



COURSE SYLLABUS

SCI 202A Biology Semester 1

Welcome!

My name is Mrs. Ulry and I will be your Bio 202 teacher this semester. This is my third year teaching at OHVA and 8th year teaching for an online HS. I love Biology and feel it is one the most interesting and challenging subjects that you can learn in high school. I want to see you succeed and will let you know my weekly schedule along with your assignments each week. I encourage you to contact me via k-mail, telephone (1-877-648-2512 ext. 3026 or FIT sessions (Mondays 3:10 – 4pm) with your questions &/or concerns. I look forward to seeing you on a weekly basis during your required ClassConnect Sessions on Tuesdays and Thursdays from 12:10 pm to 1:20 pm.

Why you need to read the rest of this syllabus...

You should consider this syllabus as a contract between you (the student) and me (the teacher). It includes all of the policies and procedures you need to know to successfully take this course, as well as the behavior that I expect of all of my students. For my part, I will honor all of the specifications laid out in this document. No changes will be made without notice being given in the course announcements area. Students with documented IEPs or 504 plans will be given accommodations appropriate for their individual plans. Contact the school's Special Education department for more information.

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Contacting the Teacher

It is your responsibility to contact me with any questions you may have. Don't wait until the last minute—when a question arises, ask it early. When you have questions about course content or assignments, post them in the Teacher's Office area. If you have private questions for me—for example, regarding a grade you received on an assignment—either submit those to me by email or through your journal. Alternately, you can also visit me during Office Hours or call my office phone—see the top of the syllabus for this information.

If technical difficulties prevent you from contacting me online, please call my office phone (listed above). If my number is long distance for you, leave me a message and I will call you back as soon as possible so I can pay for the call.

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A Little about the Course

SCI 202A: Biology

In this course, students focus on the chemistry of living things: the cell, genetics, evolution, the structure and function of living things, and ecology. Students follow a program of online study days alternating with review-and-assessment days. Lessons include extensive animations, hands-on laboratory activities, reference book study, and collaborative activities with virtual classmates.

To complete this course and earn the best grade you must follow this format:

First: Check your Announcements and review the Weekly Schedule and Kmails.

Second: If you have questions on assignments you can also use the Calendar and the Course Checklist.

=>If you follow these directions, you will always know what to do and where to do it.

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Course Expectations

Class Connect

- Class for Biology 202 is 12:35 1:20 pm on Tues. and Thurs.
 The room will open at 12:30 pm, so please be prompt.
- Students are expected to attend the LIVE session or watch the recording and complete the weekly course check point assignment. Be sure to read your K-mails and course announcements for any changes or additional class meetings.
- o Please come prepared!
 - read assigned lesson for the day
 - have a working microphone, be able to use it, participate in class
 - an open mind and willingness to learn ②

FIT (Focused Instructional Time)

- o 3:10 4 pm on Mon. and Wed. The room will open at 3 pm, so please be prompt.
- If you are failing the course, have missing work, need to pass OGT, then you are expected to attend these Class Connect Sessions
- o For students who would like to receive extra help on labs, coursework, writing short answer essay responses, and USA Test Prep assignments

Submitting Assignments

- Students are expected to submit assignments on the DUE DATE indicated in the Weekly Agenda posted in the Announcements.
 - Please do not work ahead, unless it has been approved by the teacher.
- o All work should be submitted to the correct DROPBOX for credit. Work will **NOT** be accepted via k-mail unless it has been approved by the teacher.

Course Activities

Course activities may include:

- Reading online text and transcripts
- Viewing moving and static images and streaming video
- Listening to audio recordings and pronunciations
- Watching linear and interactive animations and simulations
- Completing hands-on and virtual activities
- Participating in threaded discussions with teachers and fellow students in a section, cohort, or group
- Teacher announcements
- Completing online self-check exercises
- Reading and completing teacher-created instructional materials

Graded assignments may include:

- Online or paper-based worksheets and practice sets
- Quizzes
- Exams (unit, semester and final)

- Threaded discussions
- Essays, research papers, and other writing assignments
- Presentations

All graded assignments are either automatically scored by the K^{12} Learning Management System, or they are teacher-scored, which means scored by me.

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Course Policies

Attendance and Activity

Students are expected to log into this course daily. While the length of time that students spend working on assignments may vary, the expectation is that you will spend approximately 40 to 75 minutes on coursework each day.

To complete this course and earn the best grade you must follow this format:

First: Check your Announcements and review the Weekly Schedule and Kmails

Second: If you have questions on assignments you can also use the Calendar and the Course Checklist.

=>If you follow these direction you will always know what to do and where to do it.

Daily Student Responsibilities

Every time you enter the course and before completing any class work:

- Read any announcements I posted since the last time you entered the course.
- Review the Calendar to see what lessons and assignments you are to complete that day.
- Check out the What's New list at the bottom of the Course Home screen to see what's gone on in the course since you last logged in.
- Look at the Course Checklist at the bottom of the Course Home page to review where you left off in the course content since you last logged in.
- Complete all lessons and assignments (both graded and nongraded) as indicated on your course calendar before the end of the day.
- Submit assignments to me through the Dropbox tool, unless they are scored by the computer. Assignments sent by k-mail will NOT be accepted unless you've made prior arrangements with me.

Before you log out of the course:

- Make sure you have completed all of the work for the day, including the nongraded lesson work.
- Go to the Course Checklist and check off the sections that you completed fully that day.

Grading Policy & Grades

- * The "MEAT" of your grade will come from labs and unit tests so always do your best!
 - A passing grade is a 60% (D-) or higher
- Extra credit assignments are determined by the teacher and are not a frequent part of the course. EC is no more than 5% of your semester grade and information will be posted in the course announcements if and when it is available.
- Letter grades will be placed into the gradebook at the end of the semester. Throughout the grading period you may find additional comments marked in the letter grade field:
 - "EX or EXCUSED" assignment is excused from your course grade
 - "Missing" or "Needed" assignment is past due and needs to be completed.
 - "Fix Me" or "Revise" assignment answers need revised and resubmitted for a higher grade.
 I encourage you to read the grading comments to see what I expect in your answers.
 - "Read Me" click on the assignment grade to open up the grading comments. This allows you to view what suggestions have been provided for that particular assignment.

USA TestPrep Expectations

- * We will be using the valuable online tool USA TestPrep in biology this year. This is not an extra requirement for this course **BUT** it is an **integral part of the course**. It will be utilized in biology for instruction and assessment and helps your teacher acknowledge the strengths and weaknesses of a student with various biology concepts.
- Packets of assigned will be completed by each student for each unit in Biology. You will be able to
 access a variety of tests, practice activities, games, and videos designed to keep you learning and
 preparing for the science OGT.
 - These assignments are graded. I will input these scores into the student's gradebook in the biology course.
- The link to this program will be posted in your students' classrooms, and teachers will provide full instructions about when and how to access assignments.
 - Here is how your student will access this resource:
 - 1. Go to www.usatestprep.com
 - 2. Enter the account ID: ohiovirtual12
 - 3. Enter your username: It is your Student ID Number@ohva -ex. 007@ohva (see the attachment for how to locate your student ID)
 - 4. Enter your password: ohvaUSA

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Communication with Teacher and Classmates

Although you won't be able to send k-mail to other students, you will be communicating with other students through the community area outside of the course and through threaded discussions within the course. In addition, students often form friendships while in the course together. When this happens, students often share email addresses or instant message names.

Some things to keep in mind when communicating with other students:

- Respect the privacy and wishes of your fellow students.
- Flaming, spamming, bullying or other unwanted contact including inappropriate message content or attachments will be considered a breach of this policy. Infractions may result in disciplinary action by the school administration.

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Due Dates

The course calendar and my weekly announcements will list which lessons and assignments you need to complete each day. You'll also find assignment due dates in the Course Details area of your student landing page and in the Course Checklist at the bottom of the Course Home page. It is important that you stick to the course schedule indicated on the calendar and in the announcements as well as the due dates for each assignment. Staying on schedule allows you to learn along with your classmates. This is especially important as we all learn together through the threaded discussions in the course.

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Late Policy—PLEASE READ CAREFULLY

- Work is expected to be submitted the week it is due. If the due date is missed, then I encourage students to submit it ASAP so they do not fall further behind.
- Late assignments are marked "0 needed" or "0 missing" in the gradebook each week. O's are "place holders" until the work is completed.

Work may be completed during:

- On your own
- During Class Connect sessions
- During FIT Sessions Mondays @ 3:10-4 pm
- Special CC sessions to be announced (TBA)
- When assignments are late, you and your **learning coach** may receive k-mail or phone calls to remind you about incomplete assignments.
- In order to receive credit for a late assignment (greater than 5 days), you must attend a FIT session.
- Due date extensions must be requested <u>before</u> the due date of the assignment and on a school day. Requests received on or past the due date, or on a nonschool day will most likely not be granted.
 - At some point during the semester past due Units will 'CLOSE', which means I will not accept any work submitted from those units. I will ALWAYS post information in the Announcements for you to follow.

Late Policy Continued...

- I only grant due date extensions for assignments when there are special circumstances. It is the student's responsibility to communicate with me about such situations so we can work together to create a plan for submitting late work.
 - You should never assume that I will automatically grant these requests. I do grant extensions for 1 or 2 days often but if you do not complete that work as requested do not expect additional extensions.
 - Please be sure to update me for any absences due to illness as well. I cannot help if you do not update me with that information.
 - I am always willing to discuss the late submission of work past the above-listed deadlines. Please contact me directly as soon as possible to find out if this is an option.

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Academic Integrity (Cheating and Plagiarism)

Students who submit work as their own, when it is not wholly and completely their own, are guilty of cheating and/or plagiarism and will receive a zero on that part of the assignment or possibly on the entire assignment.

Assisting other students in cheating or plagiarism is also considered academic dishonesty and students who do this will receive a grade of zero on their assignment submission as well.

The first time a student fails to cite the source of information in an essay or research paper, he/she will be advised of proper citation methods. Further infractions will result in the student receiving a grade of zero on the item or assignment.

Students who are found guilty of cheating or plagiarism more than once will be referred to the school administration for breach of the school's Behavior Code.

I may use a technology that helps to prevent cheating for some tests. Before these tests, you will be prompted to install a small piece of software on your computer. You will be required to install this piece of software before taking the assessment. Once you access the test, you will be unable to copy, paste or open new browser windows or programs during the assessment. If you experience any difficulty, contact K^{12} Customer Care for assistance. Contact me immediately if Customer Care cannot resolve your issue.

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Attendance

Regular and daily attendance is required:

- You must log into the course and complete the scheduled work every school day.
- Unless otherwise specified, course log in is required even when assignments occur offline as you
 are expected to review any updated announcements, What's New items and threaded discussion
 responses daily.
- You should expect to spend 40 to 75 minutes each day reading, responding, and completing other activities both online and offline.

- If you know you will not be able to log into the course on any given day, please contact me
 immediately by k-mail. If you encounter technical difficulties, contact me by phone. If you do not
 contact me before missing an activity, you can expect to hear directly from me.
- * Students who continually fail to enter the course and show progress will be referred to the school administration.

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Teacher Availability and Communications

After the first two weeks of school, you'll have a lot more freedom in your daily schedule. This goes for teachers as well! This means that, although we're both working in the course every day, we may be working at very different times of the day. When you and I happen to be online and working at the same time, I might not be immediately available. Most of my day is spent responding to student questions in the Raise Your Hand area, grading and returning assignments, and answering k-mails and phone messages. Feel free to contact me when needed, but please understand that I might be in the middle of one of these tasks, or helping another student at the time. You may need to leave me a message if you call, or wait for a short time to receive answers online. Of course, I am always available during my office hours (aka Mon FIT sessions).

If you would like to schedule time for a private conference, please request these at least three to five days before the day you are available. The more notice you provide me, the more likely I can be available at a time that is best for you and/or your parent/mentor.

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Submitting Assignments and File Types

Names of files you submit Files you submit to me through the Dropbox tool should have a filename that indicates which assignment it is, followed by your first initial and last name. You may wish to use "U" and "L" to indicate which unit and lesson it is, or simply shorten the actual title of the assignment. Some examples include "U4L3RSmith" (unit 4 lesson 3 for Robert Smith) or "PersuaEssyRSmith" for Robert Smith's Persuasive Essay.

Always use the Dropbox I will only accept teacher-graded assignments submitted through the Dropbox tool. Assignments sent to me through k-mail or email will be returned to be submitted through the Dropbox. If for some reason you are unable to submit assignments through the Dropbox, or assignments you submit are not being returned to you, contact me immediately. We will make alternate arrangements for you to get the assignments to me for grading.

File type and size At all times, attempt to keep the size of files you submit less than 3 MB. Unless otherwise indicated in the assignment directions, the only file types you should submit to me are .doc, .txt, and .tif. Assignments in other formats will be returned for resubmission.

Doc Sharing There is an area in our course called Doc Sharing. I will occasionally upload documents to this area for you to download for use in class. Students can also upload files to this area. Please refrain from uploading files there unless you have asked my permission first. Students who upload files without permission will be referred to the administration for breaking the school's Acceptable Use Policy.

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Expectations of Difficulty, Participation and Time Commitment

Students often find that going to school online takes longer and is more difficult than going to school in a traditional setting. Be prepared for this course and online schooling in general to be a little more difficult than you might expect. If you are not spending at least 40-60 minutes on this course each day, you're probably not doing enough to pass the class. If this is happening, make an appointment to meet with me or visit me in Office Hours so we can review what you are doing each day. If you need help in working out a personal schedule, staying motivated or creating an effective home learning environment, contact your advisor. This person is an expert at helping students with these concerns!

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Grading Policy

In the Course Home on the left-side of the course is an item titled Grades. Some types of assignments are worth more points, overall, than others. For example, it is very possible to take only computer-scored quizzes in this course and get an A on each one, but still fail the course. This would happen because computer-scored quizzes make up a small percentage of the total points in the course.

When an assignment is to be submitted to me as an electronic file, I will only accept these through the course Dropbox. If you have technical difficulties using the Dropbox, contact me immediately to make other arrangements.

When teacher-scored assignments are returned, I expect for you to open them and read the feedback that I provide directly in the files. Use this feedback to improve your work on future assignments.

Threaded Discussions

Grades are based on quality and timeliness. Responses should be well-written (Use the spell check tool.) and clearly address the issue being discussed. Stay on topic.

Threaded discussions usually last about three days. You are expected to respond to the original question or prompt on the first day, then read and respond to others' postings on the second day. On the third day, you should respond to others' responses to your original post.

CATEGORY					
Initial	Responded to	Responded to the	Responded to the	Responded to the	Did not respond
Response to	the instructor's	instructor's topic	instructor's topic	instructor's topic	to the instructor's
Prompt	topic on time.	one day late.	two days late.	more than two	topic.
				days late.	
Reply to Peers	Responded to	Responded to two	Responded to one	Responded to one	Did not respond
1st Round	two peer	peer postings one	peer posting on	peer posting one	to any peer
	postings on	day late (within	time (within two	day late (within	postings.
	time (within two	three days).	days).	three days).	
	days).				
Additional	Responded to at	Responded to one	Responded to one	Responded to one	Responded to

Reply to Peers – 2nd Round	least one more peer on time.	more peer one day late.	more peer two days late.	more peer more than two days late.	none of the peers who have posted comments to you.
Content	High-quality content that reflects good conceptual understanding and completion of assigned coursework.	Coherent content that reflects basic understanding of most content introduced in the course.	Acceptable understanding of content with some minor misconceptions related to course content.	Marginal understanding of content with obvious misconceptions related to course content.	Content does not demonstrate understanding of course content.
Quality Post Appropriate Length = 30–75 words of well-written text	Student's comments add significantly to the discussion by suggesting other solutions, pointing out problems, or even respectfully disagreeing. Student also substantiates any comments made with reasoning or source citation.	Student's comments add moderately to the discussion by suggesting solutions, pointing out problems, or even respectfully disagreeing. Student does not substantiate any comments made with reasoning or source citation.	Student's comments add minimally to the discussion. Student does not substantiate any comments made with reasoning or source citation.	Student's comments do not add to the discussion. Posting is simple: "I agree" or "Yes" or "No."	Student did not participate at all in the threaded discussion.

Grade Reporting

Your gradebook will always display points earned vs. point's possible as well as percentage grades. I will also provide letter grades that correspond to the percentage grades.

Assignments will be graded and (in most cases) returned to you in three school days. Grades will appear in your online gradebook, and feedback to your work will most often be included directly inside the files that I return to you.

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Course Scope and Sequence

Diagnostic Test starts this course Unit 1: The Science of Biology

Students explore biology as one of the sciences and confront the concepts of scientific methods. After exploring scientific processes as they apply to biology, students examine what "life" means as they investigate the characteristics that all living things share. Students then look at the importance of energy,

what kinds of energy are significant when considering living things, and the relationship of structures of living things to their functions.

- Semester Introduction
- Biology and Scientific Methods
- Scientific Processes
- Laboratory: Using a Microscope

- The Characteristics of Life
- Energy and Life
- Structure and Function

Unit 2: The Chemistry of Life

Students explore the chemical basis for life by examining the most important groups of organic compounds: carbohydrates, proteins, lipids, and nucleic acids. Students then examine water and how it is important for living things. In each case, students focus on the relationship of the molecular structure of compounds to its function in living things.

- Chemistry Review
- · Chemical Bonds
- Carbon and Life
- Organic Compounds and Trace Elements
- Ions in Living Things
- Useful Chemicals from Living Things
- Water
- Laboratory: Investigating Biological Compounds

- Simple Carbohydrates
- Complex Carbohydrates
- Lipids
- Amino Acids and Proteins
- Levels of Protein Structure
- Proteins as Enzymes
- Nucleic Acids
- ATP

Unit 3: Cell Biology

Students now are able to begin looking at the structure and function of living things. They begin with an exploration of the cell. They confront the structure of the cell, its membranes and organelles. In particular, they look at the processes by which cells gather and make energy available, focusing on the activities of the mitochondrion and the chloroplast. Students then proceed to look at cellular reproduction and study the processes of meiosis and mitosis.

- The Cell and Life
- Cell Structure
- Cell Organelles
- Two Types of Cells
- Cell Membrane Structure
- Movement Across Membranes
- Passive Transport
- Active Transport
- Laboratory: Determining the Rate of Diffusion
- Glycolysis and Fermentation
- The Krebs Cycle
- The Electron Transport System

- Light and Photosynthesis
- Photosynthesis and Glucose
- Chemical Energy and Life
- Respiration and Photosynthesis
- Laboratory: The Rate of Photosynthesis
- Reproduction and Development
- Mitosis
- Laboratory: Observing Mitosis
- Cell Differentiation
- Cell Specialization
- Sexual Reproduction
- Meiosis I
- Meiosis II

Unit 4: Mendelian Genetics

Students learn about the work of Gregor Mendel as a way of studying modern genetics. They perform genetic crosses and begin to see how traits are inherited. As they examine Mendelian genetics more closely, they see the relationship between inheritance and chromosomes and between genes and alleles. This unit prepares students to go deeper into genetics at the molecular level.

The Work of Gregor Mendel

Mendelian Inheritance

• Laboratory: Genetic Crosses

Pedigrees

Laboratory: Gene Mapping

Chromosomes and Genes

Genes and Alleles

Genetic Variation

Unit 5: Molecular Genetics

The chemical basis for genetics is one of the cornerstones of modern biology. In this unit, students explore the relationship between DNA, RNA, and proteins—and what this has to do with genes and inheritance. After establishing a firm basis in molecular genetics, students are able to understand modern applications of genetics, including biotechnology and genetic engineering.

DNA, RNA, and Proteins

Structure of DNA

Structures of RNA

DNA Replication

Transcription

Summative Final Exam

Students prepare for and take the semester test.

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Laboratory: Modeling DNA

Laboratory: Modeling DNA Replication

DNA Makes RNA

RNA Makes Protein

The Genetic Code