Biology 1406 Syllabus
Cedar Valley College

* This Generic Syllabus used for all online Biol 1406 courses. Your individual Syllabus Addendum will be supplemented by your instructor via ecampus once the course begins.

Instructor Information – please see individual syllabus addendum and ecampus for further information.

Disclaimer
The instructor reserves the right to amend this syllabus as necessary.

This course is completely online. This course includes lecture and virtual laboratory sessions. An ebook is required for this course in order to complete course assignments.

This course is NOT intended for those seeking Post-Baccalaureate health professions such medical, dental, pharmacy, PT, PA or OT programs. These programs require hands-on laboratory experiences. This class is ok for vet tech students.

The course will employ Respondus LockDown and Monitor Browser during exams. Students must have a functioning camera and microphone associated with their computer. Students may not use a Chromebook, tablet or cell phone while taking the exam since the Respondus Browser cannot be downloaded.

Students will be required to show their face throughout the entire exam in the video recording. Students may not cover the camera lens, obstruct the camera lens, or point the camera lens away from their face during the exam. No hats, sunglasses, or eye shielding of any kind is permitted. The student may not leave the room during the exam.

Students will be required to show a valid picture ID prior to engaging in the exam and to complete a 360° scan of their surroundings to ensure no person, book, note, electronic device or any other item containing any information relevant to the exam is present or utilized at any time during the exam. This includes scanning the surface where the computer is placed to ensure no materials are around and/or near it.

All times listed for this course are Central Standard Time (CST).
Course Information

Course Title: Biology for Science Majors I
Course Number: BIOL 1406
Semester/Year: Fall/ 2019
Credit Hours: 4
Class Meeting Time/Location: Online: administered through DCCCD eCampus
Certification Date: September 9, 2019
Last Day to Withdraw: November 14, 2019

Course Prerequisites

College level ready in Reading

Course Description

This course is designed to assist students in gaining an understanding of the basic concepts of biology. Course topics include but are not limited to the scientific method, basic chemistry, biochemistry, the structure and function of cells, cellular respiration, photosynthesis, and molecular genetics.

Student Learning Outcomes

Biology 1406 Student Learning Outcomes
1. Describe the characteristics of life.
2. Explain the reasoning used by scientists.
3. Identify the basic properties of substances needed for life.
4. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
5. Describe the structure of cell membranes and the movement of molecules across a membrane.
6. Identify the substrates, products, and important chemical pathways in metabolism.
7. Identify the principles of inheritance and solve classical genetic problem sets.
8. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.

CVC’s Learning Signature

CVC’s Learning Signature is One College Transforming Lives. Cedar Valley College establishes clear expectations for students through engagement and empowerment leading to excellence.

CVC Faculty and Staff expect students to:
• take responsibility for their own learning
• commit to achieving high academic performance
• be meaningfully engaged in the campus community

CVC Faculty and Staff expect to:
• provide students a clear pathway of instruction
• establish clear learning outcomes
• serve as role models and mentors for students
9. Describe the unity and diversity of life and the evidence for evolution through natural selection.

10. Demonstrate proficiency in performing basic measurements and metric conversions utilized in the sciences.

11. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.

12. Use critical thinking and scientific problem-solving to make informed decisions.

13. Communicate effectively the results of investigations.

14. Compare and contrast conflicting view-points concerning a highly controversial bioethical topic while discussing the biotechnology involved with the topic.

**Texas Core Objectives**

The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. **Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

2. **Communication Skills** - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication

3. **Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

4. **Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

5. **Personal Responsibility** - to include the ability to connect choices, actions, and consequences to ethical decision-making

6. **Social Responsibility** - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
Required Course Materials


ISBN: 9781305856103

Required materials: computer with a functioning camera and microphone; not a chromebook or tablet. Must download Respondus Lockdown and Monitor Browser from ecampus and have Adobe Flash installed.

Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Graded Work

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated.

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syllabus Quiz</td>
<td>1 @ 10 points</td>
<td>10 points</td>
</tr>
<tr>
<td>Metric Quiz</td>
<td>1 @ 10 points each</td>
<td>10 points</td>
</tr>
<tr>
<td>Honor Code</td>
<td>1 @ 10 points each</td>
<td>10 points</td>
</tr>
<tr>
<td>Email Etiquette Policy</td>
<td>1 @ 10 points each</td>
<td>10 points</td>
</tr>
<tr>
<td>Discussion Board Etiquette Policy</td>
<td>1 @ 10 points each</td>
<td>10 points</td>
</tr>
<tr>
<td>Email to Instructor</td>
<td>1 @ 10 points each</td>
<td>10 points</td>
</tr>
<tr>
<td>Virtual Laboratory Assignments</td>
<td>8 @ 50 points each</td>
<td>400 points</td>
</tr>
<tr>
<td>Chapter Reviews</td>
<td>14 @ 10 points each</td>
<td>140 points</td>
</tr>
<tr>
<td>Discussion Boards</td>
<td></td>
<td>70 points</td>
</tr>
<tr>
<td>Genetics Project</td>
<td>1 @ 100 points each</td>
<td>100 points</td>
</tr>
<tr>
<td>Assignments</td>
<td>Points</td>
<td>Totals</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Lecture Exams</td>
<td>4 @ 100 points each</td>
<td>400 points</td>
</tr>
</tbody>
</table>

**Total: 1,170 points**

**Final Grade**

<table>
<thead>
<tr>
<th>Points</th>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1170-1012</td>
<td>87-100%</td>
<td>A</td>
</tr>
<tr>
<td>1011-895</td>
<td>77-86%</td>
<td>B</td>
</tr>
<tr>
<td>894-780</td>
<td>68-76%</td>
<td>C</td>
</tr>
<tr>
<td>779-673</td>
<td>58-67%</td>
<td>D</td>
</tr>
<tr>
<td>672 &amp; below</td>
<td>0-57%</td>
<td>F</td>
</tr>
</tbody>
</table>

**Description of Graded Work**

**Exams:** Four lecture exams will be taken in this course. Each is worth 100 points.

The exams will cover material presented in textbook chapters. Questions will consist of multiple choice, T/F, labeling, and matching-type questions. Chapter assignment questions may also be similar in format to those questions found on exams.

All exams will be taken online using eCampus (see Exams button). There is a 4 day window to take the exams. **All exams expire at 7 pm on the scheduled day** (central daylight time). This means you must start the exam by no later than 6:00 pm on the last day in order to have the full hour to complete it. Exams are approximately 50 questions in length.

**Students may only take/attempt an exam once!** Students may NOT start an exam, SAVE it, then go back to it. The exam is timed. You will be given one hour to complete the exam. Exams that experience technical problems (as verified by eCampus administrators) will be reset ONCE! If a student continues to exhibit problems while
taking the exam, he/she will have to come to CVC's campus to take a paper version of the exam. If this is not possible due to the student’s location, he/she will be encouraged to either take the average of other exams and/or drop the course. No other options are possible. The exam is designed to automatically submit at the one hour mark. In the event of a technical issue in which the exam does not submit on its own, it is the student’s responsibility to keep track of the time and submit at one hour. **Ten points will be deducted from the exam grade per minute the student exceeds the time limit if the system fails to submit on its own!** These penalties WILL BE ENFORCED! This does not allow a student to take extra time on the exam. This point deduction is for the sole purpose of ensuring the exam is submitted at the one hour mark either by the system itself or by the responsibility of the student.

There are no re-takes on exams. Students are EXPECTED to adhere to the HONOR CODE when taking an exam. No books, notes, websites, online materials, or other individuals are to be consulted while the student is engaged in an exam. Students who did NOT agree to the HONOR CODE may NOT take the exam and/or receive a grade for the exam.

Once an exam has expired, the student will NOT be permitted to make it up without a valid medical excuse and/or valid emergency.

Students may only access the exam through the Respondus Lockdown and Monitor Browser associated with DCCCD ecampus. All exams require a password provided for the student in a course announcement.

"Procrastination is NOT your friend!" Waiting until the last possible moment to take your exam nearly always ends in tragedy.

**Exam Schedule:** Please see ecampus Calendar

**Orientation:** Orientation assignments including taking the Honor Code, Email Etiquette, Discussion Board Etiquette and syllabus quizzes. Lastly, the student will also email the instructor with the following information: first/last name, course/section number, major & future career plans.

Please see the ecampus calendar for the Orientation button and assignments. All orientation assignments are due by 11pm on the due date.

**Genetics Project**

Your assignment is to investigate a genetic disorder tied to a gene or chromosome. You will create a 10-15 slide PowerPoint presentation about a genetic disorder. Remember, one disorder per person (no duplicates). Each student will sign up for his/her genetic disorder under the Genetics Project button. Detailed instructions can
be found under the Genetics Project Button on ecampus. Students will be required to submit their project to Turnitin.com for plagiarism detection.

**The project is due by 11pm on the date listed in ecampus.**

**Virtual Laboratory Assignments**

Laboratory assignments are found under the Laboratory button on eCampus. They require students to download a worksheet (word document) from eCampus BEFORE going to the website to complete the lab simulation.

**All labs are due on the scheduled day by 11pm.**

Answers on worksheets must be in another color font (a color not close to black or a pastel). This includes any tables that must be completed. Some labs require screen shots of the data or tables completed. Tables may be recreated in another document if necessary and inserted into the worksheet.

Submit the labs as Word documents (.doc or .docx).

Screen shots must include not only the lab related material, but the **time and/or date** the assignment was completed on the “screen” at the time the image was captured.

The instructor will grade lab assignments **within a week after the due date**; however, once an assignment is submitted, it is considered ready for grading (even if before the due date). Only submit assignments you want graded.

**All labs are due by 11pm.**

**Chapter Review Assignments**

The Chapter Review (CR) assignments are found on eCampus under the “Chapter Review” button.

Students must complete all of the 14 assigned chapters. Each is worth 10 points. The entire chapter Review Assignment is worth 140 pts (like an open-book test). Any CR Assignment completed after its assigned deadline is worth half credit up until the final deadline which corresponds with the exam 4 chapter deadline.

Students have until **the deadline stated on ecampus** to complete all CR Assignments (not just those for exam 4). The assignments become unavailable after 11 pm by this deadline. No credit will be given after the final deadline.
Any CR Assignments completed after the assigned due date are worth half credit. This grade will be determined at the end of the semester. Students are encouraged to complete all CR assignments before each stated deadline to better their understanding of the material and prepare for the exams.

**Discussion Boards**

Discussion board (DB) submissions must be **original**. Students may not submit information on the same events or diseases. Students must adhere to the guidelines presented in the discussion board link.

Each DB requires the student to research a topic, post an original discussion over that topic, give the MLA citation for sources consulted, and then **reply to another student’s post in an educational manner**. Replying to another student’s post requires the student to research that other student’s topic and add facts not already discussed and/or compare/contrast the topic with his/her own if applicable. An MLA citation must be included for the reply to another student to support the information presented. **Web links are not acceptable MLA citations.**

Discussion boards are intended for instructional use only. Any information posted on the discussion board must adhere to the guidelines of the assignment given in the instructions of each discussion board. **All information posted on the discussion board must be supported** (by giving the citation and/or source in the discussion board using MLA documentation rules) by scientific fact in this course. This means the information must be derived from a peer-reviewed scientific journal (not a magazine or newspaper), scientific text book, or scientific paper published by a legitimate scientific society and written by a member of the scientific community. Once again, be careful when searching internet sources. Many are not supported by the scientific community and/or are plagiarisms of other sites. Do **NOT** copy and paste material onto the discussion board that isn’t your original work.

Below are examples of acceptable scientific publications (you are not limited to these):

- Journal of Clinical Microbiology
- Epidemiology Reviews
- American Society for Microbiology News (ASM News)
- Science
- Nature
- Morbidity and Mortality Weekly Report (MMWR)
- Journal of Virology
- Journal of Infectious Diseases
- New England Journal of Medicine
- Emerging Infectious Diseases (EID)
- Lancet
- Journal of Bacteriology
Examples of unacceptable sources for this course:

Wikipedia.com - never acceptable
Time
National Geographic
National Inquirer
Any newspaper (such as: Dallas Morning News, USA Today, New Yorker)
Reader’s Digest
Globe
Any other magazine: Men’s Health, Women’s Health, Good Housekeeping

***In no way are these lists all inclusive. These are meant to represent examples of what is and is not acceptable. When in doubt, please contact me prior to posting any information.

***The use of unacceptable sources or the avoidance of using a source will result in the loss of points for an assignment.

***Failure to adhere to discussion board etiquette may result in the student being blocked from using the discussion board and a loss of points.

Attendance and Your Final Grade

In general, daily class attendance enhances student achievement of an A, B or C in the course.

This course is completely online (lecture and lab). Students are expected to make posted deadlines and participate accordingly. Late work is NOT accepted for any lab, discussion board, project, exam or orientation assignments. Chapter reviews are worth half credit if late (see Chapter Review Assignments section above). Extensions are NOT given on the other assignments. Failure to purchase required materials is not an excuse for missing work. Technical issues are the student’s responsibility to work through. Waiting until the last minute to complete work then running into technical issues can cause a student irreparable damage in the course. Students are encouraged to work ahead in order to avoid such situations.

In the event of an emergency and/or life changing event occurs, the student should notify the instructor as soon as possible of the situation. Documentation of the event will be required. Because life is unpredictable, students should do their best to work ahead on all assignments.
Your final grade is determined by the total number of points earned out of the total possible points available written as a percentage. The percentage grade does not indicate the number of points, but rather the % of this total. Students who do Not earn the minimum number of points for each grade level (i.e. A, B, C, or D) will obtain the grade to which their total number of points corresponds. Due to the adjusted letter grade scale in this class, no bonus points, extra assignments, or almost there points will be given.

Certification Policy

You must attend and participate in your online course(s) in order to receive federal financial aid. Your instructor is required by law to validate your attendance in your online course in order for you to receive financial aid. You will be required to complete all orientation assignments and send an email to your instructor telling him/her your major and future career plans.

Late Work Policy

Late work is not accepted in this course. If an emergency situation occurs, you must contact the instructor. Documentation will be required for any exception to this policy at the instructor’s discretion. Students are expected to work ahead in the course as much as possible to prevent the need for this consideration. Assignments that do not fully upload into ecampus by the deadline are considered late. It is up to the instructor’s discretion as to whether or not to accept a “resubmit” of that “pending” assignment.

Other Course Policies

Email Etiquette: When sending an email message to an instructor there are a few guidelines to follow:

1. Address the instructor by the title he/she deems appropriate.
2. Always include your name, course, and section number in the email. The subject line of the email MUST include your course and section number.
3. Never use foul, vulgar, inappropriate, discriminatory, rude, or otherwise unprofessional language in the email.
4. Remember, the relationship between the student and the instructor is a professional relationship not a friendship; therefore, be sure not to include instructors in your forwarded emails to friends, chat rooms, or personal updates.
5. Please use complete sentences and proper punctuation in correspondence. Emails between the instructor and student is to relate to course, campus or educational matters.
6. Rude or otherwise disrespectful emails will NOT be answered. Do not spam the instructor. Doing so will result in an automatic zero for the subject matter and/or the email will be ignored.

**Discussion Board Etiquette:** This science course is based on scientific fact alone, not personal opinions. Please refrain from using the discussion board to express political viewpoints, as a dating service, to advertise any and all types of solicitation, from expressing religious viewpoints or quoting Biblical passages, or giving personal opinions. Please refrain from using any inappropriate language in the discussion boards. Please do not “sign” discussion boards. The discussion board will automatically be posted with your name.

**Academic Dishonesty Course Contract**
Academic dishonesty as defined in the District Catalog includes, but is not limited to, cheating on a test, quiz, or assignment; plagiarism (including the internet); copying another student’s lab or lecture work; or allowing another student to copy all or any portion of an assignment. All assignments are to be in the students’ own words.

All assignments are to be completed only by the student enrolled in the course.

Written assignments require an MLA citation for all information and sources consulted. A maximum of five sentences may be quoted in any assignment turned into this course. Assignments that exceed the five quoted sentence maximum are considered to be plagiarized. Please be aware that many internet sites are actually plagiarisms of other sites. When documenting an internet site, the student must be sure that he/she is using the “original” source of the information. All work must be the student’s original words, not just a manipulation of word or sentence order.

Lab assignments, handouts, online labs, in class assignments, and chapter reviews are to be completed by the student enrolled in the course. Students may consult notes, the text book, or other valid sources for these assignments/tasks. Students are NOT to work together to complete assignments.

All examinations are intended to test a student’s knowledge of learned and acquired information. Examinations (tests) are NOT open-book or open notes. Students will be on their honor to NOT consult any material or person while engaging in an exam. Students may only enter/take an exam once. You may NOT “save” an exam and come back to it later. Severe penalties exist for exceeding the testing time limit.

Academic dishonesty will not be tolerated.
Any student found to be violating any portion of the academic dishonesty policy will automatically receive a zero (without exception or discussion) for that material being tested over or that assignment being evaluated.

Further action for the violation may include expulsion from the course and/or college. This means that each student should guard against another student acquiring information from his or her assignment, to use original information (not plagiarized information), and refrain from consulting any source of material during an exam.

Students who intentionally obstruct the camera, move excessively out of the frame of view, do not show their face during the entire exam, or have other people present/assisting during the exam are subject to receiving a zero on the exam. Repeated offenses will be reported to the administration.

Students repeating the course are not permitted to use any old assignments or graded materials. All written assignments must be new, not just modifications of old assignments.

Exact (or overwhelmingly similar as per the instructors discretion) duplication of an assignment (in any form) will not be accepted, and a grade of zero will be given. If further clarification of this policy or explanation of actions that will be taken for any and all violations is necessary, please contact the instructor. Students MUST agree to this policy in order to receive ANY credit in this course for ANY assignment.

**Institutional Policies**

Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

[Cedar Valley Institutional Policies](http://www.cedarvalleycollege.edu/syllabipolicies)

**Course Schedule**

For maximum success in this course you should spend a *minimum* of 21 hours per week working on course material.

<table>
<thead>
<tr>
<th>Week</th>
<th>(Chapter/Topic)</th>
<th>Major Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intro to Biological Concepts &amp; Research (1)</td>
<td>Metric Assignment</td>
</tr>
<tr>
<td>2</td>
<td>Life, Chemistry &amp; Water (2)</td>
<td></td>
</tr>
</tbody>
</table>
| 3 | **Orientation Due by 11pm**  
  
(syllabus quiz, Honor Code quiz, email to instructor, email etiquette & DB etiquette quizzes, Intro DB) |  
  | Life, Chemistry & Water (2) | Scientific Method lab due |
|---|---|---|
| 4 | Biological Compounds: The Carbon Compounds of Life (3) | DB Scientific Current Event due |
|  | Biological Compounds: The Carbon Compounds of Life (3) | Enzyme lab due |
| 5 | **EXAM ONE** | Exam 1 Chapter Review Assignments Due |
|  | Energy, Enzymes, & Biological Reaction's (6) | Cell Lab Due |
|  |  |  |
| 6 | Cells (4) | Diffusion & Osmosis Lab Due |
|  | Membranes and Transport (5) |  |
|  |  |  |
| 7 | **EXAM TWO** | Exam 2 Chapter Review Assignments Due |
|  | Cellular Respiration (7) | Microorganisms & Disease due |
|  |  | Respiration & Photosynthesis Lab Due |
| 8 | Photosynthesis (8) |  |
|  | Mitosis (10) | Mitosis Lab Due |
| 9 |  |  |
| 10 |  |  |
| 11 | Meiosis (11) | Exam 3 Chapter Review Assignments Due |
| 12 | **EXAM THREE** | Biotech DB Due |
|  | Mendel, Genes and Inheritance (12) | Genetics Lab Due |
|  | Genes, Chromosomes, & Human Genetics (13) |  |
| 13 | **Drop Date** | Genetics Project Due |
| 14 | DNA Structure & Replication (14) | DNA Lab Due |
| 15 | From DNA to Protein (15) | All remaining Chapter Review Assignments Due |
| 16 | **EXAM FOUR (FINAL)** |  |