

SYLLABUS – BSC 2933, Spring 2022

Course: Special Topics in Biology, Section 28275, 1 credit

Instructor: Professor Barbara Gutierrez, MS

Location: online

Contact Information: Canvas messaging (preferred) or e-mail: bgutierrez3@valenciacollege.edu, expect a reply within 24 hours (weekends excepted)

Office Hours: via Zoom links in Canvas on Mondays 1-6 pm, Tuesdays 8-noon Wednesdays 3-7 pm, Thursdays 1-5 pm, and Saturdays 9-10 am, other hours by appointment

Prerequisite:

Departmental Approval.

Course Description:

Selected topics in biological sciences based on historical, traditional or contemporary approach as background and interest of students and professor dictate. In this course, we will be conducting the laboratory portion of General Biology I.

Course Objectives:

Upon successful completion of this course, the student should be able to:

- Demonstrate competency in the application of critical thinking and scientific reasoning.
- Differentiate between living and non-living entities.
- Model and categorize the fundamentals of molecular structure and functions associated with living organisms.
- Compare and contrast the structure and function of prokaryotic and eukaryotic cells.
- Demonstrate an understanding of the structure and function of cell membranes and the implications for cellular processes.
- Explain the processes of energy transformation as they relate to cellular metabolism.
- Evaluate asexual and sexual reproduction as they relate to genetic variation
- Model the processes and patterns of inheritance in eukaryotic organisms.
- Describe or model the regulation and expression of genetic information.

Valencia Student Core Competencies:

Valencia College faculty members have defined four interrelated competencies (Think, Value, Communicate, Act) that prepare students to succeed in the world community. These competencies are outlined in the [College Catalog](#). In this course, through lecture and discussion, group work, and other learning activities, you will further develop your mastery of those competencies.

CLAST Competencies: Certain CLAST competencies are required for this course.

Attendance and Withdrawal from Course:

The drop/refund deadline is **January 18th**. To remain active in the course after that date, you must have completed all parts of the Welcome Module in Canvas and turned in at least one completed

assignment through Connect by that date or you will be withdrawn as a no-show. Per Valencia College policy 4-07, if you withdraw from this course before the established withdrawal deadline of **March 25th**, you will receive a grade of “W.” If you withdraw from class during a third or subsequent attempt in the same course, you will be assigned a grade of “F.” If you are receiving financial aid, you are advised to consult with [an advisor](#) prior to withdrawing from this course.

Required Text:

Connect Access Code Biology Virtual Labs, McGraw-Hill, ISBN 9781264349739

West Campus Bookstore:

Campus Store will be open Monday – Friday, 8 a.m. – 6 p.m.

Campus store window pick-up will be available Monday – Saturday, 8 a.m. – 6 p.m.

Downtown Campus

The Campus Store at the Downtown Campus is owned and operated by Barnes & Noble and will continue to operate online for the Fall 2021 term. Visit the [Campus Store website for the Downtown Campus](#) for more information and to [order online](#).

Other Campuses

Valencia Campus Stores will be closed during the Fall 2021 term. Visit the [Valencia Campus Store website](#) for more information and online ordering.

Customer Service

Monday – Friday 8 a.m. – 6 p.m.

407-299-5000, extension 5310

onlineorder@valenciacollege.edu

Learning Support Services:

I recommend that you see me or seek assistance from [Learning Support Services](#) as questions arise. Learning Support Services provides students with academic support through distance tutoring, face to face tutoring at the campuses, writing consultations, library services, and resources. Tutoring is offered in most academic disciplines including math, science, foreign languages, English for academic purposes (EAP), computer programming and writing assistance for any course. Assistance with library research can be accessed online through Atlas or the tutoring LibGuide. For more information on how to access tutoring and library research assistance, please visit the college-wide Learning Support Services LibGuide at: www.valenciacollege.edu/tutoring

Please note: Brainfuse is our new 24/7 online tutoring and learning hub, which is available to all of Valencia’s students. This service is best used as a back-up to Valencia’s Distance Tutoring service, not as a replacement. Brainfuse is accessible through Canvas or by visiting www.valenciacollege.edu/tutoring

COVID Statement:

Valencia College has a [robust and tested response to COVID](#) and plans to keep our campuses, colleagues, and students healthy and safe and to ensure the continuity of student learning.

Health and Safety Protocols and Plans

- **Vaccines** are strongly recommended for everyone who is eligible to receive one. Valencia is partnering with the state and local health departments to provide over 70 on-campus vaccine clinics between now and the end of September. The clinics are open to anyone (students, families, community members) and provide the vaccine at no charge.
 - o More information on vaccines can be found at: <https://valenciacollege.edu/about/coronavirus/covid-19-vaccine.php> (scroll down to see a listing of all on-site clinics).
 - o To learn about vaccine safety, you can use this libguide created by Valencia librarians: <https://libguides.valenciacollege.edu/COVID19Vaccines/home>
- **Masks** are expected, but not required, indoors on Valencia campuses. Valencia has ordered tens of thousands of masks which will be available in classrooms, building entrances, and other easily accessible locations.
- **Cleaning and Sanitization** protocols are robust and in place. The facilities team has installed over 2,000 hand sanitizer dispensers and continues to [implement cleaning protocols](#) to keep our facilities clean.

COVID Illness Reporting and Contact Tracing

- Valencia has [robust illness reporting and contact tracing procedures](#) in place. Two full time staff members are dedicated to supporting individuals with a COVID diagnosis, those who are identified as close contacts, and others who aren't feeling well.
- **A student who is not feeling well, has been in close contact with someone who is COVID positive, or has a positive COVID diagnosis, should not come to the campus and should as soon as possible contact their professor AND the COVID case management team for next steps, support, and clearance to return.** Your professor will also contact the case management team in these situations to ensure reporting and receive guidance for the class. The case management team is well trained to implement CDC isolation and quarantine protocols, to clear students to return, and keep Valencia's classrooms safe. Reach out at covidillness@valenciacollege.edu for support – and know that the email box is monitored seven days a week.
- **A close contact is defined** by the Centers for Disease Control and Prevention as someone who is within 6' of distance of a COVID positive individual for more than 15 cumulative minutes. Whether individuals are vaccinated or masked does not impact the definition of a close contact – and close contacts are quarantined based on CDC guidelines. This means that in order to keep everyone safe and to avoid quarantines of large numbers of individuals, Valencia College will work to ensure students distance from one another in class. Professors walking around the classroom and engaging in short times of close contact (less than 15 cumulative minutes) is an acceptable practice and does not require reporting.
- Valencia has a partnership with Orlando Health to provide access to a virtual visit and COVID testing for those without insurance if needed.

If you are unable to participate in the course due to illness, family emergency, etc., please communicate with me as soon as possible in order to create a plan to complete any missed assignments so that your learning can progress in your course. In the case of a prolonged online absence, please communicate with me as soon as possible in order to create a plan for the best course of action.

Grading Policy: Final grades will be determined in the following manner:

90-100%=	A
80-89% =	B
70-79%=	C
60-69%=	D
0-59%=	F

To calculate your grade at any given time, add up your total points earned and divide by the number of points possible thus far; it is your responsibility to keep track of your scores. For privacy reasons, grades will only be disclosed via posting at mid-term and end of term in ATLAS or in a private Zoom meeting; they will not be given via e-mail or telephone. Evaluation of your mastery of biological concepts and procedures will be determined as follows:

Category	Description	Points or %
Lab Exams	2 at 100 points each	66.6%
Connect Labs	12 labs, various points each	33.4%
Total points or %		100%

Examinations:

All tests must be taken by the dates assigned. No makeup tests will be given without explicit **prior** consent of the instructor, which will only be granted in cases of documented extreme emergency (ie hospitalization, jury duty, military deployment). Any missed exams will result in a grade of 0 for the exam unless/until it is made up. Exams may contain information covered on previous tests.

Proctored Exam Requirement:

This course utilizes Honorlock, an online exam proctoring service, to promote academic integrity during online testing. You do not need to create an account, download software (except for a plug-in), or schedule an appointment in advance. Honorlock is available 24/7. After you verify your identity and scan your room, you can begin your exam. You will be remotely monitored and recorded while taking the exam, including your internet activity, attempted use of other devices and interactions with other people at your location. Canvas will also keep a record of your internet activity, including during the exam. The recorded information will be subject to the protections of the College's policy on Student Records.

To take an online exam, you will need:

- A laptop or desktop computer with a microphone (not a tablet or phone)
- A webcam
- Reliable Internet connection
- Photo identification in the form of a Valencia-issued student ID card or government-issued ID card (i.e. driver's license, passport)
- [Google Chrome](#) (required browser)

- [Honorlock Chrome Extension](#)

NOTE: Students must use a computer with reliable internet access because excuses or failure to complete assessments due to computer error will not be permitted.

Honorlock support is available 24/7/365. Support access is built into Honorlock in real-time.

If you encounter any issues during an exam, you can contact support by live chat within the Honorlock window in Canvas, by phone (855-828-4004), and/or by email at support@honorlock.com. For answers to common questions on online proctoring, visit the [Student FAQLinks to an external site.](#) page or Honorlock's [student information website \(Links to an external site.\)](#).

Please Note: If, for any reason, HonorLock is not available for an exam, report it immediately to HonorLock tech support and your instructor. Any exam taken without HonorLock will receive a grade of zero.

Assignments:

There are laboratory assignments through McGraw-Hill Connect, available only through links in Canvas. Assignments range in point value from approximately 1 to 8 points; collectively they are worth one third of your final grade. All due dates and times are listed in the course calendar in Canvas or on the Connect website. Late assignments of any type will receive a grade of zero.

Technology Requirements:

Reliable internet access is required for this course, as are access to a laptop or desktop computer with a microphone and a webcam. This course utilizes multiple areas of asynchronous online environments including: Valencia College Website which includes Canvas, Faculty Webpages, and the Valencia Libraries. Beginning the first week of the term, the instructor will assume that students are well acquainted with the *Canvas* environment and have become proficient at the following:

- **navigating** through *Canvas*;
- **emailing** through your Atlas account;
- **taking an exam** in Honorlock
- **attaching** documents;
- **browsing** the Internet;
- **creating** and **formatting** documents in a standard word-processing application;
- **saving** documents in rtf or "rich text format" or as a "compatible" WORD document

By the end of the first week of the term, all students should have resolved all technical issues with the Valencia College Helpdesk and be ready to fulfill the requirements of the course. No exceptions will be made; no excuses will be accepted.

Academic honesty is demanded at all times.

Each student is required to follow Valencia policy regarding academic honesty. All forms of academic dishonesty (cheating, plagiarism, forgery, misuse) are prohibited as stated in the Student Code of Conduct and will be disciplined or penalized accordingly. All work submitted by students is expected to be the result of the student's individual thoughts, research, and self-expression unless the assignment specifically states "group project." With the first occurrence of academic dishonesty, in any form, a student will receive a failing grade for that single assignment/assessment, and your professor reserves the right to review previous written assignments/assessments. If a previous or subsequent event of academic dishonesty is found, it will result in an administrative withdrawal from the course, a failing grade in the course, and a referral to the Dean of Science and the Dean of Students for possible further action. I reserve the right to ask you to retake an exam while I proctor you live via Zoom if I observe questionable activity on your Honorlock recording. Please refer to the [college handbook](#) for further details. You will be asked to sign an acknowledgement of expectations for academic honesty, which must be on file before the first exam.

Extra Credit:

Once during the semester, you may donate or attempt to donate blood and upload a written slip from the blood donation center for 1% extra credit. Any other extra credit opportunities will be announced in class. No extra credit assignments, given only to an individual, will be allowed under any circumstances.

Important Notice:

Your instructor is not technical support! If you experience a problem with Atlas, Canvas, etc., you will need to contact the appropriate department. Atlas Help Desk is (407) 582-5444, Canvas support is (407) 582-5600.

Expected Student Conduct:

Valencia College is dedicated not only to the advancement of knowledge and learning but is concerned with the development of responsible personal and social conduct. By enrolling at Valencia College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct. The primary responsibility for managing the classroom environment rests with the faculty. Students who engage in any prohibited or unlawful acts that result in disruption of a class may be directed by the faculty to leave the class. Violation of any classroom or Valencia's rules may lead to disciplinary action up to and including expulsion from Valencia. Disciplinary action could include being withdrawn from class, disciplinary warning, probation, suspension, expulsion, or other appropriate and authorized actions. You will find the Student Code of Conduct in the current [Valencia Student Handbook](#).

Computer/Equipment Use Policy:

Use of computers in the Business, IT, and Public Service classrooms at Valencia College is restricted to those activities designated by the instructor to enhance the class materials. Any other use is strictly forbidden. Inappropriate use includes, but is not limited to:

Use of computer to send E-mail or access Internet sites not specifically assigned in class.

Use of computer for job, internship, homework or other activities not assigned in class.
Modifying any hardware or software system configuration or setting.
Activities not in accordance with the Valencia Student Code of Conduct
Use of computers in the departmental open lab is limited to those activities involved with preparing homework or coursework in this department and is subject to the same restriction as listed above.

Computer use is remotely monitored; any student using computers inappropriately may be subject to dismissal from class or banishment from the lab. Subsequent offense may be sent to the campus administration for further disciplinary action.

Campus Security:

We want to reassure you that our security officers are here around the clock to ensure the safety and security of the campus community. It's important to remain alert and aware of your surroundings, especially during the early morning or evening hours. Remember that you can always call security for an escort if you feel uncomfortable walking alone on campus. Finally, report any suspicious persons to West Campus Security at 407-582-1000, 407-582-1030 (after-hours number) or by using the yellow emergency call boxes located on light poles in the parking lots and along walkways.

Valencia I.D. Cards:

Valencia ID cards are required for LRC, Testing Center, and IMC usage. No other form of ID at those locations will be accepted. Possession and utilization of a Valencia ID is mandatory in order to obtain these services.

Student Assistance Program:

Valencia College is interested in making sure all our students have a rewarding and successful college experience. To that purpose, Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. [BayCare Behavioral Health Student Assistance Program \(SAP\)](#) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free confidential virtual counseling sessions are also available.

Request for Accommodations:

Students with disabilities who qualify for academic accommodations must provide a Notification to Instructor (NTI) form from the [Office for Students with Disabilities \(OSD\)](#) and discuss specific needs with me, preferably during the first two weeks of class. OSD determines accommodations based on appropriate documentation of disabilities. You may contact OSD by telephone at (407) 582-1523.

LEARNING IS AN ACTION VERB!!

Most students need to do more than complete the assignments. **Spend blocks of time EVERY DAY** actively writing or discussing concepts to make them a part of your memory. Use the words you learn often, they will sink in better☺.

Here are some study and classroom management tips that have assisted former students:

- REWRITE YOUR NOTES soon after the you complete the lab exercises.
- Create flash cards with questions you make up from the lab with answers on the back.
- Use mnemonic devises and other games to remember concepts; go to Google images, YouTube and Khan Academy for additional pictures and videos to clarify concepts.
- Make lists of confusing topics from your studying and ask questions.
- Take advantage of the professor's office hours.
- JOIN A STUDY GROUP and predict what questions the professor could ask on the test.
- Get the telephone number of one or more buddies in case you are absent from a class.

Course Outline and Schedule:

Week	Begins	Ends	Objectives & Reading Assignments	Items Due
1	1/10	1/19	Lab 1: Metric System	Lab 1 activities
2	1/20	1/26	Lab 2: pH and Buffers	Lab 2 activities
3	1/27	2/2	Lab 3: Microscopy	Lab 3 activities
4	2/3	2/9	Lab 4: Cell Size	Lab 4 activities
5	2/10	2/16	Lab 5: Diffusion 1	Lab 5 activities
6	2/17	2/23	Lab 6: Diffusion 2	Lab 6 Activities Lab Exam 1 (Labs 1-6) due 2/23
7	1/24	3/2	Lab 7: Enzymes	Lab 7 Activities
8	3/2	3/9	College Closed 3/7-3/13	
9	3/10	3/16	Lab 8: Respiration	Lab 8 Activities
10	3/17	3/23	Lab 9: Photosynthesis	Lab 9 Activities
11	3/24	3/30	Lab 10: Cell Division	Lab 10 Activities
12	3/31	4/6	Lab 11: Genetics	Lab 11 Activities
13	4/7	4/13	Lab 12: Human Phenotypes	Lab 12 Activities
14	4/14	4/20		Lab Exam 2 (Labs 7-12) due 4/20
Final	4/21	4/26		

Valencia College is committed to providing each student a quality educational experience. Faculty members have set high standards of instruction for themselves and for you. If you have a problem in any class, your first step is to talk to your instructor. If you are still dissatisfied, you may talk with the academic dean of the division for your class. We will work together to resolve any issues that arise.

The course outline and syllabus are subject to change as needed, at the sole discretion of the instructor; changes will be announced in class in a timely manner, when necessary. Your continued participation in this course after the drop-add deadline period constitutes an agreement with, and an acceptance of, the conditions presented in this syllabus.

LETTER FROM THE DEAN

Expectations of Academic Integrity

Welcome to the Science Division of Valencia College's West Campus; we are enthused to have this opportunity to assist you in achieving your educational goals. In working to provide you with the best learning experience at Valencia College, my expectation is that each of our faculty and students maintain the highest ethical academic standards.

From your professors, you can expect the following:

1. They will be on time to class and available during their scheduled office hours.
2. They will return graded tests, labs and other assignments when promised and within a reasonable period of time.
3. They will answer emails and phone calls within 48 business hours.
4. They will properly cite their references and resources, where applicable.

From you, we expect the following:

1. You will take your exams without referring to any books, notes, electronic devices or classmates unless you are specifically instructed that a test is open-book or collaborative.
2. You will not tell other students about test questions or answers before or during their exam and you will protect the exam from being seen by others.
3. You will avoid even the appearance of cheating by not looking in the direction of other exams, by not wearing clothing/hats/visors that hide your eyes, by keeping your belongings, other than pens, pencils and erasers away from your desktop, by going to the restroom before the exam and by asking your professor for permission and supervision if you need to retrieve another pen, pencil or eraser from your backpack or purse.
4. You will not allow anyone else to be the author of any part of your essays, lab reports or other written assignments and you will not include any materials from any sources (books, journals, other students, the internet, etc.) unless you give credit to those sources.
5. Unless approved by both professors, you may not use the same written work for a grade in two separate courses.

It is my hope that you will think about why it is important that we each show academic integrity and how cheating and plagiarism affect all of us, including those guilty of these academic crimes. Some students think that it only hurts their grade if they get caught cheating or plagiarizing, but cheaters typically lie not only to others, but to themselves. Eventually, cheaters pay a price.

- Those who cheat typically fail licensure exams, since they don't really know the material. Without a professional license, they won't be able to get employment. Would you want to be treated by a doctor who cheated in order to pass an exam that covered his or her knowledge of your disease? Also, if they falsify a patient's medical records, can you guess what can happen to them?
- Research scientists who falsify data are typically discredited and their reputations can be permanently ruined.
- Although you may think your professors have no clue when a student is cheating, usually your classmates do and some will inform your professor.
- Cheating becomes habitual. See what happens when employees cheat their employer.
- Students who let others cheat off them are not doing anyone a favor. If you are in a highly competitive field, you may ultimately be aiding your competition.

- Guess what a professor says to a student seeking a letter of recommendation when they know the student cheated or plagiarized.
- Finally, what happens to a person's self-esteem and to their reputation when they act unethically by cheating or plagiarizing?

Use the following as your guide: *"Each student is required to follow Valencia policy regarding academic honesty. All work submitted by students is expected to be the result of the student's individual thoughts, research, and self-expression unless the assignment specifically states 'group project.'* To get the most out of each of your classes, it is best to learn how to study for long term comprehension, not just to memorize facts. Study so you can teach others what you are learning. My motto is, *"if you can't teach what you are learning to others, you don't really know the material."* Academic dishonesty, in the forms of cheating and plagiarism, will not be tolerated and for most of our science professors will result in a student getting a zero on a test or assignment for the first offense and then an F for the course if a student is caught cheating or plagiarizing again; at that point the Dean of Students will also be notified. Don't throw away your dreams and your reputation by showing a lack of academic integrity. We wish you the best and want you to succeed and be proud of your accomplishments at Valencia.

Dr. Robert Gessner

Valencia College West Campus Dean of Science

LETTER FROM THE DEAN

Expectations of a Valencia College Science Student

Welcome to the Science Division of Valencia College's West Campus; we are enthused to have this opportunity to assist you in achieving your educational goals. Higher education is a privilege and an opportunity; it is your responsibility to realize that you are in control of those behaviors and actions that can enable success in this course.

From your professors, you can expect the following:

1. They will be prompt, courteous and respectful.
2. They will provide a professional learning environment throughout the entire scheduled instructional period.
3. They will provide an up-to-date syllabus; when changes need to be made, they will announce changes in a manner that is conveyed to all students in their class.
4. They will provide you with a course that is of necessary rigor to prepare you for the career you have chosen; because the class you are taking transfers to a four year college or university, it will be taught with the same academic expectations. The bonus of starting your education at Valencia, when compared to attending a four year college, is you will be able to get more personal attention with small class sizes and you will be able to save money; the classes are not easier.
5. They will offer time outside of class to discuss your questions.
6. They will be available to discuss your class concerns in private, outside of class time; you should try to resolve your class concerns with your professor before you try to voice your concerns with administrators.
7. They will respond to emails within 2 business days.
8. They will expect from you what they have expected from the many students who passed their classes in the past.

In return, this is what your professor will expect from you:

1. You will be prompt, courteous and respectful.
 - a. Prompt means you come to class on time, ready to work, with all assignments completed before you enter class or lab. It means that you have studied, that all conversations, texting and diversions come to a stop and that you are ready to contribute to a positive learning environment from the beginning of the class or lab.
 - b. Courtesy means you are polite in your attitude and behavior towards your professor and classmates.
 - c. Respectfulness means that you regard everyone's classroom experience as valuable to them, that you accept your professor's expertise and experience to create relevant course objectives and that you treat college and personal property with care.
2. You will read your syllabus; your syllabus is a contract between your professor and you. Be aware of deadlines to complete assignments on time and know your professor's attendance

policy. You will need to attend class for the full length of time allotted to your science class and lab.

3. You will be aware of Valencia College policies and procedures found in the college catalog; ignorance of policies and procedures doesn't mean they don't apply.
4. You will be serious about learning; it is your responsibility to be an active participant in your own learning. You will need to devote sufficient time to learn the material presented by your professor; for most students, this means you will need to spend at least two hours studying for every hour of instruction. Learning is an action verb; you will need to do more than sit through class and reread your notes to be successful. To succeed in higher level classes, you must retain the information, concepts and skills you will learn; this can only happen if you work at learning to make the course content a part of your long term memory. Do not cram!!
5. You will be encouraged to produce your own study guides. Most college professors do not provide study guides, but they can give you tips that will help you produce your own study guides to gain a better understanding of the course content.
6. You will be expected to participate fully in classroom activities. The work you produce must be your own; cheating in any form is not tolerated and your professor will have specific consequences, in their syllabus, which will be enforced should cheating occur.
7. You will be expected to contribute to a positive learning environment. Avoid classmates who speak negatively, or who have a negative outlook, about your class or your professor. Instead, get to know your professor during office hours; you will learn much more with a positive attitude.
8. You will be held to a high standard of maturity and responsibility. Disruptive behaviors will not be tolerated in the classroom or lab. First time disruptions will be handled by your professor and may include a request that you leave the class or lab. Very serious or repeated disruptions will be reported, to the Dean of Science and the Dean of Students, with specific consequences that can include your permanent removal from the class. Disruptions include:
 - a. Being noisy when arriving late to class or leaving early.
 - b. Carrying on private conversations while the professor is talking.
 - c. Disrespectful language, tone and mannerisms.
 - d. Sleeping or attempting to sleep in class.
 - e. Repeatedly asking unnecessary or irrelevant questions.

My wish is that you get the best learning value from the science classes that you are taking. With everyone abiding by the expectations in this letter, your science classes at Valencia should be the next step in achieving your academic dreams.

Dr. Robert Gessner

West Campus Dean of Science

Valencia College