

Nashville State Community College
STEM Division
Biology Program

2018 Master Course Syllabus

BIOL 1110 General Biology I

(This master course syllabus template is a general guide for providing an overview of each course offered at Nashville State. Each instructor will further clarify specific criteria for grading, classroom procedures, attendance, exams and dates, etc. on his/her individual course syllabus. Prompts for individual adaptations are italicized and in parentheses; faculty should remove or replace these prompts when creating master syllabi and their own individual syllabi if they have not been removed previously.)

Course Information:

Course Title: BIOL 1110 General Biology I

Credits: 4

Class Hours: 3 class hours, 3 lab hours

Course Description:

A comprehensive course suitable for biology majors and minors. Fulfills the science requirement for pre-medicine, pre-pharmacy, pre-medical technology, pre-veterinary medicine, and pre-dentistry programs. Topics include the unifying principles found in all organisms, their molecular and cellular basis, the mechanisms of heredity, the interrelationships of organisms, and their evolution. The laboratory component of the course is integrated into the lectures (i.e., there is no separate lab time). Credit for BIOL 1010 and BIOL 1110 may not be used together to satisfy the general education natural science requirement. **Prerequisite:** Level 2 placement in English, Math and Reading.

Instructor Information:

Name:

Email:

Office Phone:

Office Location:

Office Hours:

Required Textbook(s) & Other Materials:

Onground and Hybrid

Textbook(s): *Campbell Biology*, 11th Edition by Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, and Jane B. Reece. (Publisher: Pearson, 2017);

ISBN: 9780134093413

Supplies: HYBRID SECTIONS ONLY: If you select a hybrid section, the 3 lab hours will be onground and the 3 lecture hours will be online. To complete the online coursework, you will need to frequently access the online learning environment utilized at Nashville State called D2L/NS Online. Please see the Nashville State [Online Orientation](#) for more information regarding required student technical skills, required device and web browser compatibility with D2L/NS Online, and an introduction to D2L/NS Online instructional tools.

Once enrolled, all students should verify that they have the correct textbook and materials information by consulting the D2L/NS Online shell for the course. If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center at 615-353-3721, 615-353-3741, or accesscenter@nsc.edu.

Course Outcomes:

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

- Describe and apply the scientific method of investigation.
- Explain the basic mechanisms of life (including cell replication) and the molecular and cellular (prokaryotic and eukaryotic) basis for each mechanism.
- Describe atomic structure, chemical bonding and the properties of acids, bases, water, lipid, carbohydrate, protein and nucleic acid.
- Differentiate between prokaryotic and eukaryotic cells at the cellular level.
- Describe energy production (photosynthesis, anaerobic and aerobic respiration) in cellular organisms.
- Explain the molecular basis of genetics and patterns of inheritance and current methods of genetic engineering (for both prokaryotic and eukaryotic cells).
- Explain interactions between organisms and their environment as energy and matter flows through ecosystems and discuss environmental problems and their solutions.
- Describe the evidence for evolution and illustrate the basic tenets of population and species evolution

Topics to Be Covered:

Course Topics: Chemistry, Water & pH, Organic Chemistry, The Cell, Cell Membrane, Cellular Respiration, Metabolism (Enzymes & Energy), Photosynthesis, Cell Signaling, Cell Cycle, Mitosis, Meiosis, Genetics (Mendel), Genetic Mutations, DNA Synthesis, Transcription & Translation, Viruses & Bacteria, Gene Regulation & Cancer, Biotech: Cloning Vectors & PCR, Development: Stem Cells, etc., Evolution, Ecology

Lab Topics: Biological Terminology, Scientific Method, Chemistry, Organic Chemistry, Osmosis and Diffusion, Enzymes, Photosynthesis, Cellular Respiration, Microscope, Cell Division, DNA Synthesis, transcription and translation, DNA extraction and engineering, Natural Selection, Ecological Succession

Course Assessments:

The following performance assessments will be used to demonstrate students' understanding, knowledge, and skills:

Exams

- The exams may include, but aren't limited to, multiple choice, short answer, essay, matching, fill-in-the-blank, true-false or picture/diagram drawing and labeling.
- Exams will count as 55-60% of the final course grade.

Laboratory Activities

- Laboratory activities include, but are not limited to, lab exercises, virtual lab activities, or lab practicals.
- Laboratory activities will count as 20-25% of the final course grade.

Class Activities

- Class activities may include, but aren't limited to, quizzes, discussion boards, class presentations, group work, homework, model or diagram labeling, lab specimen/model ID or essay questions.
- Class activities will count as 15-20% of the final course grade.

Grading Policy:

- Exams: 55-60% of the final course grade
- Laboratory activities: 20-25% of the final course grade
- Class activities: 15-20% of the final course grade

Late Work Policy & Make-up Procedures for Missed Assignments and Work:

(Each instructor will provide policy)

Attendance Policy

Students are expected to attend all scheduled classes and laboratories. Absences in a course may affect a student's final grade. The student is responsible for all assigned work in the course regardless of excused or unexcused absences. Tardiness may also affect a student's final grade.

In online courses, attendance is signaled by logging on to the D2L/NS Online shell, participating as prompted (e.g., responding to an instructor's email, posting to a discussion board) and/or completing and submitting assignments. Campus closures do not affect attendance and assignment completion in online courses.

(Each instructor will provide policy, especially how attendance influences student assessment and grading.)

Grading Scale:

Letter Grade	Percentage Range
A	90% or higher
B	80-89%
C	70-79%

D	60-69%
F	Below 60%

FA

According to NSCC policy, if a student fails a course, but has not officially withdrawn from the course, and her/his last date of attendance is before the last date to withdraw (*use date appropriate to your section*), the student will receive a grade of FA (i.e., “Failure for Attendance Reasons”).

(While the above statement should appear in all syllabi, faculty are encouraged to make additional statements or provide examples that would clarify the policy for students.)

FN

An FN is awarded to students who never attended class.

Technology Statement

Nashville State's classes are considered to be web-enhanced. Faculty have an expectation that students will use a computer and the Internet to complete assignments, engage in online discussions, and access various course materials through D2L/NS Online course shells. Computers are available for student use at each campus during campus open hours.

D2L/NS Online and myNSCC

It is students’ responsibility to check D2L/NS Online course shells for all enrolled courses and myNSCC, including student email, on a regular basis. These are the official communication channels between the college and students, who are responsible for the information communicated through those channels. D2L/NS Online contains specific course information and myNSCC contains information important for other purposes.

ADA Compliance Statement

Nashville State complies with the Americans with Disabilities Act (ADA). If you require accommodations for any courses in which you are enrolled, contact the Access Center at 615.353.3741 or 615.353.3721, or e-mail accesscenter@nsc.edu. If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center.

Classroom Misconduct

Nashville State Community College has a zero-tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary measures. Please review the [Nashville State Student Code of Conduct policy](#). Please be aware that children are not allowed in class or to be left unattended on campus.

Academic Misconduct

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. Students are responsible for understanding and abiding by the [Academic Misconduct Policy](#) in the Nashville State Student Code of Conduct. In addition to other possible disciplinary measures that may be applied through regular college procedures as a result of academic dishonesty, the instructor has the authority to assign an “F” or a “zero” for the exercise, paper, or examination, or to assign an “F” for the course. Students may appeal through the appropriate college grade appeal procedures.

(Each instructor will outline his/her expectations for academic integrity and provide individualized information about consequences for academic misconduct.)

Academic Early Alert System

Nashville State Community College uses an Early Alert System to let students know of a faculty member's concern in one or more of these academic areas: lack of attendance, lack of classroom participation, late or missing assignments, and/or poor performance on assignments/tests. *Please note that Early Alerts do not affect a student's academic standing. If you receive an Early Alert email, please see your instructor and your academic advisor as soon as possible.

RAVE Emergency Alert System

Emergency events can happen at any time and Nashville State Community College wants to be able to notify students if and when they occur. For this reason, all students have been enrolled in the free RAVE alert system. If you have not already done so, please log in at <https://www.getrave.com/login/nsc> to confirm and update your contact information and notification preferences. It is critical that your information be correct so that you will receive any emergency notifications. Your RAVE Username is your NSCC email address. If you've never received an email from RAVE with your password, or if you need to reset your password, select "Forgot your password?" and a new password will be emailed to you. Should the RAVE system indicate "user not found", select Register and create your own RAVE account.

Inclement Weather & Campus Closings

Nashville State will use the RAVE alert system to send a text message to students, staff, and faculty about adjusted hours of operation and/or closings at individual campuses. All students should check the Nashville State web site home page at www.nsc.edu for announcements on campus closures, which may vary from campus to campus. Campus closures will also be announced on local television stations. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

Even when campuses are closed, students are still responsible for completing all assigned work. When classes are cancelled, faculty will post online assignments and any additional instructions in the D2L/NS Online course shell. Check D2L/NS Online for a message from your instructor regarding your online assignment requirements. Faculty have discretion over adjusting deadlines or due date for assignments, but students are responsible for completing all assigned work by the due date established by the instructor.

Class Cancellation Policy

If the class is cancelled, the instructor will notify all students by posting in the D2L/NS Online course, e-mailing through D2L/NS Online, and/or by posting a sign on the classroom door. In the event of class cancellation, students must access D2L/NS Online to complete classwork and the assignment that will be posted in the course D2L site.