GENERAL INFORMATION

PROFESSOR INFORMATION

Instructor: Maureen Walter
Phone: (305) 919-5898 (do not leave voicemail)
Office: Academic 1, Room 380 (BBC)
Office Hours: By appointment (can be a phone meeting)
E-mail: Please use Blackboard course messages or walterm@fiu.edu

COURSE DESCRIPTION AND PURPOSE

The BSC2023 Lab course for non-science majors illustrates the processes, concepts, and principles discussed in BSC2023 Lecture through virtual and kitchen-based investigative activities.

This course assumes very little or no prior scientific knowledge of biology, and thus serves for non-biology major students who wish to satisfy the lab portion of BSC 2023, completing the Life Science requirement within the FIU Core Curriculum Natural Science category.

This course will expand the student's knowledge of how the human body works over successive levels of organization from molecules of life to organ systems to organisms. Lab assignments may include (but are not limited to) such work as hands-on (kitchen based) lab experiments, labeling activities, short answer essay questions and quizzes. There may also be writing assignments that will analyze data collected from the class. All of the assigned activities will be explained in each Lab module.

Natural Sciences

Our technologically dependent world requires an understanding of the processes that led us here. Learning the basic concepts and ideas of scientific fields provides contact with not just those fields but with how science is done. In these courses students study the scientific method through examination of the foundational theories of modern scientific thought. Students apply scientific principles and theories to problem solving, evaluate scientific statements, and incorporate new information within the context of what is already known.

Emphasizing the essential connection between theory and experiment, the hands-on laboratory experience provides the context for testing scientific theories. Students will be able to describe the scientific method through examination of the foundational theories of modern scientific thought.

COURSE OBJECTIVES

Students will be able to:

- Translate a greater appreciation of your own biology to how your organ systems work together to maintain your internal environment (homeostasis).
- Demonstrate an understanding of human biology, and science in general, that will help you make sound decisions about contemporary issues of a biological or technological nature that will impact your life.
- Integrate both virtual and (kitchen based) hands-on lab experiments' procedures and outcomes to the process of scientific inquiry.
TEACHING METHODOLOGY

This is a fully online course in which all of the instructional materials and activities are delivered through Blackboard, and/or other internet-based media. This course is divided into Labs. Each Lab includes background material on the scientific material being explored.

Includes, but not limited to:

- Active participation in kitchen-based experiments including recording & interpreting results and submitting experiment write-up with supporting digital pictures.
- Guided inquiry through illustrated text, animations, and virtual exercises assessed by quizzes and exams.

IMPORTANT INFORMATION

POLICIES

Please review the FIU policies page as it contains essential information regarding guidelines relevant to all courses at FIU and additional information on the standards for acceptable netiquette important for online courses.

No material will be reopened except for an emergency that has impacted the FIU community. Any personal issues that impact your ability to complete work MUST:

- Be documented. Such documentation would include funeral announcement (death in family), hospital receipts (accident, illness, etc.), etc.
- Prevent you from accessing the material during the COMPLETE time is open (~6 weeks for quizzes and assignments and ~5 days for exams). If you choose to wait till the last few days (or hours) to do the work and something prevents you from completing the work (including an emergency), the material WILL NOT be reopened. By making the choice to wait, you are also accepting the possibility that (Murphy's Law) "If anything can go wrong, it will". And always at the worst possible time.
- Please note that in this class all material opens and closes at 9AM, NOT 11.59PM!!!!

TECHNICAL REQUIREMENTS & SKILLS

One of the greatest barriers to taking an online course is a lack of basic computer literacy. By computer literacy we mean being able to manage and organize computer files efficiently, and learning to use your computer's operating system and software quickly and easily. Keep in mind that this is not a computer literacy course; but students enrolled in online courses are expected to have moderate proficiency using a computer. Please go to the "What's Required" page to find out more information on this subject.

Please visit our technical requirements page for additional information.

ACCESSIBILITY AND ACCOMMODATION

Obtain more detailed information about the specific limitations with the technologies used in this course.

Review Blackboard's Accessibility Commitment for more information.

For additional assistance please contact our Disability Resource Center.

ACADEMIC MISCONDUCT STATEMENT

Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly to demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed
by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook.

Academic Misconduct includes: **Cheating** – The unauthorized use of books, notes, aids, electronic sources; or assistance from another person with respect to examinations, course assignments, field service reports, class recitations; or the unauthorized possession of examination papers or course materials, whether originally authorized or not. **Plagiarism** – The use and appropriation of another’s work without any indication of the source and the representation of such work as the student’s own. Any student who fails to give credit for ideas, expressions or materials taken from another source, including internet sources, is responsible for plagiarism.

Learn more about the [academic integrity policies and procedures](#) as well as [student resources](#) that can help you prepare for a successful semester.

### COURSE PREREQUISITES

Since this course is designed for non-Science majors, there are no prerequisites. For this course to fulfill the UCC requirement, students must also take (at some point in time) the Lab component worth 1 credit. This is BSC2023L and can be taken online or in an actual lab environment on either campus. Any Quizzes or Exams taken in this course has no impact on the BSC2023 Lab grade. The BSC2023 Lab has its own Quizzes and Exams.

### PROCTORED EXAM POLICY

This course does not require any on-campus or proctored exam.

### LAB MATERIALS

**A list of grocery items needed for the kitchen based experiments is included under Course Content.**

You will also need a digital camera (can be a cell phone camera) to take pictures that must be attached to each Assignment before it is submitted through the Blackboard program. This can be a camera you already own, including your phone camera, or a disposable digital camera that can be purchased at a drugstore. **YOU MUST DOCUMENT THE EXPERIMENTS WITH PICTURES. EACH AND EVERY PICTURE MUST INCLUDE A HAND WRITTEN CARD WITH NAME AND ID NUMBER OR YOU WILL RECEIVE NO CREDIT FOR THE LAB ASSIGNMENTS** and they will be returned to you for resubmission.

**You will not need to purchase a Lab Manual for this course. All of the required text material is on the website.**

### EXPECTATIONS OF THIS COURSE

his is an online course, which means most (if not all) of the course work will be conducted online. Expectations for performance in an online course are the same for a traditional course. In fact, online courses require a degree of self-motivation, self-discipline, and technology skills which can make these courses more demanding for some students.

**Students are expected to:**

- Review the how to get started information located in the course content
- Introduce yourself to the class during the first week by posting a self-introduction in the appropriate discussion forum.
- Take the practice quiz to ensure that your computer is compatible with Blackboard
- Take Student/Instructor Quiz as many times as necessary to earn a perfect score. This Quiz acts to certify your knowledge of the course rules and deadlines and your acceptance of said rules. Students will not have access to Exam 1 until the Quiz is taken and a perfect score earned.
- Interact online with Instructor/s and peers
• Review and follow the course calendar for due dates and times. **All material in this specific course opens and closes at 9AM.** If you have a smart phone, put those dates and times with alerts in your phone so you do not miss them.

• Log in to the course as many times as necessary to keep up with the work and complete scored material by the closing date and time.

• Regularly check your registered FIU email and Blackboard page for course Announcements

The Instructor will:

• Log in to the course **multiple times** per week
• Respond to emails or messages within **72 hours**
• Typically score and return submitted Lab Assignments within 72 hours of submission.
• If you are planning on traveling this summer, carefully check your travel plans with the closing dates and times for the material in this course. **This course will NOT be customized to suit student's travel plans.** If you see an issue, drop the course in time to receive a refund for your tuition costs.

COURSE DETAIL

### COURSE COMMUNICATION

Communication in this course will take place via **internal messages and announcements**. If you have a time sensitive issue, email me at my regular FIU email, walterm@fiu.edu. But be sure to put your name and course number in the subject line indicating you are an online student.

The course message feature is a private, internal Blackboard only communication system. Users must log on to the blackboard system to send/receive/read messages. There are no notifications in Blackboard to inform users when a new message has been received; therefore, it is recommended that students check their messages routinely to ensure up-to-date communication.

The announcements are messages posted on your My Course page and sent to your registered email account. This is typically your FIU account email. If you do not check your registered email account, you will still be responsible for checking for announcements on the Course Blackboard website. The announcement messages are very helpful because I use this tool to inform the whole class about course issues such as material closing or any technology problems students have encountered. I will be sending out an announcement the first day of class. **If you do not receive it, contact Technology Support (through link on left-hand menu) and ask them to confirm your email account.**

I receive many messages throughout the semester. For some, I respond individually, but to others I will respond as a message to the whole class because I view it as an issue that everyone needs to know about. And for some messages, I do not respond at all. Some of these are the messages that request I reopen material that has closed. Since the course guidelines are very clear on this matter, and since all students will have taken the Student-Instructor quiz covering these guidelines, there is no reason for me to tell the student what they already know: **the material will not be reopened.**

If you have a Quiz or Exam scheduling conflict, let me know in advance. While I will not customize the course to fit your schedule, I may be able to open a Quiz or Exam early. **YOU MUST NOTIFY ME IN ADVANCE OF A CONFLICT, NOT AFTER THE EXAM HAS CLOSED!** You must provide specific information on why you need a schedule change and the Instructor has the right to either grant or deny the change based on the supporting information. Barring hurricanes and other natural disasters, there will be no extensions on the closing dates for the Lab quizzes or Exams or Lab Assignments (see dates below).

• If you have an emergency that prevents you from accessing the material (the last 3 weeks of the ~6 weeks for quizzes and assignments and the last 4 days for exams). The Instructor MUST be contacted (at least 2 weeks before closing for Quizzes and 4 days before closing for Exams) before the closing of the material. These circumstances must be supported with official documentation such as the official hospital records showing day of admittance and release or police records showing day or arrest and release.

• If you choose to wait till the last few days (or hours) to do the work and something prevents you from completing the work (including an emergency), the material **WILL NOT be reopened.** By making the choice
to wait, you are also accepting the possibility that (Murphy's Law) "If anything can go wrong, it will" and always at the worst possible time.

The Instructor typically logs in to the course 3 times a week, so you can expect to receive an answer to any messages within 72 hours. If it is an emergency, send an email to my regular FIU email account.

Visit our Writing Resources webpage for more information on professional writing and technical communication skills.

ASSIGNMENTS

While the on-line format of this course offers the student a degree of flexibility in when they participate in the work, it requires self-discipline to stay on track through the semester. The class will receive Announcement emails indicating where you should be (ideally) in the work and how much you should have completed by that time and each student is responsible for keeping up with their work. The suggested Summer C work pattern is to do more than one Lab per week. If you choose to wait until the last few hours to complete your work, you are taking the chance of having something preventing you from completing the work, much to your unhappiness, since the work will not be reopened.

This course is designed in a format that divides the 12 Labs in half with Labs 1-6 open during the first half of the semester and then Labs 7-12 open during the second half of the semester with Lab 12 (virtual fetal pig dissection) making up Exam 2. This results in a work load of ~ one Lab per week.

VERY IMPORTANT: Each Lab will include different activities that may include a kitchen-based or virtual experiment with required write-up submission that may include specific digital pictures of work, a quiz based on included text, and/or an assigned article with accompanying questions to be submitted with answers. The only way I can verify that the student(s) did the experimental work is for it to be supported by the accompanying pictures with each and every picture having a hand written card with student(s) name and ID number within the picture. Any assignment submitted with a picture or pictures NOT including the hand written card will NOT be accepted and will be returned to the student(s) with and assigned 0 points and feedback to resubmit with said card in every picture. So DO NOT waste your money and time completing an experiment and not including the hand written card in EVERY picture submitted.

For specific Lab Assignments (indicated in Instructions), students may work in groups. If you are working in a group, only one student (group leader) will submit the Lab Assignment write-up through the "Submit-it" link. In the submission, that student (group leader) will identify all the members of the group. The card or paper that must be included within every submitted picture must have all of the members’ names and numbers hand-written on it. ALL STUDENTS IN THE GROUP MUST BE PRESENT TO PARTICIPATE IN ALL PARTS OF THE EXPERIMENT. The leader must also submit at least one picture that includes all members of the group in the picture (a group selfie will do) and that picture must include the hand written card with all names and numbers. All of the other members of the group (those not submitting the work) must also each submit a statement (through the "Submit-it" link) of whose group you belong to. If you do not submit this statement, there will be no way of assigning you points for the work.

Only some Assignments must be submitted with pictures of the experiment. Those lab assignments’ instructions will tell you what specific pictures are needed for your submission (seen on the Dropbox/Submit it link). Pictures can be taken with one camera, developed, and then the specific pictures can be attached to the specific assignments before they are submitted.

As explained previously, Lab assignments will NOT be accepted without these supporting pictures and every picture MUST have within the picture a card or piece of paper with your name and Panther ID# hand-written on it. You may NOT photoshop a label into the picture; it must be hand written with your name and number or, if working in a group, the names and numbers of each member of the group.

All submitted work MUST be in the student’s own words. Some Lab Assignments are answering questions about a specific article. You may NOT copy and paste answers from the article. Any submissions not in the student’s own words will be returned with 0 points and feedback to resubmit in your own words.
The semester is divided into two halves. The dates stated below are when the mentioned Labs open. The labs stay open until the stated closing date. Which means Labs 1-6’s text material are open from May 8 – June 19, with the quizzes closing at 9am on June 14 and the Assignments with the potential for earning full points due on the same time and day (June 14, 9am). Lab Assignments submitted after 9AM, June 14 but before 9AM, June 16 will be viewed as a late submission and may have up to 30% of potential points deducted. It is each student’s responsibility to check their My Grades to determine if they have earned the maximum number of points for a submitted Assignment. **If they have not earned all possible points, they should reopen their submission to read the feedback and then resubmit.**

Assignments submitted during the late submission period may not be returned to the student with feedback in time for the student to resubmit.

Exam 1 opens on June 14 at 9AM and closes at 9am on June 19. Students must have completed the Student Instructor quiz and earned a perfect score to receive access to Exam 1.

Labs 7-11’s text material are open June 19 till July 28 with the quizzes closing at 9am on July 23 and the Assignments, with the potential for earning full points, due on the same time and day (July 23, 9am). **Lab Assignments submitted after 9AM July 23 but before 9AM, July 25 will be viewed as a late submission and may have up to 30% of potential points deducted.** It is each student’s responsibility to check their My Grades to determine if they have earned the maximum number of points for a submitted Assignment. If they have not earned all possible points, they should reopen their submission to read the feedback and then resubmit.

Assignments submitted during the late submission period may not be returned to the student with feedback in time for the student to resubmit.

Exam 2 which is part of Lab 12 will be open July 23 - 28 from 9am to 9am. Exam 2 is drawn from Lab 12, but while it covers material from all of the Labs studied throughout this semester, Lab 12 also has included text.

**QUIZZES AND EXAMS**

In order to mitigate any issues with your computer and online assessments, it is very important that you take the "Practice Quiz" from each computer you will be using to take your graded quizzes and exams. It is your responsibility to make sure your computer meets the minimum [hardware requirements](#).

Assessments in this course are not compatible with mobile devices and should not be taken through a mobile phone or a tablet. If you need further assistance please contact [FIU Online Support Services](#).

**Quiz and Exam Expectations:**

- Please note that the semester is divided into two periods with access to text:

<table>
<thead>
<tr>
<th>May 8 - June 14</th>
<th>Labs 1-6 Quizzes</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 14 - June 19</td>
<td>Exam 1</td>
</tr>
<tr>
<td>June 19 - July 23</td>
<td>Labs 7-11 Quizzes</td>
</tr>
<tr>
<td>July 23 - July 28</td>
<td>Lab 12: Exam 2</td>
</tr>
</tbody>
</table>

- Quiz duration: 30 minutes
- Exam duration: 1 hour
- Details for results:

1. Students will be able to see the results immediately after Quiz or Exam.
2. Students will be able to see the total earned score only.
3. **Students may take each Quiz or Exam 2 times. But if you choose to do so, you will receive the average of the two scores. Questions on the second attempt may be different from the first attempt.**
• Each student will be required to enter into a "course contract" with the Instructor by taking the INSTRUCTOR-STUDENT CONTRACT QUIZ found on the Course Content page and under Assessments. This contract specifies that you have read the Syllabus and therefore understand the time frame for completion of the Exams, Quizzes, and Discussion Postings. You do not receive points for this quiz. **But completing it and earning a perfect score is a requirement for accessing Exam 1.** You may take the quiz as many times as is required for you to earn a perfect score.

In order to mitigate any issues with your computer and online assessments, it is very important that you take the "Practice Quiz" from each computer you will be using to take your graded quizzes and exams. It is your responsibility to make sure your computer meets the minimum hardware requirements.

Assessments in this course are not compatible with mobile devices and should not be taken through a mobile phone or a tablet. If you need further assistance please contact FIU Online Support Services.

**GRADING**

The Instructor has no specific control over what is seen in the student’s “My Grades”. It shows students what scores have been earned on completed work. It does NOT show missing work. So it is each student’s responsibility to keep a record of assigned work (as seen in the Syllabus) and use that list to check the My Grades information, thereby confirming that the student has completed all of the necessary work. It is NOT Blackboard’s responsibility to inform students that they have not completed specific quizzes or exams. Any figures shown on My Grades, such as 158 (earned points)/ 340 (total points), will NOT be used to calculate your grades since it does not reflect the weights seen below or missing work.

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Number of Items</th>
<th>Points for Each</th>
<th>Total Points Available</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>9</td>
<td>10</td>
<td>90</td>
<td>25%</td>
</tr>
<tr>
<td>Exams</td>
<td>2</td>
<td>50</td>
<td>100</td>
<td>40%</td>
</tr>
<tr>
<td>Assignments</td>
<td>9</td>
<td>varied</td>
<td>145</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

**COURSE CALENDAR**

**IMPORTANT DATES**

This course is designed in a format that divides the 12 Labs in half with Labs 1-6 open during the first half of the semester and then Labs 7-12 open during the second half of the semester. This results in a work load of more than one Lab per week. Lab 12 includes the information for Exam 2.

**If you have a smart-phone, I suggest you now place in your Calendar app the closing days and time (always 9AM EST) for the quizzes and Exams and also include some alerts to remind you of these closings.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 8 (Monday)</td>
<td>Summer C starts (all material opens &amp; closes 9AM throughout semester)</td>
</tr>
<tr>
<td></td>
<td>- Lab 1 opens to familiarize</td>
</tr>
<tr>
<td></td>
<td>- Student/Instructor Quiz opens; you must complete this quiz with a perfect score before you receive access to Exam 1.</td>
</tr>
<tr>
<td>Date</td>
<td>Tasks</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>May 8</strong></td>
<td>Labs 1-6 Quizzes and Experiment Assignments open</td>
</tr>
<tr>
<td></td>
<td>Labs 1-6 Quizzes close at <strong>9AM (NO late submission for quizzes)</strong></td>
</tr>
<tr>
<td><strong>June 14</strong></td>
<td>Labs 1-6 Assignments submitted by 9AM June 14 may earn full points.</td>
</tr>
<tr>
<td>(Wednesday)</td>
<td>Assignments submitted after 9AM June 14 but before 9AM, June 16, may have up to 30% points deducted for late submission.</td>
</tr>
<tr>
<td><strong>June 14</strong></td>
<td>Exam 1 opens at 9AM</td>
</tr>
<tr>
<td>(Wednesday)</td>
<td>Exam 1 closes at 9AM</td>
</tr>
<tr>
<td><strong>June 19</strong></td>
<td>Labs 7-12 Quizzes and Experiment Assignments open</td>
</tr>
<tr>
<td>(Monday)</td>
<td>Labs 7-12 Quizzes close July 23, 9am (no late submission for quizzes)</td>
</tr>
<tr>
<td><strong>July 23</strong></td>
<td>Labs 7 - 11 Assignments submitted by 9AM, July 23, may earn full points. Assignments submitted after 9AM, July 23, but before 9AM, July 25, may have up to 30% points deducted for late submission</td>
</tr>
<tr>
<td>(Sunday)</td>
<td>Exam 2 opens 9AM</td>
</tr>
<tr>
<td><strong>July 28</strong></td>
<td>Exam 2 closes 9AM</td>
</tr>
</tbody>
</table>

**WEEKLY SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>May 8</strong></td>
<td>Welcome to Human Biology Lab - Read information on Homepage and Syllabus and familiarize yourself with the Blackboard online course structure by looking at Lab 1 (quizzes and assignments will open May 8).</td>
</tr>
<tr>
<td></td>
<td>Review Shopping list for items to be used in hands-on (kitchen-based) lab experiments. This list is linked on the Course Material page.</td>
</tr>
<tr>
<td></td>
<td><strong>- Take Student-Instructor Quiz</strong> (You may take this as many times as is necessary to earn a perfect score. While this score will not be part of your grade, Exam 1 (June 14-19) will not be available for you until the perfect score is earned.)</td>
</tr>
<tr>
<td><strong>1st Period</strong></td>
<td><strong>Lab 1</strong> - Scientific Method; Metric System includes:</td>
</tr>
<tr>
<td><strong>May 8 - June 19</strong></td>
<td>- Height/Arm Span Data collected from a previous semester's class has generated a data set for this course...this data set will be used to explore the process of scientific inquiry, focusing on Scientific Method</td>
</tr>
<tr>
<td></td>
<td>- An Assignment, based on exploration of Scientific Method and utilizing class data set will be submitted. On-time submission: June 14; late submission by 9AM, June 16</td>
</tr>
<tr>
<td></td>
<td>- A quiz which will cover metric system and Scientific Inquiry. close 9AM June 14; no late submission period</td>
</tr>
<tr>
<td></td>
<td><strong>Lab 2</strong> - Microscope &amp; Cells</td>
</tr>
<tr>
<td></td>
<td>includes:</td>
</tr>
<tr>
<td></td>
<td>- Cellular Respiration, a hands-on (kitchen-based) lab experiment</td>
</tr>
<tr>
<td></td>
<td>- An Assignment consisting of experiment questions/write-up using Scientific Method to analyze experiment outcomes. On-time submission: June 14; late submission by 9AM, June 16</td>
</tr>
<tr>
<td></td>
<td>- A quiz covering information illustrated in Microscope material; close 9AM June 14; no late submission period</td>
</tr>
</tbody>
</table>
Lab 3 – Homeostasis includes:
- Acid/Base Indicator, a hands-on (kitchen-based) lab experiment
- An Assignment consisting of experiment questions/write-up using Scientific Method to analyze experiment outcomes and answer questions related to Homeostasis. on-time submission: On-time submission: June 14; late submission by 9AM, June 16
- A quiz covering material illustrated in Respiratory close 9AM June 14; no late submission period

Lab 4 – Biomolecules includes:
- Text that gives a background on Biomolecules
- Explanation of a typical lab's Biomolecules Experiments
- 4 URL's linking to interactive exercises exploring the structure and functions of Biomolecules
- A Guide to Biomolecules that poses questions to be considered as the student finishes each Activity. This Guide will help prepare the student for the Biomolecules Quiz.
- A quiz covering the Biomolecules material provided in this Lab; close 9AM June 14; no late submission period

Lab 5 – Cardiovascular includes:
- General information on the Circulatory System
- Illustration of Heart Anatomy
- URL to BioCoach Activity for "The Beating Heart" and "The Vascular Highway"; a quiz will be taken at the end and then included as part of the Cardiovascular Lab Assignment
- Heartbeat and Pulse Rate Experiments, to be performed with a helper
- Assignment that will include questions from Heartbeat and Pulse Rate Experiments and quiz taken at end of BioCoach Activity. On-time submission: June 14; late submission by 9AM, June 16
- A Blackboard quiz covering Cardiovascular material and information given during the BioCoach Activities; close 9AM June 14; no late submission period

Lab 6 - Cell Structure includes:
- General information on Cell Structure
- A background on the processes of Diffusion and Osmosis
- Diffusion and Osmosis - a hands-on (kitchen based) lab experiment
- An Assignment consisting of experiment questions/write-up using Scientific Method to analyze experiment outcomes and answer questions related to Diffusion and Osmosis. This experiment takes a couple of days to complete, so give yourself enough time. on-time submission: On-time submission: June 14; late submission by 9AM, June 16
- A quiz on material covered in Cell structure and Diffusion info; close 9AM June 14; no late submission period

EXAM 1:
June 14-19
EXAM 1 opens 0900 (9:00 AM EST), June 14; closes 0900 (9:00 AM), June 19

*None of these Labs (7-11) will require materials for a kitchen-based experiment nor will they require pictures.

Lab 7 - Digestion, Nutrition, Ideal Weight includes:
- Keeping a Physical Activity Diary which will be utilized in completing an Activity Intensity Summary, an Energy Cost for Activities exercise, and an Estimation of Total Energy Expenditure exercise.
- A Nutrition Assignment will include questions answered from information recorded and calculated using the previous exercises. This Assignment takes 3 days to complete, so give yourself enough time. On-time submission: 9AM, July 23; late submission by 9AM, July 25.

Lab 8 - Musculoskeletal; Tissues includes-
- links to Musculoskeletal text, Adduction-Abduction, Inversion, and Isotonic-Isometric illustrations and information
- a Blackboard Quiz on the material covered in the previous links. closes 9AM, July 23
- link to Article: Preserving a Fundamental Sense; Balance which will be the basis of a

2nd Period
June 26 - August 3
Balance experiment
- Balance experiment Assignment, in which student will write up results of performing
- Balance experiment and using observations made about other members of their family or
friends, create hypotheses that will relate to importance of maintaining musculoskeletal
strength in terms of being able to maintain balance. On-time submission: 9AM, July 23; late
submission by 9AM, July 25.

Lab 9 - Reproduction; Birth Control; STDs includes:
- 4 Articles relating to issues of Reproduction, Birth Control, and STD's
- A question based Exercise referencing the 4 Articles
- Assignment made up of answered questions; On-time submission: 9AM, July 23; late
submission by 9AM, July 25.

Lab 10 - Nervous System; Senses; Drugs includes:
- a link to an interactive exercise in Understanding Addiction
- a Drug Addiction Blackboard quiz on material covered in interactive exercise. Closes
9AM, July 23
- 4 Articles covering Nervous System topics.
- link to questions on 4 Articles, focusing on analyzing information given in the Articles
- Assignment of Articles’ questions. On-time submission: 9AM, July 23; late submission by
9AM, July 25.

Lab 11 – Genetics includes:
- links to interactive websites: Gene on a Chromosome, Finding a Gene, Human Genetics,
Genetic Traits, and Inherited Disease
- link to a Lab Review
- Blackboard Quiz on material covered in Genetics Lab. closes 9AM, July 23

Lab 12 - The virtual Fetal Pig Dissection will be the basis for Exam 2. Questions will be
drawn from the actual Virtual Dissection and from information on the organ systems that are
found in both pigs and humans.

EXAM 2 opens 0900 (9:00 AM), July 23; closes 0900 (9:00 AM), July 28.