

Course: BIO 103 Title: General Biology: Introduction to Human Anatomy and Physiology (4 credit hours)			
Term: 2023-24	Period: 6 and 7	Reynolds High School	
Instructor: Eric Wergeland	Office Phone: 503-667-3186 x1150	E-mail: ewergeland@rsd7.net	

Text and Materials:

- Anatomy & Physiology Online OpenStax 2e https://openstax.org/details/books/anatomy-and-physiology
- Essentials of Human Anatomy and Physiology by Elaine Marieb

Course Description: Biology 103 introduces the student to basic anatomy and physiology of animals with an emphasis on humans. Emphasis is placed on organs, organ systems, and how they function. The course is focused at non-science majors who have likely never experienced the scientific method. It is the sincere hope that some individuals will pursue further courses in biology. This introductory course can also serve as a prep class prior to taking more advanced A&P courses offered at Oregon Tech.

Course Outcomes:

- Identify the structure and function of the major organs and organ systems in humans.
- Cover the following organ systems at both macroscopic and microscopic levels: introduction (anatomical terms, homeostasis and organization of the body); circulation; respiration; nutrition and digestion; osmoregulation and nitrogenous waste disposal; hormones; nervous system; special senses; structural support; and reproduction.
- Identify basic human anatomy on human models, and possibly some structures on human cadavers.
- Develop a fundamental understanding of A&P and learn to apply the knowledge to the fields of medicine, health care and other related subjects.

Catalog Description:

Basic human anatomy and physiology, including a survey of all major bodily systems. (Cannot be used for graduation credit for students who have taken BIO 231, BIO 232, and BIO 233).

Dual Credit

Students have the ability to enroll in dual credit for this Anatomy and Physiology course. Electing to sign up for dual credit means you will transcript college credit for the course. Students must be aware that you must proceed through enrollment with Oregon tech in order to receive the dual credit. Students can learn more about this opportunity by visiting: www.oit.edu/dual-credit

Students may request college transcripts upon completion of this course through Oregon tech by visiting:https://www.oit.edu/registrar/student-records/transcript-request

Teaching Methods and Expectations:

Biology 103 will incorporate coordinated lectures and laboratories. Students are expected to participate in group discussions during the lecture and laboratory sessions. They are expected to attend all lectures and a laboratory session each week. In the laboratory, students will work individually or in small groups to complete observations.



Course Syllabus

Daily attendance and being on time to class is critical. If you are absent, it is your responsibility to make up missing assignments and attain the notes you missed. You will have as many days as you missed to make up the assignments.

Once lecture starts please refrain from ongoing conversations with your fellow students. Having multiple conversations going on in the class makes it very difficult for other students to hear.

Please turn off cell phones during class. Thank you for your courtesy in this!

Students are expected to engage with the teacher and other students in this class in a respectful and civil manner at all times to promote a classroom environment that is conducive to teaching and learning. Students who engage in disruptive behavior will be warned, and if the behavior continues, removed from the classroom.

READINGS/ASSIGNMENTS: The material covered in this class will be based on the assigned chapters. Students are expected and required to complete the readings in the time frame presented. This course is reading intensive. This is a highly interactive class requiring a high level of student discussion – quality discussion of the topics will not occur if students do not keep up with the readings.

Student Academic Integrity Statement:

Students are expected to demonstrate their knowledge with honesty and integrity. Oregon Tech considers academic dishonesty to be an unacceptable practice. Academic dishonesty (cheating) is defined as, but not limited to: obtaining or providing unauthorized information during examination through verbal, visual, or unauthorized use of books, notes, and/or other materials. The complete Oregon Tech Student Academic Integrity Policy is available on the Oregon Tech web site: Https://www.oit.edu/campus-life/studentaffairs/student-resources/student-academic-integrity

Americans and Disabilities Act (ADA/Section 504):

Students with documented disabilities should work with their high school instructor to discuss accommodations. It is Oregon Tech's policy to provide individualized accommodations to students with documented disabilities in order to help them meet their academic potential, and to ensure course activities and requirements are accessible to all. Dual credit students with disabilities are encouraged to follow high school protocol when accessing services and/or connect with your instructor to discuss individual needs for accommodation.

Grading Policy:

- 1. Evaluation of student progress and achievement will be done by lecture and lab quizzes and exams, and lab reports. Testing will be done on a regular basis to give you feedback on your grasp of the material covered in lecture and lab.
- 2. Lecture examinations will consist of any combination of short answer, multiple choice, matching, and essay questions. Lab exams will consist of fill-in-the-blank. Due to variable terms used to describe human anatomical features, answers must EXACTLY match the list in the lab notes and resources.
- 3. Please feel free to email or discuss with me any time you are having difficulty with the material or even if you just want to discuss an idea or concept that was presented in class!
- 4. Students are responsible for all material presented during lecture, even if they do not attend class.



Classwork and Homework (Formative Assessments): Students will have the opportunity to earn completion points and credit for various practice assignments. These are for the sole purpose of helping students memorize and further develop connections between curriculum throughout the unit. Late-work will be docked 20% and will not be accepted two weeks past the unit test. Turning work in On time is essential to success in this class.

Lab Reports/Case Studies (Formative Assessments): Throughout this course, we will be doing various lab investigations, dissections, or case studies in which each student is responsible to turn in a summative lab report or case study summary.

Exams/Quizzes/Final (Summative Assessments):

- Quizzes may be given through unit to help students stay on top of material and provide an opportunity for assessment of learning. There will be no make-up of quizzes, however, students will be allowed to drop their lowest quiz score.
- Unit tests are an opportunity for students to demonstrate their learning at various points throughout the school year. If you know ahead of time that it is <u>unavoidable</u> that you will miss a unit test, arrange to take it **before** it is given to the class. Any missed unit test will score 0 points and the makeup test must be completed within one week of the exam date. There are **no retakes** on unit tests.
- All students will take a cumulative midterm and final at the end of each semester. There is no retake or make up for these exams.

Grading Scale: Your final grade will be based on your cumulative percentage. Students are advised to keep track of their points. Students can meet with their instructor to discuss individual standing. Final Grades are based on the following percentage breakdown:

Points Breakdown	Grade Scale	
20% Classwork and homework	90%-100% A	
20% Labs, dissections & case studies	80%-89% B	
60% Unit tests, quizzes, midterm, and final exam	70%-79% C	
	60%-69% D	
	Below 60% F	

- For RHS, you will earn separate semester 1 and 2 grades. Each semester is 0.5 science credit
- For OIT, your Bio 103 grade will be an average of your two semester grades. You must take both semesters to earn OIT credit. Bio 103 is 4 college quarter credits.

Grading may be adjusted for reporting grade for BIO103 dual credit course with OIT, which means that your high school class grade may not be the same as your college class grade.

Dual Credit grades will be distributed in alignment with Oregon Tech's grading policies: http://catalog.oit.edu/content.php?catoid=4&navoid=82&hl=grading+policy+&returnto=search



Course Syllabus Scope and Sequence

Date	Chapter	Material Covered
Sept 7 - 27	Unit I	Human Body Orientation
Sept 29 – Oct 13	Unit II	Cell structure and Function, Histology
Oct 16 – Nov 3	Unit III	Skeletal system
Nov 6 – Dec 1	Unit IV	Muscular system
Dec 4 – Jan 5	Unit V	Digestive system Nutrition and Metabolism
Jan 8 – 19	Unit VI	Endocrine system
Jan 22 – 24		Semester 1 Exam
Jan 30 – Feb 23	Unit VII	Blood, Blood Vessels, Heart, and Circulation
Feb 26 – Mar 15	Unit VIII	Respiratory System
Mar 18 – Apr 11	Unit IX	Nervous System
Apr 15 – 26	Unit X	Senses
Apr 29 – May 10	Unit XI	Lymphatic System and Immunity
May 13 - 31	Unit XII	Urinary System Reproductive System
June 3 – 13		Final Review and Semester 2 Exam