### COURSE INFORMATION

<table>
<thead>
<tr>
<th><strong>Course Title</strong></th>
<th>General Biology I</th>
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<tr>
<td><strong>Course Number</strong></td>
<td>BSC-2010</td>
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<tr>
<td><strong>Course Discipline</strong></td>
<td>Biology</td>
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**Course Description**: We will explore the question, **what is life?** You will discover how cells are organized and how they work, how genetic information is used and inherited, and how it changes over time to produce new species. Along the way, you will relate these life functions to nutrition, health and disease, biomedical advances, and our ultimate sustainability on this planet. We will employ active and interactive learning, and you will develop skills in solving problems and interpreting scientific hypotheses and evidence.

**Course Dates**: Monday, August 20, 2018 – Friday November 30 + final exam (Weds Dec 5, 9:45-11:45 am) **Attendance in class is crucial and mandatory.**

**Location**
- Section U02: School of International & Public Affairs Room 125
- Section U04: School of International & Public Affairs Room 125
- Section U06: Green Library Room 100

**Meeting Days/Times**
- Section U02: MWF 11:00 AM – 11:50 AM
- Section U04: TuTh 11:00 AM – 12:15 PM
- Section U06: TuTh 12:30 PM – 1:45 PM

**Instructor(s)**
- Section U02: Prof. John Cozza
- Section U04: Prof. Thomas Pitzer
- Section U06: Prof. Thomas Pitzer

**Contact Information & Office Hours**

<table>
<thead>
<tr>
<th><strong>Dr. John Cozza</strong> (Instructor)</th>
<th>Office Hours</th>
<th>Office Room</th>
<th>Office Phone</th>
<th>E-mail</th>
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<tr>
<td></td>
<td>Mon 5-6+; Tues 11-12, 2-3, &amp; 5-6+; Weds 2-3, 5-6+; Fri 5-6+</td>
<td>OE-216</td>
<td>305-348-4932 (email is preferred)</td>
<td><a href="mailto:jcozza@fiu.edu">jcozza@fiu.edu</a></td>
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<tr>
<th><strong>Prof. Thomas Pitzer</strong> (Course Coordinator)</th>
<th>Office Hours</th>
<th>Office Room</th>
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<td>by appt or call before stopping by</td>
<td>OE-273B</td>
<td>305-348-1224</td>
<td><a href="mailto:genbio@fiu.edu">genbio@fiu.edu</a></td>
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<tr>
<th><strong>Roberto Pereira</strong> (Program Assistant)</th>
<th>Office Hours</th>
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### INTRODUCTION

**Description**: This course is designed for science and biology majors. Although there are no prerequisites, some chemistry background is recommended. It will be very challenging and difficult for non-science majors without adequate background to do well in this course.

**Student Learning Outcomes:**
- Apply the scientific method to solve problems and to understand relevant current issues in biology, medicine, and environmental science.
- Explain how cells work, including membrane function, signaling, and metabolism.
- Explain the principles of genetics on multiple levels: molecular function (the DNA code and how it is used), sex and inheritance, and population biology.
- Use biological terms and concepts accurately and effectively in written form.
- Analyze and examine hypotheses and research findings in biology.
- Develop and demonstrate the ability to gather and evaluate scientific information.
NOTE: This syllabus is subject to change. Please check the on-line syllabus often for possible modifications.

***Exam dates and schedule of lectures are posted on Canvas

Help and advice: If you aren't doing well in the course and would like to go over exams or remedy whatever problems you have, please come talk to us ASAP. We want you to do well, but if you suffer in silence, what can we do? Sometimes, a simple change of approach or studying strategy makes all the difference. Your instructor and TA are here to help you with the material and how to learn it, so keep in touch and don’t be shy!

Conduct: We expect all students to behave as reasonable adults just as in any university classroom in any other school. In such a large class, it is important to have respect towards the instructors and fellow classmates. Inconsiderate, disrespectful, dishonest, or disruptive behavior, as the instructor or your fellow classmates perceive it, or as is described in the Student Handbook, is unacceptable for adults in this course. The instructors reserve the right to ask you to leave or have you removed if such behavior is present. Such behavior may bring about official disciplinary procedures as outlined in the Student Handbook. To avoid distraction, PLEASE TURN OFF AND PUT AWAY YOUR CELL PHONES!!!!

Following Directions: We expect all students to follow the directions outlined in this syllabus, announced in class, and distributed via email or Canvas announcement. We are not responsible for any problems that arise because students didn’t attend class or didn’t check these resources. Also, not having easy access to these resources is not an excuse—email not working, wasn't in class when the announcement was made, etc.

General expectations and how to succeed:
- **Read the text** and any additional assigned readings thoughtfully before the corresponding lecture. In a pinch, skimming is better than not reading at all.
- **Attend every class** and actively participate in discussions, interactive questions, and activities. Many studies show that active, social engagement with the material produces meaningful, enduring learning.
- **Take good lecture notes**, in your own words and preferably handwritten. Indicate any areas of difficulty to look up after class. Structure your notes as lists, outlines, concept maps, or in some other form that is useful to you. This initial processing of the information begins the process of making it your own, aka learning it!
- **Minimize distractions.** Texting, social media, online activity, videos, etc. erases learning, according to research. In class, it also unfairly distracts your neighbors.
- **Ask questions;** ask for clarification ASAP. There are no stupid questions!
- **Help your neighbor** and contribute to the group. If you help each other, everyone will do better including you!
- **Review concepts** ASAP after class, using the book and other resources to clarify any hazy areas. For the most enduring learning, try to find the answers to your questions yourself, or through active participation in a study group.
- **Come to office hours** (or make another time to see us) with any questions you are still unsure about, or just to talk about biology!
- **Take care of yourself:** eat well, drink water, sleep, exercise, go outside!
**REQUIRED TEXTBOOK**

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<tr>
<th>General Biology I Lecture</th>
<th>General Biology I Lab</th>
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<td>Choose ONE of the options below:</td>
<td>Everyone must buy:</td>
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<table>
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<tr>
<th>Title: Biology In Focus</th>
<th>Title: Openstax Biology 2e</th>
<th>Title: General Biology I Lab Manual</th>
</tr>
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<tbody>
<tr>
<td>Authors: Urry, Cain, Wasserman</td>
<td>Authors: Clark, Choi, Douglas</td>
<td>Authors: Jose Alberte, Thomas Pitzer, Kristy Calero</td>
</tr>
<tr>
<td>Edition: 2nd</td>
<td>Edition: 2nd</td>
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**TEXTBOOK BUYING OR FREE OPTION**

The use of a text in this course is required. However, you have two options: you may purchase a hard copy or eBook of the standard textbook traditionally used in this course, OR you will also have the option to use a free online textbook resource. Either way is up to you, and we will be using and referencing both texts during the semester. Students should realize that we use the text as a reference and not as an instruction manual. Your exams in class will be based solely on what we do in class, but to help you prepare for class you will also be quizzed weekly on the main concepts from the assigned text readings. So it is incumbent upon all students to have access to one of the options presented within this syllabus, as you cannot complete the work nor can you hope to learn the material without some type of reference material.

<table>
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<tr>
<th>Textbook Options (choose one)</th>
<th>Price</th>
<th>Click below to purchase packages</th>
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<tr>
<td><strong>Openstax Biology 2e</strong></td>
<td>FREE</td>
<td><a href="#">Openstax Link</a></td>
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<tr>
<td><strong>Biology in Focus digital + print package:</strong></td>
<td>$158.55</td>
<td><a href="#">Bookstore Link</a></td>
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<tr>
<td>2. Pearson eText</td>
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<tr>
<td>3. Modified MasteringBiology (an optional online study aid)</td>
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<td>ISBN for Package: 9780134433769</td>
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*Note: If you are a Biology major, you must also take General Biology 2. Your professor in that course may require you to purchase this Campbell text and Modified MasteringBiology.*
**eText with Modified MasteringBiology**
This gives you access to the Pearson eText for the entire Campbell *Biology in Focus* AND access to Modified MasteringBiology (an optional online study aid). You will have access for 2 years. $115.95

To activate MasteringBiology:
1. Sign in to Canvas and enter your Canvas course.
2. Select the 'MyLab and Mastering' link in the left-hand menu.
3. Select any course link in the Mastering Biology page to redirect to Mastering Biology website.
4. Create account/Log-in with Pearson account.
5. On the following screen, either enter your prepaid access code or purchase student access to Modified MasteringBiology.

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<tr>
<th>Product</th>
<th>Price</th>
<th>Notes</th>
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<tbody>
<tr>
<td>General Biology I Lab Manual Only</td>
<td>$68.75</td>
<td><strong>GBI Lab Manual</strong></td>
</tr>
<tr>
<td>Free 2-week trial of Modified MasteringBiology</td>
<td>FREE</td>
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**CLICKERS**
You will need to purchase an **i-clicker2** if you want to receive **extra credit**. If you do not participate in the i-clicker questions, it will NOT count against you because it's used as extra credit. You can purchase the clickers at the MMC bookstore (see prices below). *It is recommended that you own a clicker, as you will use it in many of your other science courses.*

<table>
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<tr>
<th>MMC Bookstore i-clicker2</th>
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<tbody>
<tr>
<td>(Buy New)</td>
<td>$60</td>
</tr>
<tr>
<td>(Buy Used)</td>
<td>$49.20</td>
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<tr>
<td>(Rent New)</td>
<td>$46.20</td>
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<tr>
<td>(Rent Used)</td>
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**CLICKER POLICIES:**
You can receive up to a total of 25 points extra credit on an exam grade for participating with your clicker and answering correctly. You can earn a maximum of 2 “RAW” points for every clicker question done in class: 1 point for participating in the question and another point for getting the answer correct. So if in one day of lecture there are 3 clicker questions, you can earn up to 6 points that day. At the end of the semester, the student with the highest amount of RAW clicker points in their section will receive the full 25 extra credit points, and everyone else will be scaled from there. For example, if at the end of the semester the highest RAW clicker point total someone earned was 150, then that student would receive 25 ACTUAL clicker points added to one of their exam grades. Let's say another student earns 125 RAW points. Then once scaled, that student would receive 20.83 ACTUAL clicker points of extra exam credit, because (125/150)*25 = 20.83.

You will NOT be able to use the **i-clickerGO** which is used through smartphones/ipads/laptops because of...
technical and logistical difficulties associated with it.

You may use an older model such as the i-clicker1, but keep in mind that this older model won’t show you how much battery life you have left, and it won’t show you a check mark on the LCD screen once you submit your answer to know that it went through.

**If a student is caught with more than 1 clicker, the instructor will confiscate both clickers, take a picture of the clicker ID numbers, return the clickers to the students, and let them know that neither one of them will be receiving any credit at all for the clickers.**

It is your responsibility to check your clicker points online ASAP after we post it on Canvas. We do this so that you can make sure that your clicker is logging in your answers. This allows you to service your faulty clicker (at FIU tech services) before too many points are lost. If you don’t do this, you won’t get any extra credit points—there’s nothing we can do if your clicker wasn’t logging in points. We can’t accept written or emailed answers to clicker questions.

### GENERAL POLICIES

**Labs:** We do NOT give overrides into lab. If you are trying to get into lab and they are full, just keep checking my.fiu.edu to see if anyone drops so that you can take their spot. **LABS WILL MEET THE FIRST WEEK OF CLASSES. PLEASE PURCHASE YOUR LAB COAT AND SAFETY GOGGLES (OR SAFETY GLASSES), AND BE PREPARED TO PERFORM A LAB THE FIRST WEEK.**

**Extra Credit:** The ONLY two ways of receiving extra credit is by participating in the i-clickers and the Reading Enhancement Workshop (REW) program. More information about REW can be found on Canvas under the "Extra Credit" link.

**Cheating Policy:** We will follow the "Student Handbook" regarding cheating. Formal and informal procedures can be found under the section "Academic Misconduct" in the "Conduct & Policies" chapter. Anyone caught cheating will be asked to leave the class, will be given an "F" for the course and a petition will be sent to Academic Affairs. This course has too large an enrollment for any other recourse—we will go by the University's policy.

**Questions about course policies:** **Roberto** can answer just about any question you may have about the logistics of the course. You can e-mail him at genbio@fiu.edu and he will get back to you as soon as he can. Keep in mind that Roberto handles about 1,500 students per semester so if he doesn't respond to you right away give him about 24-72 hours (not including weekends) for a response. Sometimes he does read e-mails during the weekend but not always.

**Questions about course content:** E-mail or talk to **your professor** if you have questions about the actual material being taught in class, because they know exactly what you are supposed to be learning. **Contact your professor as soon as you realize you are struggling, or aren’t doing as well as you hoped!** We are here to help you succeed! On the other hand, please don't write your professor with questions about logistics that Roberto could better answer for you.

**Thoroughly read the e-mails** that Roberto sends to everyone, because he addresses things that might answer your questions. If you ask a question that Roberto or the professor answers in a mass e-mail, we will not personally answer your e-mail, so make sure you read ALL course announcements!!! Also, look at the FAQs
page as a lot of questions are answered there. You can use the discussion boards on Canvas to ask questions that you think may have been covered, or if you can’t wait for us to respond.

**Disability Students:** If you are registered with the Disability Center at FIU, make sure to provide Roberto with a copy of the document at the beginning of the semester so that he can accommodate your needs in time.

**Religious Holidays:** You must notify us at the beginning of the semester if there is a conflict with your religious holiday and an exam date so that we can make accommodations.

In general, please let Roberto know of any conflicts with exams ASAP—beforehand if at all possible. The more notice we have of a conflict or problem, the more options there may be to resolve it.

### EXAMS

**Exams:** There will be a total of 5 exams in this course (4 midterm exams and 1 cumulative final). Each midterm exam will have around 50 multiple choice questions (some professors also use matching, true/false, and diagram questions). The final will have around 100 questions.

Check the schedule for the exam dates NOW and double check your personal calendar to make sure that you do not have any conflicts with any of the exam dates, because there’s nothing we can do if you will be missing an exam for a reason that is unexcused, such as a planned vacation or wedding. You will need to either change your plans or take this class in another semester.

On the day of the exam, please bring TWO sharpened pencils with erasers and your STUDENT ID. All other materials must be placed at the front or side of the class, so it is best not to carry anything to the room on exam day. NOTE: this includes hats, cell phones, beepers, all watches (smart, electronic, or otherwise), purses, backpacks, tissues, sweaters and jackets, calculators, lunch boxes, pencil cases—everything except pencils. Please turn off all cell phones and beepers. You will be asked to remove your hat.

You will be provided with a bubble sheet. Please be careful when filling it out, as errors will cause you to make a bad grade. **If you do not bubble in your last name first, then your first name along with your panther ID and form number on your bubble sheet on the day of your exam, you will lose 10 points on the exam!!**

You may write on the exam—in fact you should do that—to help clarify complicated questions or do calculations. Students will not be allowed to use the restroom during the exam. No talking. Cheating will be dealt with seriously and severely.

We will check your student ID before you are allowed to turn-in your exam and leave. Do not forget to bring it. You must sign your exam. When you are finished, you must return the exam booklet and any and ALL materials given to you during the test, whether filled-out or not. No one can leave unless they have returned the exam.

**ARRIVING LATE:** If you arrive to an exam more than 20 minutes late, or after the first person finishes the test (whichever comes first) you will NOT be allowed to take the exam. You must take the exam at the time you are registered for.
**Exam Viewing:** After the exam, you will be emailed a scanned copy of your bubble sheet. Roberto will then set up a day/time where you can come by the office to view your exam. You must bring a printed copy of your scanned bubble sheet to view your exam in the office. We do not allow students to keep their exams. When you view your exam, you will NOT be allowed to write anything down or take a picture of anything from the exam. Cell phones may NOT be used during exam viewing. If you can't make it to the day/time that Roberto sets up, then you must email Roberto for an alternate appointment, which must be within a week of the original exam viewing date. After a week from the exam viewing date, students will NOT be allowed to view their previous exams. Students who would like to raise any questions concerning the nature of any particular question on an exam can do so ONLY within a week of exam viewing date. **After the viewing, we strongly recommend that you visit your professor during office hours to discuss any questions or concepts you are still unsure about.**

**Calculating your exam grade:** To check your grade on the exam, count the number of correct answers on the bubble sheet—do not count the number of incorrect answers, because that is not how the exam is graded. Simply divide the number of correct answers by the number of questions the exam is graded out of (as shown on the first page of the exam booklet), and multiply that number by 100 to get your percentage score.

**Make-ups:** If you miss an exam your grade is ZERO—unless you provide Roberto with VALID documentation of a serious and urgent excuse. Once the document is approved, the required cumulative final will substitute the grade for the missed exam. You must provide Roberto with a copy of your documentation within a week of your absence for approval by him to make up the missed exam grade.

Roberto will not approve excuses that are within the student's control. **Students who simply do not show up for the exam will NOT be allowed to replace the zero on the missed exam.**

Examples of unacceptable excuses: poor performance, not enough time to study, overslept, headache or common cold, car wouldn't start, ride didn’t show up, family problems, family celebration or vacation, etc.

Examples of acceptable excuses: medical emergency, death of member of immediate family, serious accident reported to police, military or jury duty, FIU NCAA athletics game day. All of these must be accompanied by a valid and verifiable written letter signed by a professional or some other type of irrefutable and official proof.

**WE DO NOT DROP ANY EXAM SCORES!!**

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**PLTL**

**PLTL** (Peer-led team learning) is an active learning paradigm, where small groups of students meet once a week outside of class with a peer-leader who has done well in the course. Student attendance for General Biology I PLTL is mandatory. PLTL is a semester-long commitment, and sections will meet once a week, every week, for 75 min. You must arrive on time—allow extra time to get to remote locations, such as the Football Stadium. Each week your PLTL Leader is required to give you points based on whether you came prepared, whether you participated, and on the correctness/completeness of your readiness survey. PLTL counts as 15% of your total grade. Please read the PLTL syllabus for any other clarifications. **Students will be notified via e-mail how to enroll for the program during the beginning of the semester.**

Please contact the PLTL office ASAP if you are not able to register for a section, if you miss your session, or for any other concerns.
WEEKLY QUIZZES

Every week, you will take an online quiz on Canvas. It will be composed of 10 multiple choice questions randomly selected from a quiz bank provided by the course instructors. You will have 20 minutes to take the quiz and only one chance to take it. Unless told differently, that is how quizzes work each week. In addition, you will take a special online pre- and post-concept inventory quiz to measure your progress in the course. Roberto will e-mail you with the details.

The material covered on the regular weekly quiz is the material that will be taught in lecture the UPComing WEEK. This is to motivate you to read over the new material and familiarize yourself with it, so that you can better understand what will be taught in lecture the week coming up.

Please email Roberto if you have any concerns about your quiz grade that are not addressed below.

A few important things about weekly Canvas quizzes:

1. **There are absolutely NO excuses for a missed quiz.** Even if something goes wrong in the middle of it because of a computer glitch/internet, there's nothing we can do about it. But that's why we drop one quiz grade—so missing one quiz will not hurt your grade at all.

2. **There are NO makeups for online quizzes** even if your excuse is valid. It'll just be your dropped quiz.

3. **We drop ONE of your lowest quiz grades** at the end of the semester regardless of the reason: whether it's because you forgot/missed it or had an error, computer/internet glitch etc., or just didn’t do well. If you didn’t do the reading, do it before the topic is covered in class, and schedule your time better in the future.

4. **Use the free Mozilla Firefox** web browser to take the quiz. Safari and Chrome are not compatible with Canvas.

5. **Canvas quizzes must be taken on a laptop or desktop computer.** They do not work through ipads/tablets. Do not try taking it on your phone as it will not work.

6. **You always know what will be on the quiz: the chapters of the UPComing week** as shown on the “Schedule” link for your professor on Canvas “Modules”.

7. **It is YOUR responsibility to be reading ahead each week**—so that by the time the quiz is posted all you have to do is take it.

8. Quizzes are normally posted on a **Wednesday/Thursday and due by Sunday** before midnight.

9. **Roberto will always send an email** when a quiz is posted along with what chapters it covers. But keep in mind all the quiz information is already posted on Canvas through the "Schedule" link for your instructor, so there is no excuse for not knowing about a quiz or what chapters it covers.

10. **Do NOT wait until the last minute on Sunday** to complete the quiz. Even waiting until 11:30pm on Sunday night is considered taking it at the last minute.

11. **Your quiz must be submitted BEFORE 11:59 pm each Sunday.** Submitting your quiz at 11:59 pm will already be considered late and your quiz might be marked as a "0".

12. **You will NOT be able to view your answers** on the quiz after it's been submitted. The only way to do so is if you stop by Roberto’s office to take a quick look. This can only be done after the due date of the quiz. You will not be allowed to write anything down or take a picture.

13. On a normal weekly quiz, **you will not be able to see your score on the quiz until AFTER the due date** of the quiz. It will be posted automatically on Canvas.
**GRADING**

**Grade Determination:** Your grade will consist of scores from five exams (together worth 75% of your overall grade), your PLTL score (worth 15% of your grade), and your Quiz score (worth 10% of your grade). **WE DO NOT DROP ANY EXAM SCORES!!**

All course grades are on the 10-point scale below.

**A:** 90-100; **B:** 80-89; **C:** 70-79; **D:** 60-69; **F:** <60. We do **NOT** give pluses or minuses.

**For credit in the Biology Major, you must earn at least a C.**

When assigning a letter grade, your numerical grade for the course will be rounded up to the next highest whole number. For example, if your calculated numerical grade is at least 89.00, that would round up to 90 and the A. However, an 88.99 would be a B. No exceptions, so please don’t ask.

We do **NOT** give Incompletes.

### HOW TO CALCULATE YOUR GRADE:

1. **Exam Average:** Add your five exam scores. If you completed all 5 weeks of REW then you should add 5 additional points. If you participated with iClicker then add your actual (or estimated) extra credit points (up to 25) to the sum. Once you have your final sum you divide that number by 5 and multiply that number by 0.75. This is your Exam Average.

2. **PLTL:** Your PLTL leader will be giving you points each week based on whether you're prepared and participate and at the end of the semester those points will be added up. You can check the PLTL website for your weekly PLTL score. Take your PLTL score (out of 100%), then multiply that number by 0.15. This is your PLTL score.

3. **Quiz Average:** Add all your quizzes (except your lowest one that we drop). Note: you add your quizzes as if they are percentages (so if you get an "8" that's really an "80" and if you get a "9" that's really a "90" so you would add "80 +90+ etc. ") and then divide that number by the number of quizzes (minus one) you had in the semester. Then multiply that number by 0.10. This is your Quiz Average.

4. **Overall Class Average:** Then the last step is to add your Exam Average plus your PLTL score plus your MasteringBiology score to make your overall Class Average.

Or just use the handy grade calculator that Roberto will post on Canvas!

*Note: You can think of the 5 points from REW as being added to one of your test scores. Please keep in mind that the 5 points do NOT get added to your final overall average.*

### Schedule of topics and exam dates

Please visit the BSC2010 Canvas site for your instructor’s full schedule. Keep in mind that the schedule is subject to change, especially in the amount of time devoted to each topic, so be sure to note any updates given in class. Exam dates are meant to be firm, and would only change under the most pressing circumstances (e.g. a hurricane).