BSC 1005c – Biological Sciences Syllabus
Saint Petersburg College, Spring 2016

INSTRUCTOR: Dr. Erin Goergen
Office: NM 218, phone (727) 791-2561
Email: goergen.erin@spcollege.edu

OFFICE HOURS:
Tuesday & Thursday: 9:00 - 10:30; 2:00 - 4:00

ACADEMIC DEPARTMENT: Natural Science
Chair: Dr. Jill Harper-Judd, NM 213, (727) 791-5955
Dean: Dr. John Chapin, Seminole Campus, UP 337, (727) 394-6995

COURSE DESCRIPTION:
This course introduces the essential principles relevant to the biological sciences through combined lecture and laboratory activities. Contemporary issues are applied to topics in biology and include the process of science, evolutionary theory, organisms and ecology, cell structure and function, basic biological chemistry, diversity of life, and genetic mechanisms.

PRE-REQUISITES:
ENC 1101 or equivalent with a minimum grade of C

REQUIRED TEXTBOOK:
**There are many options available at the bookstore from the paperback to the eBook.

GRADING:

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<tr>
<th>Assignment</th>
<th>Points</th>
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<td>Homework and Quizzes</td>
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<tr>
<td>Class participation and Reports</td>
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<td>Exam 1 - 4</td>
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<tr>
<td>Final Exam**</td>
<td>100</td>
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<td>Total possible points</td>
<td>650 points</td>
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</table>

**Each student is required to take all four regular examinations. The final exam is an optional, cumulative exam that can be used to replace your lowest exam score.

Final Grade:
89.5-100% = A
79.5-89.4% = B
69.5-79.4% = C
59.5-69.4% = D
0-59.4% = F

To calculate your grade at any time, divide the points you have earned by the points possible up to that time. If you need assistance, you can stop by my office to get help calculating your grade.
Make-up exams:
You need to make sure you attend class and take each scheduled exam. Make-up exams will ONLY be given for instructor approved documented excused absences (e.g. weddings, funerals, hospital stays, etc.). If you miss an exam due to an unexcused absence, you will receive a zero for the exam. If you have an **excused absence with proper documentation**, you will need to contact Dr. Goergen within 48 hours to rearrange for a make-up exam. Make-up exams may be in short-answer or essay format.

Homework and Reports:
There will be a number of in-class activities conducted over the course of the semester. The activities are meant to help reinforce the concepts covered in class and may require a written assessment. Participation in activities, as well as completeness of the reports will be considered. Missed activities (and corresponding assignments) are scored as zero points. In addition, there will be homework assignments assigned periodically over the semester to allow you to further examine and strengthen your understanding of the material. **All assignments are due at the start of the following class unless otherwise indicated.**

Quizzes:
There will be multiple online quizzes throughout the semester. The idea of these quizzes is for you to assess your learning before the exams. They give you a chance to make adjustments to your studying strategies, and encourage you to reflect on the topics learned more frequently. The quizzes will be available in MY COURSES on the dates indicated in our MY COURSES shell. Check MY COURSES frequently so you don’t miss any quizzes. **THERE ARE NO MAKE-UPS FOR QUIZZES.** If you are having problems with MY COURSES, let me know IMMEDIATELY! Alerting me to problems after the fact will not allow you to make-up missed quizzes.

Extra Credit:
Extra credit opportunities MAY arise and will be announced in class. Individual extra credit opportunities will not be offered- please do NOT even ask as this is not fair to your classmates.

EXPECTATIONS:
What I expect from YOU:
- Be on time for class and do not leave until class is over.
- Turn off all electronic devices BEFORE class starts. Laptops and tablets are only for class use.
- Read the assigned chapters **BEFORE AND AFTER** they are covered in class.
- Take good notes during class; you can record the lecture if that helps.
- Study EVERYDAY, at least one hour per day.
- Appropriate behavior that will be conducive to a healthy learning environment.
- Communicate with me if you have any problems or concerns.
- Do your best to succeed in this course!

What you can expect from ME:
- Be on time and come well prepared to teach class.
- Check MY COURSES at least once per day, Monday-Friday.
- Grade fairly.
- Be available to you so I can help you succeed in this course! You can come to see me during office hours in my office, at the LSC, or make an appointment outside office hours.
RESOURCES:
MY COURSES:
The MY COURSES class website contains your syllabus, the course schedule, lecture slides, and quizzes. It also has an announcement page where I will post important announcements and extra credit opportunities. You can also check your grades. Please check the MY COURSES website on a daily basis.

Learning Support Commons:
If you haven’t done so yet, take time in the beginning of the semester to visit the Learning Support Commons (LSC). There is a Science resource room and tutors available to help you, free of charge.

ACTIVE PARTICIPATION (ATTENDANCE) POLICY AND WITHDRAWAL:
The college-wide attendance policy is included in the Syllabus Addendum (http://www.spccollege.edu/central/asa/addendum.htm). The policy notes that each instructor is to exercise professional judgment and define “active participation” in class (and therefore “attendance”), and publish that definition in each syllabus.

First two weeks:
As per SPC policy students must attend at least ONE class in the first two weeks of the semester. Faculty verifies that students are in attendance at least once each week during the first two weeks of class. Students classified as “No Show” for both of the first two weeks will be administratively withdrawn and will still be responsible for the tuition and fees.

Non-payment of course fees:
Students will be automatically withdrawn at the beginning of the term for non-payment of course fees.

Withdrawal:
Students will be able to withdraw themselves at any time during the term. If a student wishes to withdraw from a course, it is the responsibility of the student to withdraw either online through MySPC or with the help of an advisor in the registration office. If the withdrawal is completed by March 23rd, 2016, a grade of “W” will be recorded which does not impact the student’s GPA. If the withdrawal occurs after March 23rd, 2016, the student will receive a grade of WF (withdraw-failing). The WF grade is punitive; it has the same impact on the GPA as an “F”. Students who withdraw from all classes may be required to repay some or all of the financial aid received for the term. Should you consider totally withdrawing from all classes before March 23rd, 2016 it is important that you consult the Scholarships & Student Financial Assistance office on your home campus to understand your options and the consequences of total withdrawal. Students in the third attempt of a course who withdraw will receive a WF regardless of the date of withdrawal.

Active participation:
Immediately following the 60% point (March 23rd, 2016) of the term the instructor will verify which students are actively participating in class. For this class, a total of 4 or more missed combined quizzes/homework/exams/reports prior to the voluntary withdrawal deadline of March 23rd, 2016 will result in the recording of a non-participating status being recorded. To qualify as an excused absence, you must have a valid, written document that can be verified. I cannot stress how important it is that you communicate with me! Students classified as not meeting the criteria for active class participation will be administratively withdrawn with a “WF.” Students and instructors will automatically receive an email notification to their SPC email whenever a withdrawal occurs. Please come see me if you have any questions.
Attendance:
**Regular class attendance is expected of all students.** If you miss a lecture, it is YOUR responsibility to obtain notes from your peers, and to know of important announcements and any assignments.

**SPECIAL ACCOMMODATIONS:**
If you wish to request accommodations as a student with a documented disability, please make an appointment with the Learning Specialist on campus (Jeff Zeigler, 791-2710). I need to see your accommodation form at least one week before the first assignment in which you intend to use the accommodation.

If you have a documented hearing loss, please contact the Program for the Deaf/Hard of Hearing at 791-2628. If you need assistance during an emergency classroom evacuation, please contact your campus learning specialist immediately about arrangements for your safety. The Office of Services for Students with Disabilities can be reached at 791-2628 or 791-2710.

**ACADEMIC HONESTY:**
The college has an official policy on academic honesty and proper classroom behavior. If there are any questions, please refer to the brochure, "Academic Honesty and Student Behavior: Expectations of Students at SPC" (also available online). I take this subject very seriously and will not tolerate academic dishonesty or inappropriate/disruptive behavior in the classroom. College policy states that a first offense (cheating, plagiarism, etc) is given a “zero” for the assignment with no possibility of replacing the score. In addition, on the first offense, a form is filed in the Assistant Provost’s office. This does not go onto the student’s transcript, but should a second offense occur, the student is then subject to expulsion from school.

**EMERGENCY PREPAREDNESS:**
In the event that a hurricane or other disaster causes closure of St. Petersburg College facilities, you may be provided the opportunity to complete your course work online. Following the event, please visit [www.spcollege.edu](http://www.spcollege.edu) for an announcement of the College’s plan to resume operations.

This syllabus is currently available in MY COURSES for your convenience. Log in to MY COURSES to confirm that you have access, reporting any difficulty to the SPC Student Technical Support Center at 727 341-4357 or via email at Onlinehelp@spcollege.edu.

Learning Outcomes and Objectives:
1. The student will demonstrate their understanding of the process of science by:
   a. explaining the terms and premises involved in solving problems scientifically, scientific research, and peer review.
   b. identifying an observation of interest, developing a hypothesis and designing an experiment to test it.
   c. discussing scientific contemporary issues using essential science skills including, but not limited to, critical thinking, efficient written and/or oral communication, and the ability to identify reliable scientific information.
2. The student will be able to explain the diversity of life and identify the general characteristics of each of the major life groups by:
   a. naming characteristics of major biological taxonomic categories.
   b. comparing major taxonomic categories, distinguishing similarities and differences among them.
   c. identifying live and/or preserved specimens belonging to each of the major taxonomic groups.
3. The student will describe the underlying organization of nature, including the basic structure, function and homeostatic integration in select biological organisms by:
   a. recognizing levels of complexity in nature.
b. identifying major cellular structures and their functions.
c. describing the processes of cell division and its role in the life cycle of organisms.
d. describing how organisms obtain and process energy, with special emphasis on photosynthesis and aerobic cellular respiration.
e. describing how organ systems function in order to provide homeostasis.
f. performing dissection of selected organisms to identify major structural components relevant to their function and maintenance of homeostasis.

4. The student will explain the conceptual basis of evolutionary theory by:
   a. applying the principles of evolutionary theory to the understanding of changes in abundance and kinds of life with time.
   b. describing different mechanisms of evolution such as natural selection, genetic drift, and gene flow.
   c. describing the importance of mutation in producing variation.
   d. explaining the evidence of evolutionary change.

5. The student will describe the basic concepts and application of genetics by:
   a. differentiating among chromosomes, genes, alleles, genotype and phenotype.
   b. solving genetics problems involving complete dominance, incomplete dominance, sex-linked traits, multiple alleles, multiple genes and simple pedigrees.
   c. describing the role of meiosis in heredity.
   d. describing technology that arises from our understanding of genetics and explaining its uses and implications.

6. The student will demonstrate their understanding of basic ecological principles by:
   a. explaining the flow of energy through ecosystems with respect to the laws of thermodynamics governing flow through successive trophic levels.
   b. analyzing biotic and abiotic factors in ecosystems.
   c. explaining community ecology and interactions among populations.
   d. describing population dynamics, human population growth and topics in sustainability.

7. The student will demonstrate the use of basic scientific equipment and techniques by:
   a. using a microscope to observe cellular structures and other specimens as well as identifying the parts of the microscope.
   b. using various types of scientific equipment to collect specimens or conduct scientific experiments.
   c. applying the knowledge of use of the equipment to real world scenarios.

The instructor reserves the right to make changes where necessary to the schedule and assignments. Changes will be announced in class and/or MyCourses. (Students need to check MyCourses regularly for course information and are responsible to note any changes.)

SIGNATURE PAGE:

I have read, understand, and agree to abide fully by the parameters set in this Syllabus and Syllabus Addendum for Dr. Goergen’s BSC 1005c course.

Printed Name:

Student Signature: Date: