BIOLOGY 1 - CELLULAR PROCESSES
BSC 2010, SECTION 005(6)
SYLLABUS FOR FALL, 2012
3 CREDITS

Instructor:  Alan R. Franck, Ph.D.
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Email:  afranck@mail.usf.edu
Office Hours:  Wednesday 2:30 – 4:30

Class Meeting Times:  M/W/F 8:35 am – 9:25 am

Class Location:  ISA 1061

Text Book:  Biology, Custom Edition for University of South Florida by Campbell and Reece.

Prerequisites/Corequisites:  CHM 2045 is a prerequisite/corequisite.  You must take BSC 2010L concurrently.

Course Description (from course catalog):  An analysis of biological systems at the cellular and subcellular levels: cell structure and function, respiration, photosynthesis, mitosis and meiosis, genetics and gene expression.

Course Objectives and Outcomes:  This course deals with biological systems at the cellular and subcellular levels.  Topics include an introduction to biochemistry, cell structure and function, enzymes, metabolism, photosynthesis, mitosis and meiosis, genetics, and gene expression.  This is a rigorous introductory biology course designed for undergraduate science majors who have obtained a 'basic level of proficiency' in algebra, chemistry, and biology.  By the end of the class, students should have a firm understanding of prokaryotic and eukaryotic cell structure, the structure and function of major biological molecules, basic metabolism, and basic genetics.  This course will prepare students for advanced subjects in the biological sciences.

Grades:
The final grade for the class will be determined by exams (71%, 150pts), in-class assignments (10%, 20pts), and online quizzes (19%, 40pts).

Exams:  There are six exams planned for this course.  Each exam will be worth 30 points.  The final exam will be cumulative.  All exams will be a combination of multiple-choice, true/false, and matching questions that will cover material presented in class, plus assigned reading and suggested problems.  One exam will be dropped.  Students may choose to skip the final exam and use it as their dropped exam grade.

Make-up exams will only be provided for certain specific circumstances that can be verified by accompanying documentation (see below).
Exam Dates:
Exam 1 – September 14, 2012
Exam 2 – October 5, 2012
Exam 3 – October 24, 2012
Exam 4 – November 16, 2012
Exam 5 – December 7, 2012
Final Exam (cumulative) – December 14, 2012 (7:30 A.M. – 9:30 A.M. in ISA 1061)

Exam Procedures:
1. Each student will need ID, U number, and #2 pencils
2. Students may be told where to sit
3. Both exams and answer sheets will be collected
4. Use of notes, books, electronics (including phones), or help from other students during exams is PROHIBITED

Viewing Exams:
Students will not be permitted to keep exams. However, students may visit during office hours to view their exams. If you cannot attend office hours, please contact me by email as soon as possible so that an alternate viewing time can be scheduled. Exams will only be viewable for one week after completing the exam.

In-class assignments (ICAs): Six short assignments will be given during the semester. These assignments are to be completed during the class meeting. Questions or problems will concern material recently covered in class, and answers will be in multiple choice format. In-class assignments will not be announced prior to the class in which they occur. It is the student’s responsibility to come to class so that these assignments are not missed. The two lowest ICAs will be dropped. As for exams, make-ups for ICAs will be permitted only for certain specific circumstances that can be verified by accompanying documentation (see below).

Online Quizzes: Five online quizzes will be given during the semester. They will consist of 8 questions, one at a time, with a 20 minute time limit. All quizzes will count towards the final grade.

Bonus Quiz: A bonus (extra credit) quiz or assignment will be administered before the end of the course and will be worth up to 2% of the final course grade. It will concern the book The Double Helix.

Grading Scale:

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<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
<th>Total Points</th>
<th>Quality Points</th>
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<tbody>
<tr>
<td>90+</td>
<td>A</td>
<td>189–220</td>
<td>4</td>
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<tr>
<td>80-89</td>
<td>B</td>
<td>168–188</td>
<td>3</td>
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<td>70-79</td>
<td>C</td>
<td>147–167</td>
<td>2</td>
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<tr>
<td>60-69</td>
<td>D</td>
<td>126–146</td>
<td>1</td>
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<tr>
<td>&lt;60</td>
<td>F</td>
<td>&lt; 125</td>
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Blackboard:
The Blackboard course management system will be used extensively throughout this course to post course material, grades, quizzes, announcements, etc. **It is your responsibility to ensure that you have Blackboard access and are receiving course e-mails.** I will make every effort to provide accurate records of your progress during the semester through Blackboard. However, please note that a grade in Blackboard is not an official record and may be changed at the discretion of the instructor for the purposes of error correction.
It is the student’s responsibility to confirm that a grade has been assigned on Blackboard for each assessment taken. If a student wishes to question the grading of an exam, this must be done within the exam viewing period. For quizzes and ICAs, questions/concerns/discrepancies must be addressed within 2 weeks of the quiz or ICA. (University policy declares that grade disputes and grievances will not be considered by the Department or College after a period of 3 months following the last exam.)

Missed Exams and In-Class Assignments:
Make-up exams and in-class assignments will ONLY be permitted in those cases where regular completion is prevented by 1) certain/specifc unforeseen circumstances, such as illness, accident, or death of a close family member or 2) special circumstances, such as participation in a conference, athletic event, or court date.

Make-ups must be requested as soon as reasonably possible given the conditions requiring the make-up. For example, in “unforeseen circumstances” the instructor would ideally be contacted BEFORE the missed assessment and MUST BE contacted at least within 48 hours of the missed work. For “special circumstances”, the instructor must be notified as soon as the conflict arises, typically at the beginning of the semester.

In all cases, unambiguous documentation justifying the make-up must be provided before the make-up will be administered. Unambiguous documentation must verify the date of the event and show its applicability to the student. Examples include a doctor’s note bearing the student’s name (for an illness), a hospital visitor’s pass or funeral notice (for illness/death of a close family member), or a towing receipt/police report with the student’s name (for car problems or accidents). Documentation must apply to the specific time of the missed work.

The scheduling, format, and location of make-ups are at the instructor’s discretion. Students must be willing to take a make-up assessment prior to the scheduled assessment date. Make-ups may differ from the regular assessment in their length, the questions asked, and the types of questions (which may include short-answer or essay questions). Since make-up assessments are different from those given to the rest of the class, any point adjustments made to the regular class assessment may not be applicable.

Academic Dishonesty: Academic dishonesty will not be tolerated. Students must answer exam questions through their own independent effort and without the aid of notes, textbooks, internet, etc. Copying/verifying answers from another student’s exam is prohibited, as is allowing another student to view your answers. Other indications of cheating during the examination include, but are not limited to talking with other students, using notes, shuffling through notebooks, or using electronic devices. Please note that students may be videotaped during any examinations in this course. Students who cheat will be prosecuted; this may result in a grade of ‘FF’ being entered into your academic record (failure due to cheating). It is infinitely better to accept a bad grade than ruin your academic record by dishonesty.

Electronic Devices: Use of electronic devices including but not limited to programmable calculators, laptop computers, cell phones, iPods and PDAs during exams is expressly prohibited. Use of these items during an exam will result in a failure (F grade) for the exam. The instructor reserves the right to restrict or forbid use of electronic devices during class if, in the instructor’s opinion, such use is distracting or otherwise prohibitory to the learning environment. Phones and other electronic devices must be off or silenced during class. Making or receiving phone calls, text messaging, and taking photos is prohibited. If laptop computers are used, they must be involved specifically in CLASS ACTIVITIES
ONLY. Other use of laptops during class is prohibited. Breach of these guidelines may result in dismissal from the classroom.

**Conduct:** Disruption of academic process is defined by the University as an act or words of a student in a classroom or teaching environment which, in the reasonable estimation of a faculty member, (a) directs attention from the academic matter at hand (e.g. noisy distractions; persistent, disrespectful, or abusive disruptions of lecture, exam, or academic discussions) or (b) presents danger to the health, safety, or well being of the faculty members or students. As a courtesy to your fellow students and the instructor, please do not converse during lectures. Please make sure all phones are off or set to “silent” (NOT VIBRATE). Please make sure laptop speakers are muted. Breach of these guidelines may result in dismissal from the classroom.

**Attendance:** Attendance is the responsibility of the student and you are strongly encouraged to attend all class meetings. The lecture presentations are the only complete guide to what will be tested in quizzes and exams. There is no ‘grade’ given for attending lecture but failure to attend may result in missed tests, in-class assignments, practice exercises, class demonstrations, announcements, and other information. Please arrive to class ON TIME and stay for the ENTIRE lecture. Leaving class early is distracting to the audience as well as the lecturer. If you need to leave early due to unusual circumstances, please sit near an aisle at the back of the lecture hall to minimize class disruption.

1st day Attendance: Students are required to attend the first class meeting of undergraduate courses for which they registered prior to the first day of the term. Names of students who register prior to the first day of the term are shown on the first class roll in Blackboard for each course section. The first day class roll is used by professors to drop students who do not attend the first day of class. Students having extenuating circumstances beyond their control and who are unable to attend the first class meeting must notify the instructor or the department prior to the first class meeting to request waiver of the first class attendance requirement.

**University Holidays:** Sep 3, Labor Day; Nov 12, Veterans Day; Nov 22-23, Thanksgiving

**Religious Observances:** Students who anticipate the necessity of being absent from class due to the observation of a major religious observance must provide notice of the date(s) to the instructor in writing prior to the missed class.

**Disabilities:** USF policy specifies that all programs are open to students with disabilities. Students in need of academic accommodations for a disability may consult with the office of Students with Disabilities Services to arrange appropriate accommodations. Students are required to give reasonable notice prior to requesting an accommodation from Students with Disabilities Services, and must provide the instructor with appropriate documentation from Student Disability Services.

**Lecture Notes:** Notes are encouraged, and tapes of lectures are permitted for personal use only. Notes and tapes of lectures ARE NOT PERMITTED FOR THE PURPOSE OF SALE.

**Please Note:** Steps for academic continuity in the event of campus closure: In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Blackboard, Elluminate, Skype, and email messaging and/or an alternate schedule. It is the responsibility of the student to monitor Blackboard site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.
Tips for Class Preparation: The emphasis in this class is on understanding principles and concepts and on critical thinking (not simply memorization).

1. Read the material prior to class
2. Come to class regularly, participate in discussions, and take good notes
3. Review your notes SOON after class and make use of any additional materials that are provided (reviews, videos, etc)
4. Study regularly and keep up to date (don’t wait till exam time to study!)
5. Ask questions if you have any difficulties with the material
## Tentative Schedule of Course Topics

Please note that the schedule, as given, is subject to change, depending on the progress of the course.

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<th>WEEK</th>
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<tr>
<td>Week 1 (Aug 27-31)</td>
<td>Ch 1</td>
<td>Ch 2</td>
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<td>Week 2 (Sep 3-7)</td>
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<td>Week 3 (Sep 10-14)</td>
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<td>EXAM (1-4)</td>
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<td>Week 4 (Sep 17-21)</td>
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<td>Week 5 (Sep 24-28)</td>
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<td>Week 6 (Oct 1-5)</td>
<td>Ch 7</td>
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<td>EXAM (5-7)</td>
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<td>Week 7 (Oct 8-12)</td>
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<td>Ch 8</td>
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<td>Week 8 (Oct 15-19)</td>
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<td>Week 9 (Oct 22-26)</td>
<td>Ch 11</td>
<td>EXAM (8-10)</td>
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<td>Week 10 (Oct 29-Nov 2)</td>
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<td>Week 11 (Nov 5-9)</td>
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<td>Week 12 (Nov 12-16)</td>
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<td>EXAM (11-14)</td>
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<td>Week 13 (Nov 19-23)</td>
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<td>Week 14 (Nov 26-30)</td>
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<td>Week 15 (Dec 3-7)</td>
<td>Ch 17</td>
<td>Ch 17</td>
<td>EXAM (15-17)</td>
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<td>Week 16 (Dec 10-14)</td>
<td>Final Exam</td>
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<td>Friday, Dec 14, 7:30-9:30am</td>
<td>ISA 1061</td>
<td>Cumulative</td>
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- **Chemistry & Molecular Diversity**
- **Biological molecules and Cell features**
- **Metabolism, respiration, photosynthesis**
- **Cell cycles and genes**
- **Inheritance and Gene to Protein**