synthesis and General Histology</i>	1-4	<i>DaVinci's Vitruvian Man Heart Rate and Homeostasis Diffusion and Osmosis Concepts Observing Human Cells Biological Molecules in Humans Energy and Metabolism</i>
<i>Unit 2 – Structural Systems</i>	2.5	<i>Integumentary System The Skeleton and its Articulations Muscles and Sliding Filament Theory</i>	5-11	<i>Banana Surgery and Suturing Practice Joint Movements in Dance Project Skeletal System Stations Muscle Fatigue</i>
<i>Unit 3 – Communication Systems</i>	2.5	<i>Nervous System Peripheral Nervous System Autonomic Nervous System Endocrine System</i>	12-17	<i>Cranial Nerves Sheep Brain Dissection</i>
<i>Unit 4 – Transportation Systems</i>	2.5	<i>Blood Cardiovascular Systems Lymphatic and Immune Systems Respiratory System</i>	18-22	<i>Blood Pressure and Pulse Determination General Immunology and Vaccination</i>
<i>Unit 5 – Processing and Duplication Systems</i>	3	<i>Urinary System Digestive System General Nutrition Reproductive System</i>	23-28	<i>Urinalysis The Digestive System Meiosis and Trait Inheritance</i>
<i>Unit 6 – Evolution and Impact</i>	2	<i>Principles of Evolution for Humans Human Impact on Ecosystems</i>		<i>Scientific Principles of Evolution as They Pertain to Humans Analysis of Human Impact on Ecosystems</i>

Course Evaluation:

The percentage breakdown for semester grade calculation will be as follows:

Classwork **55%**

This can include practice sheets, case studies, diagrams, laboratories, and articles.

Laboratories **25%**

This will include weekly quizzes, exams, and lab practical exams.

Final Exam or Project **20%**

Grading Scale

Grade	Percentage	Proficiency descriptors
A+	97-100	<i>Assignments are fully completed in a timely manner and of excellent quality; the student shows superior level of initiative and seeks to <u>go beyond the minimum requirements</u>. Errors are rare or nonexistent.</i>
A	93-96	
A-	90-92	
B+	87-89	<i>Assignments are fully completed in a timely manner and typically of above average quality; the student is conscientious and meets all requirements with few errors.</i>
B	83-86	
B-	80-82	
C+	77-79	<i>Assignments are generally complete (met minimum requirements) and of good quality; assigned tasks have occasional errors.</i>
C	73-76	
C-	70-72	
D+	67-69	<i>Assignments are generally incomplete or of poor quality; the student makes frequent errors in work.</i>
D	63-66	
D-	60-62	
F	0-59	<i>Work is poorly done, if at all. Overall performance is inadequate to pass the course.</i> <i>Note: No name = No credit</i> <i>Illegible = No credit</i> <i>Late = No credit (*will <u>STILL</u> complete and submit the assignment)</i>

Classroom Policies and Expectations:

Students are expected to adhere to the classroom rules set by the teacher in their assigned classroom, and in accordance with expectations found in the [Student Handbook](#) and [Technology Policy](#).

In addition, students are expected to adhere to the college's policies on attendance in a lab-based class.

- Missed labs will be given a zero regardless of excused/unexcused status of the absence.
- Assignments missed due to an excused absence are expected on the day of the student's return, not the traditional STEM policy of one day per day. Late assignments past that day are assessed a 10% late penalty per day up to 4 days late (calendar, not class days). After 4 days, they will be assessed a zero.
- Missed tests or quizzes are assessed a 15% late penalty.

Academic Honesty Code of Conduct:

“On my honor, I will maintain the highest possible standards of honesty, integrity, and personal responsibility. This means I will not lie, cheat, or steal, and as a member of this academic community, I am committed to creating an environment of respect and mutual trust.”

Violations of this code include, but are not limited to:

- Copying another person’s work or allowing your work to be copied (plagiarism)
- Allowing someone other than yourself to complete work in your name
- Using unauthorized assistance on an assessment or assignment
- Falsifying or manipulating data
- Submitting the same work for multiple courses without instructor’s permission
- Giving answers to other students
- Lying to an instructor
- Tampering with or destroying the work of another student
- Using responses found on the internet, or created with the use of technological means (ex artificial intelligence, etc)

*****Any outside sources used on an assignment should be referenced and cited appropriately.*****

Consequences for Academic Dishonesty:

At the instructor’s discretion, the student **will** lose partial or full credit for the assignment. The student will be on notice that the incident will be recorded in the gradebook and his/her parent(s) will be informed. Future academic dishonesty incidents will result in a grade of zero for the assignment, a meeting with the principal, and possible loss of credit, suspension, or expulsion. Direct copying is plagiarism. Only original work may be submitted for this (and any other) academic course. If you have any questions about avoiding plagiarism, please visit the [OWL at Purdue's "Avoiding Plagiarism" web page.](#)