

Course Name: AP Biology : BI 101 / BI 102

Term: Fall / Winter / Spring Year Long Course	Class Days: Period 5 B Days	Class Time: 8:30am - 9:40am	Class Location: Room 911	Credit Hours: BI 101 : 4 BI 102 : 4
Teacher: Mrs. Dickerson		Phone: 503-623-8336 Ext. 3991	Email: brandy.dickerson@dsd2.org	

OFFICE HOURS: Monday, Wednesday, Thursday, and Friday from 2:40pm - 3:30pm or by appointment.

COURSE DESCRIPTION:

BI 101 General Biology: The Diversity of Life

Students will practice scientific skills by describing living things, investigating how living things interact, and analyzing the environment interactions that shape life's diversity. Three hours of lecture (or equivalent) and two hours of laboratory each week (14 hours total) as part of a larger inquiry-based exploration of the patterns and processes that influence the diversity of life on Earth.

BI 102 General Biology: The Foundations of Life

Students will practice scientific skills by describing the structure of cells, investigating how cells process energy and analyzing the patterns of cellular information flow that shape genetic inheritance. Three hours of classroom time (or equivalent) and two hours of laboratory each week (14 hours total) as part of a larger inquiry-based exploration of the structure and function of the basic cellular units of life.

Course Standards (BI 101)

	Proficiency Standard	Assessment	Measurement
1	I can formulate, test and evaluate scientific hypotheses	Lab Write-up	Lab Write-up rubric
2	I can evaluate (including interpretation of graphs and figures) scientific information.		
3	I can identify evolution as central theory of biology and describe random and non-random influences on genetic change to population over time.	Content Exam Holistic Assessment	Exam scoring guide Holistic rubric

4	I can identify major ecological interaction at the population, community and ecosystem level, including awareness of how energy and chemical nutrients move through ecosystems.		
5	I can describe positive and negative interactions that humans have with environments on regional and global scales.		

Course Standards (BI102)

	Proficiency Standard	Assessment	Measurement
1	I can formulate, test and evaluate scientific hypotheses.	Lab Write-up	Lab Write-up Rubric
2	I can evaluate (including interpretation of graphs and figures) scientific information.		
3	I can explain how atomic and molecular structure influence cell structure and function.	Content Exam Holistic Assessment	Exam Scoring Guide Holistic Rubric
4	I can explain how cells process energy and identify inputs and outputs when cells are stored and use energy, including energy carries.		
5	I can describe how genetic information is transmitted and the processes for creating genetic variability.		

REQUIRED TEXTS:

AP Edition Campbell Biology Eleventh Edition Urry, Cain, Wesserman, Minorsky, and Reece

CLASSROOM POLICIES

Assessment Based-Learning

Willamette Promise Writing courses are Assessment-Based Learning credit, which means that students will receive college credit if their instructor and the Western Oregon University faculty determine that their work

meets the standards set by the program. Students will not receive credit if their work does not meet standards, or if they choose to not transcribe the grade they received.

Students will also have the opportunity to take the AP Biology Exam through College Board to potentially earn additional credit for college. The **AP Biology Exam is scheduled this school year for Wednesday, May 10th 2023.**

College-Level Content

Curriculum for this course is determined by the Western Oregon college faculty that oversees this Willamette Promise course. In college, students are often exposed to a range of ideas, some aligning with their own political views and values and others not. We do not expect students to agree with what they read. However, we do expect students, taking a college course, to be emotionally mature enough to read, discuss, and consider viewpoints other than their own.

In order for students to earn college credit through WOU, they must meet the following requirements for both BI 101 and for BI 102:

- Student completes a minimum of 14 lab hours (must be completed before student can submit Lab Write Up Assessment)
- Student earns a “Meets” on Lab Write Up Assessment Rubric.
- Student earns a “Meets” on Holistic Assessment of Human Role in the Environment Assessment Rubric
- Student earns a “Meets” Content Exam Rubric by completing the exam with a score of 70% or higher.

College Grade: A weighted average will be converted to a proficiency score between the exam, the official lab write-up, and the holistic assessment. The proficiency scores on each assessment will then be converted into a letter grade.

Grades

College Grade:

Calculation of a student’s final WOU grades for BI101 and/or BI102 are calculated through a weighted combination of their scores on the holistic assessment, lab write up, and exam. The weighted breakdown is as follows:

Holistic assessment: 30%

Lab write up: 30%

Exam: 40%

Formula: (Holistic assessment. % x .3) + (Lab write up % x .3) + (Exam % x .4) = Final %

Grading Scale for College Grade:

A	92.5% - 100%		B-	79.5% - 82.4%
A-	89.5% - 92.4%		C+	75.5% - 79.4%
B+	86.5 - 89.4%		C	72.5% - 75.4%
B	82.5% - 86.4%		No Grade	72.4% or lower



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Course Syllabus

Dallas High School Grade (which may be different from the Willamette Promise Grade):

Your grade for Dallas High school will be calculated on a five point scale because it is a college class. In addition your grade will be weighted with tests, formal lab write ups, and projects accounting for 75% of your overall grade and unit assignments accounting for 25% of your overall grade.

There will be **no test retakes for unit tests** but if you score below a 70% you will have the option to come in to do test corrections to get your grade for that test up to a 70% C.

Grading Scale for Dallas High School Grade:

A	90% - 100%		D	60% - 69%
B	80% - 89%		F	59% or lower
C	70% - 79%			

Attendance: It is expected that students are on time to class and regularly attend classes when they are able to. If an absence is planned please communicate that with your instructor ahead of time. If an unplanned absence occurs, communicate with your instructor as soon as you are able to so that the necessary steps can be taken to make-up missed material.

Incomplete Policy: Incompletes are not typically given for this course. To be eligible for an incomplete in this class you must be passing the class but lack one essential requirement, such as missing one exam or one project. In addition, I must find your reason for requesting an incomplete acceptable (for example, an illness or death in the family would probably be acceptable, whereas a trip to Hawaii would probably not be acceptable). See me for more details regarding incompletes.

Willamette Promise Policies

Assessment Based-Learning

Western Oregon University's Willamette Promise Dual Credit courses are awarded through the Assessment-Based Learning model. This means that students will receive college credit based on their ability to show proficiency in the course standards. Students will demonstrate this proficiency through assessments designed by Western Oregon faculty that are scored by the participating high school teachers. Teachers are given and trained on rubrics codesigned by the college faculty. Students will not receive credit if their work does not meet standards.

Accepting or Declining Grades

After completing the required course assessments, students will be provide their final college grade. If a student receives a "C" or higher, will have the option to accept or decline having their grade transcribed on to their Western Oregon University transcript.

College-Level Content

Curriculum for this course is determined by the Western Oregon college. In college, students are often exposed to a range of ideas, some aligning with their own views and values and others not. We do not expect students to agree with what they read. However, we do expect students, taking a college course, to be emotionally mature enough to read, discuss, and consider viewpoints other than their own.



Western Oregon University Policies

Disability Accommodations: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Addie Howell, Willamette Promise Accelerated Learning Manager, 503-385-4783 or addie.howell@wesd.org.

Veterans' Accommodations: Western Oregon University recognizes that those who are actively serving in the Reserves or National Guard of the United States are required by their military contract to attend mandatory training. If you will be absent due to military orders, I strongly encourage you to communicate that with me as soon as possible so we may discuss alternative arrangements.

Academic Integrity: Students must adhere to WOU's Code of Student Responsibility. Academic dishonesty will not be tolerated in this course. I will report all instances of suspected dishonesty to the Student Judicial Committee for further action. Examples of inappropriate behavior includes doing assigned work for another student, sharing answers on work assigned to be done individually, sharing or copying answers during an exam or portraying another person's writing as your own. If you have questions about what might be considered inappropriate, please ask me!

TENTATIVE SCHEDULE

Scope and Sequence: This is a year-long course that will meet on "B" days during the period 5 time block from 8:30am-9:40am.

Big Ideas: Class content is grounded in four big ideas, which are crosscutting concepts that build conceptual understanding and spiral throughout the course:

Big Ideas:	Description
Evolution	The process of evolution drives the diversity and unity of life.
Energetics	Biological systems use energy and molecular building blocks to grow, reproduce, and maintain dynamic homeostasis.
Information and Storage Transfer	Living systems store, retrieve, transmit, and respond to information essential to life processes.
System Interactions	Biological systems interact, and these systems and their interactions exhibit complex properties.

Unit #	Topic	Assessments	Approximate Time
Unit 0	Scientific Methods - review how to set up a controlled experiment and review lab writeup format. <ul style="list-style-type: none"> Chi-square test 	Lab Write-up	2 weeks
Unit 1	Chemistry of Life - understand the chemical basis of life. <ul style="list-style-type: none"> Organic macromolecules and their functions 	Multiple Choice Unit Test and Free Response Questions	3 weeks

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Unit 2	Cell Structure and Function - maintenance of cellular internal and external conditions and cell membrane transport.	Multiple Choice Unit Test and Free Response Questions Lab Write-up	3 weeks
Unit 3	Cellular Energetics - enzyme activity, photosynthesis, and cellular respiration.	Multiple Choice Unit Test and Free Response Questions 2 Lab Write-ups	4 weeks
Unit 4	Cell Communication and Cell Cycle - how cells use energy and information transmission to communicate and replicate.	Multiple Choice Unit Test and Free Response Questions	4 weeks
Unit 5	Heredity - storage and transmission of genetic information via chromosomes from one generation to the next. <ul style="list-style-type: none"> ● Meiosis, gamete formation, sexual reproduction, and genetic diversity. ● Mendelian and Non-Mendelian genetics ● Genotype and Phenotype 	Multiple Choice Unit Test and Free Response Questions	4 weeks
Approximate End of Semester 1			
Unit 6	Gene Expression and Regulation - DNA, RNA, and protein synthesis. <ul style="list-style-type: none"> ● Mutations ● Biotechnology 	Multiple Choice Unit Test and Free Response Questions Lab Writeup	5 weeks
Unit 7	Evolution - natural selection, evidence for evolution, phylogeny, and speciation. <ul style="list-style-type: none"> ● Hardy-Weinberg Equilibrium 	Multiple Choice Unit Test and Free Response Questions Lab Write-up	5 weeks
Unit 8	Ecology - energy flow through an ecosystem, population dynamics, biodiversity, and impact of disturbances to biological systems.	Multiple Choice Unit Test and Free Response Questions Lab Write-up	5 weeks
Final	Assemble Willamette Promise Portfolio Items: <ul style="list-style-type: none"> ● Holistic Assessment Projects ● Lab Write Ups ● Multiple Choice Tests 	Holistic Projects (2), Lab Reports (2), 50 Question Multiple Choice Tests (2)	2-3 weeks

Required Materials for Class:

All students will need to purchase a larger 3-ring binder *for use in AP Biology class only*. All work done this year will be stored in this binder. Also necessary is a package of 10 divider tabs. You may also want your own colored pencils, although we have a class set, and a highlighter or two.

- We will create a Table of Contents together throughout each semester of all work that should be stored in this binder. This will be the very first item located in the binder for each unit.
- Assignments will be “stamped” in general on the day they are due. If you are absent during these “checks” at the beginning of the period, and the absence is excused, you need to write ABS at the top of that assignment and alert me the very next day I have you in class, in order to receive a stamp. Failure to do so will automatically earn you docked/late credit for that assignment.



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- Assignments for each unit will be placed into a personal student folder and turned in along with a self-score rubric that will be a reflection for that unit's materials and content understanding before the start of the unit test. A single unit grade will be given for the assignments for that unit and be recorded in the gradebook.
- **“Forgotten” binders/assignments on the day of a check will receive late credit that could be docked up to 50% for items that have not been stamped/checked off.**
- Once that notebook check score is recorded, all missing work is now too late to get stamped for more points. If you are not happy with your notebook score for a particular unit I encourage you to make adjustments to improve your score on the next unit binder check.
- We will be using AP Classroom in this course which is an online platform from College Board for resources and progress checks. **See join code below:**

AP Biology - AP Biology 2022-2023

Teacher: Brandy Dickerson

SECTION JOIN CODE

Q2D999

To enroll in this section online, sign into <https://myap.collegeboard.org> and enter the section join code



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Course Syllabus

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Course Syllabus

Mrs. Dickerson's Syllabus Signature Page for AP Biology:

Sign, detach, and return this page only to Mrs. Dickerson in Room 911

Parents/Guardians: Please **detach this last page after signing so it can be returned to the classroom** and keep the rest of this syllabus. By signing this form, you acknowledge that you have read and fully understood the expectations, policies, and standards associated with Mrs. Dickerson's AP Biology classroom. A copy of this syllabus along with other classroom documents and assignments will be available on Canvas. If you have questions, please call 503-623-8336 or email using the email address provided in this document.

Student Name: _____ Class Period: _____

Student Signature: _____ Date: _____

Parent/Guardian Name: _____

Parent/Guardian Signature: _____ Date: _____

Preferred Phone #: _____ Email: _____

Comments / concerns (*if any*):