This course DOES/DOES NOT use Cengage unlimited

**Course Rubric & Title:** Biology 1408 – Biology for Non-Science Majors I

**Instructor Name:** Sheree Daniel

**Office Hours:**  
Mon. 2:00-6:00 p.m.  
Tues. 12:00-1:00 p.m.  
Wed. 2:00-6:00 p.m.  
Thurs. 12:00-1:00 p.m.

**Campus:** Terrell Campus

**Office Location:** Administration Building, Room A121

**Office Phone & Alternate Phone #s:** 972-563-4946

**TVCC E-mail Address:** sdaniel@tvcc.edu

**Expected instructor response time Mon-Fri:** Students should expect responses to student inquiries from the instructor within 24 hours Monday-Friday.

**Expected instructor response time Sat-Sun and holidays:** Students should expect responses to student inquiries within 72 hours if submitted over the weekend or student holiday.

**Electronic communication:** TVCC students are REQUIRED to use either their TVCC Canvas account or their TVCC email account for all electronic communication. In order to ensure the identity of the student communicating via electronic methods, TVCC faculty will not reply to student communication that is sent through an email account other than their TVCC issued email account or Canvas account.
Course Description: Biology 1408 is a 4 credit hour course with a laboratory. This course provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. There is a lab fee associated with this course.

Course Co- or Pre-Requisites: Students must be able to read the textbook, understand the concepts and apply the information to a new situation. Reading is mandatory, tests are scheduled, and participation is encouraged. Laboratory for BIOL 1408 Biology for Non-Science Majors I

Textbook(s) & ISBN: Please visit the TVCC bookstore online

Required/Recommended Reading(s): Please visit the TVCC bookstore online

Required Materials: Please visit the TVCC bookstore online
STUDENTS SHOULD BUY BOOKS AND READ 1st CHAPTER BEFORE 1st CLASS MEETING. BE PREPARED FOR EACH CLASS BY READING ASSIGNED CHAPTERS BEFORE CLASSES BEGIN. There may or may not be quizzes at the beginning of the class.

Learning Outcomes: Upon completion of this course, the student should demonstrate a mastery of the following learning outcomes:
Lecture:
• Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
• Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
• Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
• Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
• Describe karyotyping, pedigrees, and biotechnology and provide an example of the uses of each.
• Identify parts of a DNA molecule, and describe replication, transcription, and translation.
• Analyze evidence for evolution and natural selection.

Laboratory:
• Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
• Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
• Communicate effectively the results of scientific investigations.
• Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
• Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
• Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
• Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
• Identify the importance of karyotypes, pedigrees, and biotechnology.
• Identify parts of a DNA molecule, and describe replication, transcription, and translation.
• Analyze evidence for evolution and natural selection.

Course Requirements: Lecture outline will be given on the first day of class. Five lecture exams will be given and account for 50% of the overall course grade. These may include essay, short answer and or multiple choice questions. Two lab practical exams will be given during the course of this class. There will be a LEAPS Project required by state law and will be a lab test grade. Also, there will be a research paper required to be completed. All specifics over this paper will be given during class. Labs will account for 50% of your grade.

These exams will consist of questions over slides, models, diagrams, concepts, and apparatus used. Practicals will cover knowledge and recognition of laboratory topics and will account for 50% of overall grade. Pop tests and quizzes may be given throughout the semester and may be added to the next exam as bonus credit. This applies to both lecture and lab. The final exam will be comprehensive. All lecture exams, and the final, will require a scantron for grading.

Expected Time Requirement for this Course: Approximately five to six hours per week of time spent reading, reviewing, and completing assignments is recommended to complete this course.

Non-Attendance and Financial Aid: If you are receiving financial aid, federal regulations require you to have begun attending the courses for which you are enrolled on or before the census date (e.g., 12th day of each fall and spring semester and 6th day of class each abbreviated semester). Students documented as “not attending” a course upon the census date are assumed (for financial aid purposes) to have NOT begun attendance for that course, negatively affecting their financial aid disbursement.

• Outline of Course Schedule: Outline is tentative and could be subject to change
• Weeks 1 and 2 – An Introduction to Science
  • Define Life
  • Major Scientists in Natural Science
• Weeks 3, 4, and 5 – The Chemistry of Life
  • Atoms
  • Bonding
  • Macromolecules
• Weeks 6, 7, and 8 – Cells: The Fundamental Unit of Life
  • Cell Composition
  • Prokaryotic vs. Eukaryotic Cell Structure
• Weeks 9, 10, and 11 – Energy and Life
  • What is Energy
  • ATP
  • Enzymes
• Weeks 12, 13, and 14 – DNA, Chromosomes, and Inheritance
  • Describe DNA
  • Replication
  • Chromosomes
  • Inheritance
  • Mitosis vs. Meiosis
• Weeks 15 and 16 – Evolution
  • Darwin
  • Natural Selection

Classroom Policies:
1. All reading is to be done before class begins.
2. Students are expected to fully participate in the class discussions.
3. No pagers or cell phones in the classroom. If your phone rings during class you will receive a 10 point deduction on your next exam. If it goes off during an exam, 20 points will be deducted.
4. Assessment will be determined by tests, quizzes, discussions, article summaries, projects, class participation, and other work assigned.
5. Regular class attendance is required. Students are expected to be on time. You will be dropped 1 letter grade for any absences over the standards set by the college. Six absences are the limit allowed for classes meeting 2 days a week, three absences for
classes meeting 1 time a week, and TARDIES MAY COUNT AS ABSENCES. A student dropped by the instructor will not be re-instated or admitted into the course once the drop procedure has taken place. (See college catalog for summer semester attendance policy as necessary).

6. Make up exams will be allowed only in unusual circumstances. You will have the opportunity to make up 1 exam with an approved excuse. You must notify your instructor prior to the absence for a test. Call the office (972) 563-4946 to leave a message, or email sdaniel@tvcc.edu, if you will not be in attendance for an exam. Make up exams must be taken before finals week.

7. Students are required to attend every class meeting. If the student arrives late, it is up to him or her to see the instructor to be counted as present. The class roll is taken within the first ten minutes and again after break. Those who leave after break will be counted absent.

8. No food, drinks, or use of any tobacco products will be allowed in the classroom.

9. All conversations must be part of the group discussion. If you wish to have a private conversation, do so outside of the class session.

10. Please respect your classmates and your instructor.

Cheating/Plagiarism: Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. “Cheating on a test” shall include

• Copying from another student’s test paper
• Using test materials not authorized by the person administering the test
• Collaborating with or seeking aid from another student during a test without permission from the test administrator – **NOTE: an instructor using non-proctored exams is NOT providing permission to collaborate with or seek aid from another student.**
• Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an un-administered test
• The unauthorized transporting or removal, in whole or in part, of the contents of the un-administered test
• Substituting for another student, or permitting another student to substitute for oneself, to take a test, and
• Bringing another person to obtain an un-administered test or information about an un-administered test.
• Accessing web content or online resources to provide support in answering questions on exams, proctored or not

“Plagiarism” shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another’s work and the unacknowledged submission or incorporation of it in one’s own written work. “Collusion” shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements.

The punishment for cheating or collusion in this class is The student who engages in cheating, plagiarism, or collusion may receive a failing grade in the course.

**Drop Policy:** It is the students’ responsibility to drop a class. The instructor is not responsible for dropping a student from a class even if they stop attending. Failure to do so may result in an “F” on your transcript. Missing more than the number of days allowed, which is 6 for classes meeting twice weekly, by TVCC may result in dropping a letter grade for the class per day over the days allowed.

A student may withdraw (drop) from a course and receive a grade of “W” at any time during a given semester subject to the last day to receive a “W” deadline specified in the TVCC schedule or catalog.

**Campus Carry:** The College District prohibits the use, possession, or display of a firearm on College District property or at a College District-sponsored or -related activity in violation of law and College District regulations. This policy does not apply to commissioned peace officers in accordance with law. All persons, including license holders, are prohibited from openly carrying a handgun on all College District campuses and premises. License holders may carry a concealed handgun on or about their person while on College District campuses and premises. License holders are responsible for complying with applicable federal and state law and this policy and associated regulations.

**Criminal History:** TVCC awards some certificates and degrees in which a criminal history **MAY** disqualify candidates from becoming licensed upon degree/certificate completion. Students **with** a criminal background enrolling in courses leading to a degree/certificate in criminal justice, cosmetology, nail technician, Heating/Ventilation/Air Conditioning (HVAC), Emergency Medical Technology (EMT), Nurse Aide, Vocational Nursing (VN), Associate Degree Nursing (ADN), Surgical Technology, Patient Care Technology, or Pharmacy Technician program are STRONGLY ENCOURAGED to discuss the licensing regulations with the TVCC program director.
Syllabus may be changed during the course of the semester. Please check with your instructor periodically.

Last revised 3/1/2019

listed in the current catalog and learn about the current guidelines related to criminal history as well as the right of individuals to request a criminal history evaluation letter.

**Research Resources:** The student is encouraged to use the TVCC Libraries as research resources for this course. Students can search the TVCC Library Resource Center holdings through the online catalog. Electronic library resources provide access to full-text and abstract articles as well as links to a variety of remote research tools. The physical library contains a specialized collection of research materials specifically chosen to support the degrees and courses offered at TVCC. Students with research questions or questions about library services are encouraged to email their question to lrc@tvcc.edu.

**Logging on to E-Courses:** To access your courses that incorporate Canvas (which are available after 8:00 a.m. on the first day of the semester), visit https://ecourses.tvcc.edu. At the Canvas login page, the TVCC username is your Cardinal ID (ex: last name, first initial, 3 numbers that were assigned to you). You can find your Cardinal ID on your printed schedule. If you do not know your Cardinal ID, you will need to visit https://mail.tvcc.edu and choose the “Activate my Cardinal ID” icon. At the Cardinal ID activation screen choose “Get My Cardinal ID” (on the right in red). Select the “Obtain Cardinal ID and TVIN” screen, enter your social security number, month of birth, year of birth and choose “search”. Your Cardinal ID will be listed in the second box under your name. Your password is created when you activate your cardinal ID. If you have forgotten your password, please visit https://mail.tvcc.edu and click on "Forgot My Password".

**Technology Resources/Access:** Each student, employee, or guest with an information technology (IT) account shall be responsible for all use of the account. All accounts shall be for use by a single individual – the person for whom the account was approved or assigned. This includes e-Course accounts as well as TVCC issued email accounts. Sharing or loaning accounts is strictly prohibited and violates TVCC Board Policy CT (LOCAL).

**Additional Information:** Any additional information that has not already been included in the syllabus.

**Student’s Responsibility:** This syllabus contains information, policies and procedures for a specific course. By enrolling, the student agrees to read, understand, and abide by the rules, policies, regulations, and ethical standards of Trinity Valley Community College as contained in the current catalog and schedule of classes.

**Student Evaluation of Courses/Faculty:** Evaluation is an important component in promoting continuous improvement, enhancing student learning, and achieving excellence in the
educational process. Therefore, TVCC administers student course evaluations every semester. Students are encouraged to complete the course evaluations for all of their courses. Notification of evaluation availability and details on how to access and complete the course evaluation will be delivered to all students through the TVCC email accounts.

When completing the evaluation, students will rate the course by responding to the following prompts:

- The instructor relates the importance of the subject matter to real life.
- The instructor is very knowledgeable of the subject matter.
- The instructor encourages questions and discussions from students.
- The instructor makes class requirements clear.
- The instructor gives class assignments (tests, projects, presentations, etc.) that measure what was covered.
- The instructor’s teaching methods are effective in helping me learn.
- The instructor expects students to take responsibility for their learning.
- The instructor establishes a climate of respect.
- The instructor is well organized and prepared for each class.
- The instructor is available to me on matters pertaining to the class.
- The instructor is reliable in meeting class (leave blank for online courses).
- The instructor normally starts class on time (leave blank for online courses).
- The instructor has challenged me to think.

**Affirmative Action:** TVCC is an affirmative action/equal opportunity institution which provides educational and employment opportunities on the basis of merit and without discrimination or harassment in full compliance with the Civil Rights Act of 1964, as amended; the Rehabilitation Act of 1973 (Section 503,504); Americans with Disabilities Act, as amended, Title IX of the Educational Amendments of 1972; the Vietnam Era Veterans Assistance Act of 1974; Article 522lk V.A.C.S.; and Executive Orders 11246 and 11758.

**Title IX of the Education Amendments:** TVCC prohibits discrimination, including sexual harassment and retaliation, against any student on the basis of race, color, religion, gender, national origin, disability, or any other basis prohibited by law. Any student who believes that he or she has experienced prohibited conduct or believes that another student has experienced prohibited conduct should immediately report the alleged acts to an instructor, counselor, administrator, or the Title IX Coordinator. TVCC has designated the Director of Human Resources/Title IX Coordinator as the individual who is responsible for coordinating its efforts to comply with Title IX of the Education Amendments of 1972, as amended. Contact information is: Director of Human Resource/Title IX Coordinator; Office Phone: 903-675-6215
American with Disabilities Act (ADA): Trinity Valley Community College provides equal opportunities for academically qualified students with disabilities and ensures access to a wide variety of resources and programs. The passage of Section 504, Federal Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990 requires that the college make certain special arrangements for students with disabilities such as moving classes to accessible locations when necessary, allowing the use of tape recorders, sign language interpreters, or other educational auxiliary aids, making special test arrangements, and other accommodations. The college will make reasonable accommodations for qualified students with a diagnosed physical and/or learning disability who have been admitted to the college and request accommodations.

Students with disabilities who wish to request accommodations should notify the Disability Services Office on their campus. In accordance with federal law, a student requesting accommodations must provide documentation of his/her disability to the Disability Services counselor. For more information, please visit the Disability Service Office on your campus or contact Melinda Berry at 903-675-6224 and email mlberry@tvcc.edu.