

COURSE # BIOL 1610

College Biology I

*2018-2019*

**Instructor**

**Instructor:**

**Phone:**

**Email:**

**Office Hours:**

**Course**

## Course Description

***This is a Concurrent Enrollment Course, offering both high school credit through \_\_\_\_\_\_\_\_\_\_\_\_\_\_ High School and college credit through Utah Valley University. Credit from this course is transferable to all colleges and universities. Contact the receiving institution for how the credits will be applied.***

**Catalog Description**

Gives a broad exposure to many aspects of the life sciences. Covers topics of biochemistry, energetics, cell structure and function, genetics, and evolution. BIOL 1615 must be taken concurrently by Biology Department majors.

**Course Prerequisites**

This class is available to all high school students in good academic standing. High school prerequisites apply.

## Course Objectives or Learning Outcomes

**Course goals:** The successful student in this course will develop a strong foundation in the fundamental concepts of biology and a deeper understanding how living thing function at the cellular level and how biological concepts relate to real life scenarios. **College Biology I is the Chemistry, Cellular, Genetics and Evolution segment of this two part course. This is an intensive course. It will prepare you for the other Biology classes you will take here at UVU. You need to be willing to give your best and you have to read the material before class if you want to succeed** **in this class.**

This course is central to the biology curriculum at UVU and provides the fundamentals for many courses in your major. Some examples given in the figure below:

Chemistry of life

Cells

Genetics

Evolution

**BIO 3400 – Cell Biology**

**BIO 3600 Biochemistry**

**BIO 3500 – Genetics**

**BIO 3550 – Molecular biology**

**BIO 4500 – Evolution**

**ZOOL 2420 –Human physiology**

**MICR 2060 – Microbiology for Health professions**

**Learner outcomes:** At the end of this course you should be able to:

 Apply basic concepts of biology to scenarios that apply to real life

 Use information given to determine the functions of the different organelles in the cell.

 Integrate concepts and relate them to unifying themes of biology such as evolution.

Compare and contrast eukaryotic and prokaryotic cells, their structure, function and evolution.

Apply concepts of metabolism, cell, genetics and evolution to real life scenarios.

**Required Text and Materials**

**Text:** Biology Open Stax = <https://openstax.org/details/biology>

 **We will be using Waymaker for the book, quizzes/assignments, please check Canvas**

**Required:** **iclicker2 or phone access to the iclicker https://www1.iclicker.com/purchase/**

It is **essential** that you use Canvas. There you will find your quizzes, syllabus, presentations, assignments, grades, announcements.

**Department Policies**

**Assessment**

Students answer questions at higher cognitive level of Bloom’s taxonomy, applying the material learned.

 Inquiry-based exercises where students apply the concepts learned. This will comprise in class quizzes, pre-quizzes due before class (In Canvas), in class exams and in class exercises.

**Student expectations:**

 Students are expected to attend class and actively participate. There will be quizzes and assignments done in class and these CANNOT be made up outside of the class period in which the assignment was given. Good attendance also means being to class on time. Excused absences are only for official college activities and require a signed letter indicating the dates of absence. Absences for illness, family crisis, etc. are not excused absences.

Disruptive behaviors include talking while other students are talking, working on other classes while in class, using the computer in ways unrelated to the course, use of headphones. Students engaging in such activities are being disrespectful to their classmates and will be asked to stop their behavior or leave the classroom.

**Please read the Academic responsibilities (page 30) of Catalog:** [**http://www.uvu.edu/catalog/current/policies-requirements/index.full.pdf**](http://www.uvu.edu/catalog/current/policies-requirements/index.full.pdf)

* 1. **Cheating** is the act of using or attempting to use or providing others with unauthorized information, materials or study aids in academic work. Cheating **includes,** but is not limited to **passing examination answers to** other students or taking examinations for someone else, or preparing or copying other’s academic work.

**You are only allowed to use your own clicker**. The use of someone else’s clicker falls under UVU’s definition of cheating.

* 1. **Plagiarism** is the act of appropriating any other person’s or group’s ideas or work (written, computerized, artistic, etc) or portions thereof and passing them off as a product of one’s own work in any academic exercise or activity.

**In this class there is ZERO TOLERANCE for lapses of academic integrity. Any student found to be guilty of lying, falsifying, cheating, plagiarism or any other form of academic dishonesty will be given a failing grade. The sanctions applied are described in the catalog (**<http://www.uvu.edu/catalog/current/policies-requirements/index.full.pdf>**).**

**Incomplete Grades**: A grade of “I” (Incomplete) is the instructor’s option and is only given under extenuating circumstances for which there is verifiable written documentation – Extenuating circumstances includes (1) incapacitating illness which prevents a student from attending classes (usually more than five consecutive class days); (2) a death in the immediate family; (3) change in work schedule as required by employer; or (4) other emergencies deemed acceptable by the instructor**” (**[**http://www.uvu.edu/catalog/current/policies-requirements/index.full.pdf**](http://www.uvu.edu/catalog/current/policies-requirements/index.full.pdf) **)**

**UVU Policy**: “If a student stops attending (but does not officially withdraw) beyond the last day to withdraw, he/she may receive a “UW”, the grade earned up to that point, or an “E”, at the instructor’s discretion.

<http://www.uvu.edu/catalog/current/policies-requirements/index.full.pdf>

 “**UWs” are calculated into the grade point average (GPA) as 0.00,** the same as “E” (failing grades).

A grade **“W”** official withdrawal is **not computed into the GPA.** If you have problems that interfere with your performance in the class, it is better to withdraw the class.

Student timetable: <http://www.uvu.edu/schedule/docs/spring-timetable17-10-7.pdf>

Last date to drop and not show on transcript**: Sept 7**

Last day to Withdraw/Audit classes: **Oct 19**

**Grading Scale**

**Assessment methods and point distribution:**

|  |  |  |
| --- | --- | --- |
|  | **Points** | **Comments** |
| Midterm exams (4 exams, each 100 points | 300 | Drop the lowest |
| Final exam | 110 | Required |
| In class clicker quizzes- attendance required – each chapter worth 5 points | 90 | Drop 2 clicker quizzes |
| Internet quizzes | 280 | Drop 2  |
| In class assignments (papers, worksheets, in class activities- each worth 10 points | 140 | Drop 2 assignments |
| Total | 800 |  |

**All unit exams are comprehensive: any material covered up to that point in the semester may be on the exam**. The midterm exams will be given **in class** and will include fill in the blank, essay-type answers and multiple choice.

**Grading Scale:**

|  |  |  |
| --- | --- | --- |
| A = 94 % & above  | A- = 90-93.99% | B+ = 86-89.99%  |
| B = 83-85.99%  | B- = 80-82.99%  | C+ = 76-79.99% |
| C = 73-75.99%  | C- = 70-72.99% | D+ = 66-69.99% |
| D = 63-65.99% | D- = 60-62.99% | E (failing) = Below 59.99 |

**Grades and Credit**

Your grade for this class will become part of your permanent college transcript and will affect your GPA. A low grade in this course can affect college acceptance and scholarship eligibility.

Grades are determined by instructors, based upon measures determined by the instructor and department and may include: evaluation of responses, written exercises and examinations, performance exercises and examinations, classroom/laboratory contributions, mastery of pertinent skills, etc. The letter grade “A” is an exceptional grade indicating superior achievement; “B” is a grade indicating commendable mastery; “C” indicates satisfactory mastery and is considered an average grade; “D” indicates substandard progress and insufficient evidence of ability to succeed in sequential courses; “E” (failing) indicates inadequate mastery of pertinent skills or repeated absences from class; “UW” indicates unofficial withdrawal from class.

**University Policies**

**Academic Integrity**

Utah Valley University expects all students to maintain integrity and high standards of individual honesty in academic work, to obey the law, and to show respect for others. Students of this class are expected to support an environment of academic integrity, have the right to such an environment, and should avoid all aspects of academic dishonesty. Examples of academic dishonesty include plagiarizing, faking of data, sharing information during an exam, discussing an exam with another student who has not taken the exam, consulting reference material during an exam, submitting a written assignment which was authored by someone other than you, and/or cheating in any form.

In keeping with UVU policy, evidence of academic dishonesty may result in a failing grade in the course and disciplinary review by the college.  Any student caught cheating will receive, at minimum, zero points on that particular assignment for the first offense.  A second offense can result in failing the course and will entail being reported to Student Advising.  Academic dishonesty includes, in part, using materials obtained from another student, published literature, and the Internet without proper acknowledgment of the source.   Additional information on this topic is published in the student handbook and is available on the UVU website.

### **Student Code of Conduct**

All UVU students are expected to conduct themselves in an appropriate manner acceptable at an institution of higher learning. All students are expected to **obey the law**, to **perform contracted obligations**, to **maintain absolute integrity and high standards** of individual honesty in academic work, and to observe a **high standard of conduct for the academic environment**.

The Student Rights and Responsibilities Code, or Code of Conduct, outlines for students what they can expect from the University and what the University expects of them.

Students should review their Rights and Responsibilities. The Code of Conduct also outlines the process for academic appeals, and appeals related to misconduct and sanctions. It can be found at <http://www.uvu.edu/studentconduct/students/>

**Student Responsibilities**

You are expected to take an active role in the learning process by meeting course requirements as specified in written syllabi. Faculty members have the right to establish classroom standards of behavior and attendance requirements. You are expected to meet these requirements and make contact with faculty members when unable to do so.

**Withdrawal Policy**

If you do not wish to take this course or find that you are unable to continue, you should officially withdraw by the deadline stated in the current semester UVU Student Timetable.

You can officially withdraw from a course by dropping it through the online registration system or the campus One Stop desk (BA 106) by the listed date. If you officially withdraw from a course by the "Last Day to Drop and Not Show on Transcript," the course will not appear on your academic transcripts. If you officially withdraw from a course by the "Last Day to Withdraw," a "W" will appear on your transcripts. Although your GPA will not be affected — a "W" will indicate that you chose to withdraw. If you fail to complete the course and do not drop it before the "Last Day to Withdraw," a "UW" or "E" (a failing grade) will appear on your transcripts.

Withdrawing from a course may impact your financial aid status. For more information, see: UVU Financial Aid.

**Cheating and Plagiarism Policy Procedures**

This document was taken from the Utah Valley University Policy 541, The Student Rights and Responsibilities Code

5.4.4 Each student is expected to maintain academic ethics and honesty in all its forms, including, but not limited to, cheating and plagiarism as defined hereafter:

1) Cheating is the act of using or attempting to use or providing others with unauthorized information, materials, or study aids in academic work. Cheating includes, but is not limited to, passing examination answers to or taking examinations for someone else, or preparing or copying another's academic work.

2) Plagiarism is the act of appropriating another person's or group's ideas or work (written, computerized, artistic, etc.) or portions thereof and passing them off as the product of one's own work in any academic exercise or activity.

3) Fabrication is the use of invented information or the falsification of research or other findings. Examples include but are not limited to:

a) Citation of information not taken from the source indicated. This may include the incorrect documentation of secondary source materials.

b) Listing sources in a bibliography not used in the academic exercise.

c) Submission in a paper, thesis, lab report, or other academic exercise of falsified, invented, or fictitious data or evidence, or deliberate and knowing concealment or distortion of the true nature, origin, or function of such data or evidence.

 d) Submitting as your own any academic exercise (written work, printing, sculpture, etc.) prepared totally or in part by another.

### **Students with Disabilities**

**Students who need accommodations because of a disability** may contact the UVU Office of Accessibility Services (OAS), located on the Orem Campus in LC 312. To schedule an appointment or to speak with a counselor, call the OAS office at 801-863-8747. Deaf/Hard of Hearing individuals, email [nicole.hemmingsen@uvu.edu](https://owa.uvu.edu/owa/redir.aspx?C=r3xUa4y2bkalWljgIj1VXM3KzYlusNIIESMqIpkF5USfG-H3cUMstYl8DNScKc_quB49PvOQ-l0.&URL=mailto%3anicole.hemmingsen%40uvu.edu) or text 385-208-2677.

**Religious Accommodations**

At the beginning of each semester, you shall promptly review the course syllabus and class schedule and notify faculty to request an accommodation for sincerely held religious beliefs and practices using the *Religious Accommodation Request Form*.

**Dangerous Behavior**

The faculty member has the right to demand and secure the immediate removal of any person from the classroom whenever the faculty member determines, to the best of his or her knowledge or belief, that the person's actions are threatening or dangerous to students or themselves. If the faculty member cannot resolve a disruptive situation, the faculty member may request that the disruptive person(s) leave the classroom. If the disruptive person(s) will not leave voluntarily, the faculty member may call University Police for assistance. The incident shall be reported to the Dean of Students and to the Director of Judicial Affairs in accordance with Policy 541 *Student Rights and Responsibilities Code*.

**Discriminatory, Exclusionary, or Disruptive Behavior**

Faculty members observing discriminatory, exclusionary, or disruptive behavior follow procedures described in UVU Policy 541 *Student Rights and Responsibilities Code.* 5.6

**Attendance**

Attendance in this class is not mandatory due to the different learning preferences with each student. However, class will be held according to the schedule on the top of this syllabus. Chapters will be covered in class as listed in the semester schedule below. Class will consist of chapter reviews, discussion and group activities.

**Policies/References**

1. Policy 541: Student Rights and Responsibilities Code <https://www.uvu.edu/catalog/current/policies-requirements/student-rights-and-responsibilities.html>
2. Policy 601: Classroom Instruction and Management. <https://policy.uvu.edu/getDisplayFile/5750ed2697e4c89872d95664>
3. Policy 635: Faculty Rights and Professional Responsibilities. <https://policy.uvu.edu/getDisplayFile/563a40bc65db23201153c27d>

**Definitions**

* 1. Syllabus: An agreement between faculty and students that communicates course structure, schedule, student expectations, expected course outcomes, and methods of assessment to students.

### **Dropping the Class**

### \_\_\_\_\_\_\_\_\_ is the last day to drop the course without it showing on your transcript.

\_\_\_\_\_\_\_\_\_ is the last day to withdraw from the class.
If you drop the high school class, you must also withdraw from the UVU class to avoid receiving a failing grade.

Due dates and this syllabus may change at the instructor’s discretion due to the needs of the class members.

**Course schedule**

**Note: Schedule is tentative. Schedule changes announced in class and in Canvas take precedence over this schedule. Assigned readings will be announced in class and in Canvas®**

Please read the assigned sections in advance of coming to lecture and answer the pre-lecture quiz before coming to class

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** |  |  | **Discussion and Reading assignments** |
| 1 | Tue | Aug 22 | Module 1- Course introduction- syllabus –course logistics –Module 1-Introduction to Biology |
| Thur | Aug 24 | Module 1 Introduction to biology. Module 2- Chemistry of life  |
|  |  |  |
| 2 | Tue | Aug 29 | Module 2-chemistry of life |
| Thur | Aug 31 | Module 3-macromolecules |
|  |  |  |
| 3 | Tue | Sept 5 | Module 3-macromolecules |
| Thur | Sept 7 | **Test 1**  |
|  |  |  |
| 4 | Tue | Sept 12 | Module 4- cellular structure |
| Thur | Sept 14 | Module 4- cellular structure, module 5-cell membranes |
|  |  |  |
| 5 | Tue | Sept 19 | Module 5-cell membranes- Module 6 metabolic pathways |
| Thur | Sept 21 | Module 6 metabolic pathways -photosynthesis |
|  |  |  |
| 6 | Tue | Sept 26 | Module 6-metabolic pathways- Respiration |
| Thur | Sept 28 | **Test 2**  |
|  |  |  |
| 7 | Tue | Oct 3 | Module 7-cell communication |
| Thur | Oct 5 | Module 7-cell communication- Module 8-cell division |
|  |  |  |
| 8 | Tue | Oct 10 | Module 8-cell division |
| Thur | Oct 12 | Module 8-cell division - Module 9- DNA structure and replication |
|  |  |  |
| 9 | Tue | Oct 17 | Module 9- DNA structure and replication  |
| **Thur** | **Oct 19** | **Fall Break** |
|  |  |  |
| 10 | Tue | Oct 24 | **Test 3**  |
| Thur | Oct 26 | Module 10- transcription/translation |
|  |  |  |
| 11 | Tue | Oct 31 | Module 10- transcription/translation |
| Thur | Nov 2 | Module 11-trait inheritance |
|  |  |  |
| 12 | Tue | Nov 7 | Module 11-trait inheritance |
| Thur | Nov 9 | Module 11-trait inheritance |
|  |  |  |
| 13 | Tue | Nov 14 | Module 12-evolution |
| Thur | Nov 16 | **Test 4**  |
|  |  |  |
| 14 | Tue | **Nov 21** | **Thanksgiving** |
| Thur | **Nov 23** | **Thanksgiving** |
|  |  |  |
| 15 | Tue | Nov 28 | Module 12-evolution |
| Thur | Nov 30 | Module 13-modern biology |
|  |  |  |
| 16 | Tue | Dec 5 | Module 13-modern biology |
| Thur | Dec 7 | Module 13- modern biology |
|  |  |  |  |
|  |  |  | **Final exam - IN CLASS according to schedule http://www.uvu.edu/asc/exam\_schedule.html** |

"All items in this syllabus are subject to modification to correct errors or to accommodate extenuating circumstances.”