This is a sample syllabus for BSC2010. Students should reference the section syllabus provided at the beginning of the semester for specifics regarding assignments and grade assignments.
BSC2010 Fall 2022-
Lecture Tuesday/Thursday
Recitation [NOT MANDATORY] Wednesday

Instructor:

Where to get help?

- Instructor
  Office Hours:

- Teaching Assistants [TA]:
  Teaching Assistants are available by zoom & in person by appointment and during class time

- Attendance Associate:

- Learning Assistant [LA]:
  Learning Assistants are available through zoom & in-person during class time

Learning Assistants and Teaching Assistants are undergraduate students who are prepared to provide support for student learning in interactive classroom environments. LAs will organize online or in person review sessions prior to exams and provide feedback on assignments. Meeting with an LA or a TA will be requested by student by emailing the LA/TA.

Each LA and TA will be assigned about 25-30 students and are always happy to meet you through zoom if you need. As undergraduates at FSU, they have their own studies, they have experienced BSC2010 and are in diverse academic tracks and a range of graduating classes. They can help you navigate this class but also this semester especially if it is your first one at FSU!

What will I learn?

This is the first part of a two-semester introductory biology course designed for those interested in pursuing a career in life sciences. The intention of this course is to provide the building blocks necessary for a student to gain a strong foundation in general biology. Topics covered will provide an overview of biological processes and function at the molecular, cellular and organismal level: 1) Atoms and Biological Molecules, 2) Cellular Biology, 3) Biochemistry and Energy Transformation 4) Molecular Genetics and 5) Physiology. The diversity of knowledge gained in BSC2010 will aid understanding in more advanced biology classes.

At the end of the semester, students will be able to:
- describe the basic structure of atoms and important biological molecules
• identify parts of the eukaryotic cell and describe fundamental cell functions
• explain basic cellular biochemistry and energy-transformation processes in plant and animal cells
• identify and explain the components of the Central Dogma of molecular genetics; describe the mechanisms and significance of gene regulation
• explain some physiological processes underlying human functional systems (e.g., cell communication…).

This course is divided into modules and the information in each module is critical for the understanding of the next. The first half of the semester focuses on the building of biological molecules from atoms, followed by the description of the organization of biological molecules within the cell. The second half of the semester will be dedicated to molecular biology and human physiology.

In addition, this course has been approved for the Liberal Studies disciplinary requirement of Natural Science and thus is designed to help you become a critical appraiser of the theories of natural science and the facts that support them. The Liberal Studies for the 21st Century Program at Florida State University builds an educational foundation that will enable FSU graduates to thrive both intellectually and materially and to support themselves, their families, and their communities through a broad and critical engagement with the world in which they live and work. Liberal Studies thus offers a transformative experience.

Therefore, at the end of the semester, students will also be able to:

1. Pose questions or hypotheses based on scientific principles.
2. Use appropriate scientific methods and evidence to evaluate claims or theoretical arguments about the natural world.
3. Analyze and interpret research results using appropriate methods.

PLEASE NOTE: Three questions assessing these three competencies will be included in each of the Unit Exams given throughout the semester.

What tools do I need?

Web class resources

• Top Hat

We will be using Top Hat (www.tophat.com) for class participation. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. For instructions on how to download the Top Hat app, please refer to the Top Hat's Getting Started Guide (https://bit.ly/3ITGMLw). Please note you cannot create an account through mobile applications.

If you already have a Top Hat account, go to the course within your LMS and click on any launch or deep link for Top Hat. If you are new to Top Hat, you will be prompted to create an account once you click on any launch or deep link for Top Hat.
If you do not click the launch link, then you will be removed from the course roster every night when the sync happens. In this case, you simply need to access Top Hat using an LTI link. If you completed any assignments using a Top Hat account with the same email address as the email address you use to log into the LMS, then your answers and grades will be restored.

If a paid subscription is required, it will be listed at checkout when you access the Top Hat course.

Should you require assistance with Top Hat at any time please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491. Specific user information may be required by their technical support team when troubleshooting issues.


Registered students have access to the recorded lectures, lecture slides, handouts, assignments and other relevant information via our class website.

- E-Textbook/Mastering Biology

**Biology,** 12th ed., Campbell and Reece. **Biology, 12th Edition**, by Campbell and Reece. This text is also used for Biological Science II (BSC 2011) and Eukaryotic Diversity (currently called Selected Topics in Biology BSC4933). You have access to an online version of the e-book through the Mastering Biology package. This is an on-line learning software package developed by the publisher of your textbook with a vast array of useful resources tailored specifically to the material covered in the text. Among these resources are: videos, mp3 tutor sessions, study tools, self-quizzes, practice tests and an online version of the textbook itself (i.e., an “e-book”).

- Openstax Textbook

How will I positively influence my grade?

Participation:

Participation will be central to your success in this course, and a high level of participation is expected during class time. Lecture recordings, lecture slides and lecture notes will be posted on Canvas ahead of the class times. Exam questions will be drawn from the lectures and practices, not the text, so reading the text is NOT a sufficient replacement for attending class. You are expected to watch recordings or read notes ahead of the class. During class time, we will review the chapter key points, you will check your understanding and engage with your peers and the Learning Assistants [LA] and Teaching Assistants [TA] and you will also complete a group activity related to the material covered. I, as well as the TA/LA, will float between groups to help answer any questions you may have. I strongly encourage you to participate and ask questions. If you have not understood something, others may not have either and speaking up will make all of our lives easier.
Use of the Mastering Biology e-book/openstax textbook:

The e-textbook is to be used as a tool to prepare for and supplement the lecture material. I assign readings of chapter before class and completing the Mastering Biology (see below) homework. The majority of the information for the lectures is derived from the textbook so use it to clarify lecture topics that may have been less clear to you.

Keeping up:

If you want to be successful in this course, you will need to keep up with the course material. With this in mind, you will be assigned graded work on the textbook’s companion website: Mastering Biology, Chapter quizzes and Unit exams. If you bought a used copy of the textbook, you will need to purchase access to the website. If you bought a new copy of the text or the electronic version of the text, you will automatically have access to the Mastering Biology site. LAs, TAs and myself are always willing to help you out, so email us!
COURSE ASSIGNMENTS AND EVALUATION:

Grades will come from six sources;

- **Participation** in classroom activities (20%). Group activities such as worksheets during class time as well as activity and concept questions will be accounted for participation.
  - In class questions (10%)
  - Group worksheets (10%)

- **Scientist Spotlight** (5%)

- Chapter **quizzes** will be taken during class period (15%)

- **Lecture notes-**Active Reading to be uploaded on canvas each Sunday following the end of a chapter covered (15%)

- Three **unit exams** will be given throughout the semester (30%); students are required to attend all 3 exams to pass the class.

- One cumulative **final** will be given during the week of Finals (15%); students are required to attend the cumulative final to pass the class.

Final letter grades given in this course follow the FSU grading scheme:

- **A**  = 93 – 100%
- **A-**  = 90 – 92.99%
- **B+**  = 87 – 89.99%
- **B**   = 83 – 86.99%
- **B-**  = 80 – 82.99%
- **C+**  = 77 – 79.99%
- **C**   = 73 – 76.99%
- **C-**  = 70 – 72.99%
- **D+**  = 67 – 69.99%
- **D**   = 60 – 66.99%
- **F**   = < 59.99%

Errors or discrepancies in a grade that you have received must be brought to the attention of the instructor within one week of receiving the grade. Unit Exams can be reviewed with Dr. and Teaching assistants during Office Hours/appointment during a 2-weeks period the following Unit period.

**Rm:**
Each unit exam covers material from one module and occur about every four to five weeks. Exams will consist of fill-in the blank and multiple-choice questions that range in difficulty from simple knowledge to more complex applications. If you do the pre-class reading, actively participate in class, approach the in class worksheet seriously, and study on your own or with a group of classmates you will see these exams as a confirmation of skills you have already acquired and practiced. If you do not take the preparation seriously, you will probably find yourself asking where these exam questions came from.
Chapter 1: Frameworks for understanding biology

Unit I: The Chemistry of Life
Chapter 2: Fundamental chemistry for understanding biology
Chapter 3: Water
Chapter 4: Carbon
Chapter 5: Polymers are built from monomers
Carbohydrates
Lipids
Amino Acids & Proteins
Nucleic Acids
FIRST EXAMINATION: Chapters 2-5 EXAM 1

Unit II: The cell and Metabolism
Chapter 6: Cell structure and organization
Chapter 7: Membrane Structure and Function
Chapter 8: Introduction to Metabolism
Chapter 9: Respiration and Fermentation
Chapter 10: Photosynthesis
SECOND EXAMINATION: Chapters 6-10 EXAM 2

Unit III: Genetics
Chapter 11: Cell Communication
Chapter 16: The molecular basis of inheritance
Chapter 17: From gene to protein
Chapter 18: Regulation of gene expression
THIRD EXAMINATION: Chapters 11, 16-18 EXAM 3

FINAL BSC2010
UNIVERSITY ATTENDANCE POLICY:
Students are expected to participate in assignments and exams at the scheduled times. Excused absences include illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid documented excuse. Illness documentation may consist of a doctor’s note or a SAFER email. Consideration will also be given to students whose dependent children experience serious illness. If there is an excused and documented absence, make up quizzes and exam must be scheduled by email with the attendance associate / fill out the google form provided on the canvas home page within 24h post missed period and make up quiz or exam has to be completed within 48h of the student’s return to campus to avoid earning a 0 on the exam/quiz.

Quizzes, Unit exams and Final will be rescheduled in case of an absence. Make up exam/quiz will consist of different questions and may be a different format than the exam taken at the scheduled time. Discussing exam content with a student who hasn’t yet taken an exam, or discussing an exam with someone who has taken if you haven’t yet, is cheating (UNAUTHORIZED ASSISTANCE) and will be subject to the academic honor policy.

Homework is assigned weeks in advance, and the lowest scores are dropped. If a student misses a homework assignment they must provide documentation for an FSU sanctioned excused within 24 hours to request a makeup. The professor will determine if it is more appropriate to allow a makeup assignment or pro-rate the student’s grade without a score for the missed assignment. Technology failure is not a suitable excuse, plan ahead and have back up plans for critical dates/times.

Students are expected to participate to in-class assignments during class period. 30% of the in-class activities lowest scores are dropped, and no makeups will be accepted. Technology failure is not a suitable excuse, plan ahead and have back up plans for critical dates/times.

GRADE REVIEW POLICY:
If you have a question about a grade, you must address it with the instructor within 72 hours of the grade being posted to Canvas. In other words, points cannot be disputed for graded work at the end of the semester (except for work that is graded at the end of the semester).

ACADEMIC HONOR POLICY:
The Florida State University Academic Honor Policy outlines the University’s expectations for the integrity of students’ academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/Academics/Academic-Honor-Policy)

Online proctoring services through honorlock, please pay close attention to information in this Canvas course site regarding examination dates and student responsibilities: Regarding specific legal requirements for the privacy and security of FSU student information refer to: https://distance.fsu.edu/honorlock-security-and-privacy-faq
What will you need to use honorlock:
Honorlock procedures: Students may be required to use Honorlock for exams or quizzes in this course. Using your e-book or textbook during exams is NOT ALLOWED. Your room scan must show the entire room, your work surface, and both sides of your scratch paper if a sheet of scratch paper is allowed. You must remain in front of your computer for the duration of the exam. NO BATHROOM BREAKS. Cell phones, tablets, laptops, smart watches, headphones, and any other electronic devices are NOT PERMITTED. Avoid talking while taking the exam. Failing to follow these instructions could result in an honor code violation, and/or a grade of ZERO on your exam. If you log out of Honorlock during the exam and then log back on (or lose internet connectivity and are consequently dropped from Honorlock), your exam may be disqualified, resulting in a ZERO on the exam. You may make arrangements to take the exam at the FSU testing center if your internet connection is unstable, but loss of internet connection will not be an acceptable excuse for logging into the exam multiple times. Requests to the testing center must be made in advance, and are the responsibility of the student. Additional instructions will be provided for each exam.

AMERICANS WITH DISABILITIES ACT: Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; and (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class. This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the: Student Disability Resource Center 874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) sdrc@admin.fsu.edu http://www.disabilitycenter.fsu.edu

FREE TUTORING FROM FSU (in addition to tutors located in the Biology Study Center in KING 1054): On-campus tutoring and writing assistance is available for many courses at FSU. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services’ comprehensive list of on-campus tutoring options at http://ace.fsu.edu/tutoring or contact tutor@fsu.edu. High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

SEXUAL HARASSMENT POLICY: It is the policy of the University that its employees and students neither commit nor condone sexual harassment in any form. http://registrar.fsu.edu/bulletin/grad/info/university_notices.htm

STUDENT ELIGIBILITY FOR AN INCOMPLETE GRADE: Incomplete grades will not be assigned except in the case of exceptional unforeseen circumstances as determined by the instructor. Incomplete might be granted in documented cases if, after completing most of the work in a course [grades obtained for the completed assignment will be maintained], because of illness or other reasons beyond your control, you are unable to complete the remaining course requirements. An “I” may be removed and another grade substituted if you complete the course requirements to the instructor’s satisfaction. If you fail to remove the Incomplete within the prescribed
period, the “I” will automatically be replaced by an F on your permanent record. It is your responsibility to make arrangements to complete the course requirements for the removal of the “I”.

LIBERAL STUDIES FOR THE 21st CENTURY:
The Liberal Studies for the 21st Century Program at Florida State University builds an educational foundation that will enable FSU graduates to thrive both intellectually and materially and to support themselves, their families, and their communities through a broad and critical engagement with the world in which they live and work. Liberal Studies thus offers a transformative experience. This course has been approved as meeting the requirements for the E-Series and thus is designed to help you become an interdisciplinary and flexible thinker; a lifelong learner; and a team builder. In addition, this course has been approved for the Liberal Studies disciplinary requirement of Natural Science and thus is designed to help you become a critical appraiser of the theories of natural science and the facts that support them.

STATEMENT REGARDING CLASS LECTURE RECORDING:
Students are permitted to make recordings of class lectures for a class in which the student is enrolled for personal educational use. A class lecture is defined as an educational presentation delivered by the instructor as part of a university course intended to inform or teach enrolled students about a particular subject. Recording class activities other than class lectures, including but not limited to lab or recitation sessions; student presentations (whether individually or part of a group); class discussions (except when incidental to the lecture); clinical practica and presentations involving patient histories and other protected health information; academic exercises involving student participation; test or examination administrations; field trips; and private conversations between students in the class or between a student and the faculty member is prohibited. Recordings may not be used as a substitute for class participation and class attendance and recordings may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of FSU’s Student Code of Conduct and possibly have legal consequences. Students who record class lectures are asked to do so in ways that do not make others feel reluctant to ask questions, explore new ideas, or otherwise participate in class. Students must monitor their recording so that they do not include participation by other students without permission. Students with disabilities will continue to have appropriate accommodations for recordings as established by the Office of Accessibility Services.

SYLLABUS CHANGE POLICY:
Except for changes that substantially affect implementation of the evaluation (grading) statement this syllabus is a guide for the course and is subject to change. New versions of the syllabus will be announced by group email through Canvas.