Presentation of biological concepts for the non-science major. Emphasis will be on scientists and their contributions to the science field, scientific problem solving, unity of life including cells and genetic information, energy pathways important to life, and current issues in biology. (3 Lec., 3 Lab.)

Prerequisites: One of the following must be met: (1) DREA 0093 AND DWRI 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards AND the college Writing score prerequisite requirement.

EVALUATION PROCEDURES

<table>
<thead>
<tr>
<th>Type of Assignment</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation Assignments</td>
<td>20 pts</td>
</tr>
<tr>
<td>2 Discussion Activities <strong>(both count @ 25 pts each)</strong></td>
<td>50 pts</td>
</tr>
<tr>
<td>12 LearnSmart Homeworks <strong>(all 12 count @ 8 pts each)</strong></td>
<td>96 pts</td>
</tr>
<tr>
<td>21 Online Modules <strong>(all 21 count @ 4 pts each)</strong></td>
<td>84 pts</td>
</tr>
<tr>
<td>13 Lab Reports <strong>(highest 11 count @ 30 pts each, 2 lowest dropped)</strong></td>
<td>330 pts</td>
</tr>
<tr>
<td>6 Unit Reviews <strong>(all 6 count @ 10 pts each)</strong></td>
<td>60 pts</td>
</tr>
<tr>
<td>6 Unit Tests <strong>(all 6 count @ 40 pts each)</strong></td>
<td>240 pts</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>120 pts</td>
</tr>
<tr>
<td><strong>Total Possible Points</strong></td>
<td><strong>1000 pts</strong></td>
</tr>
</tbody>
</table>

Note: Final points are rounded to the NEAREST whole number (0.500 rounds up, 0.499 rounds down). Grades will not be NOT curved (adjusted from this scale). A standard grading scale is used to calculate final grades as the nearest whole number percent; therefore, A ≥ 90% (≥ 895 pts); B = 80-89% (795-894 pts); C = 70-79% (695-794 pts); D = 60-69% (595-694 pts); F or N (non-participating F) ≤ 59% (≤ 595 pts).

Orientation Assignments (2% of overall grade): During the first week of classes, you’ll complete the orientation activities posted in the “Getting Started” menu, including introducing yourself on the discussion boards. Many
orientation activities are graded as complete/incomplete, followed by a graded orientation checklist to confirm completed actions and a syllabus/orientation quiz.

Two Discussion Activities (5% of overall grade): Discussion activities are designed to stimulate scientific thought and class interaction to connect your learning of science to the real world. Each discussion will begin with a prompt: an assignment to write about a particular topic. Your writing must be your own (any submissions with plagiarism will receive a zero for the entire assignment) and reflect your personal thoughts and what you’ve learned in relation to the assigned prompt. Each discussion consists of 3 parts: an original post in response to the prompt, at least 2 replies to your classmates, and a concluding, summary post. The due dates are staggered over 1 ½ weeks to maximize interaction (see calendar of assignments at end of syllabus). Each discussion activity forum, with detailed instructions inside it, will appear two weeks before the first post is due to allow time to review the instructions and complete the first part.

LearnSmart Homeworks (9.6% of overall grade): As you work on each chapter covered in this course, you’ll complete homework assignments online in eCampus to help you review the content in the textbook chapter. The homeworks use a publisher-provided resource called LearnSmart that requires you to master the material (meaning you must get the answers right or you’ll keep getting new questions on that topic until you do), so they are graded as completed (all points earned) or incomplete (zero or partial points based on percent complete at due time). All homeworks count towards your course grade.

Online Module Completion (8.4% of overall grade): For each chapter, you’ll be asked to work through 2 online modules that are tutorials over the concepts you are learning (see assignment calendar; note that Ch. 11 only has 1 module). To demonstration completion, you’ll answer questions as you work through each module. You have unlimited attempts at each question, so ALWAYS retry until you earn the full points. These are basically “attendance” points, so are easy to earn as long as you actually work on the module. All Online Module Completion points count towards your course grade.

Lab Reports (33% of overall grade): For most of the labs in this course, you’ll spend several hours doing the lab experiments and recording data, then you’ll use that data to complete a lab report in eCampus. Each lab report consists of a mixture of essay, short answer, fill-in data tables, and multiple choice questions and requires an additional 1-2 hours to complete (in addition to the time required to complete the experiments). Most lab reports also require submission of specific PHOTOGRAPHS to document your completion of the experiments. Make sure to check which photos are required before you start each lab because the photos are a significant part of your lab grade. At the end of the semester, I will drop your lowest 2 lab report scores; only the highest 11 scores will count towards your course grade.

Unit Reviews (6% of overall grade): This course is split into 6 units, each covering 2 chapters. At the end of each unit, you’ll complete a review assignment consisting of 2 thought questions (short essay, 3-5 sentence answers required). These reviews are to gauge your understanding and ability to apply what you’ve learned to the world outside the classroom. All Unit Reviews count towards your course grade.

Unit Tests (24% of overall grade): At the end of each of the 6 units, you’ll also take a multiple-choice test. You will have a TIME LIMIT for each test to ensure that you know the material well enough to answer the questions without looking everything up, but you may use hand-written or printed notes during the test. You may NOT use the internet or ask other people for assistance. I strongly recommend creating and using a single reference sheet of key concepts from each lesson because the time it would take to search in your book to find the answer will prevent you from finishing the test before you reach the time limit.

Final Exam (12% of overall grade): The final exam is comprehensive and will be taken online in eCampus. The final exam will consist of all multiple-choice questions, and will have a TIME LIMIT with only hand-written or printed notes allowed.
Extra Credit: At the instructor’s discretion, credit assignment may be offered. If offered, extra credit assignment will be announced on the main page and will be posted under a special menu labeled “Extra Credit” with a description of the activity, the due date, and potential point value. Due date for extra credit assignment will be final - no late submissions will be accepted.

ATTENDANCE POLICY

In order to be successful, students must attend and participate in enrolled courses. Students are expected to log-in and utilize the course materials and activities in eCampus on a regular basis. As a minimum expectation, you should log-in to the course at least three separate days each week, spending at least 10 hours every week working on this class. As a general guideline, you should be actively learning and studying through working with the online LECTURE materials and textbook for about 5-6 hours per week (the same as you would spend attending class plus studying 2-3 hours outside class) PLUS 5-6 hours each week working on the LAB portion of the class (reviewing the online lab materials, watching demonstration videos, completing experiments using the lab kit, and completing the lab reports. In total, to be successful, a typical student should spend a MINIMUM of 10-12 hours EVERY week working on this class alone in order to pass the class. Students who struggle with science or mathematics may need to devote much more than the minimum listed here. Similarly, students hoping to do more than just pass (those hoping to earn an A or B) will likely need to devote MORE than this minimum as well.

REQUIRED MATERIALS

Textbook

Biology: Concepts and Investigations, 4th Edition Connect Access Card (required) Author: Marielle Hoefnagels, ISBN 9781260183894. *Note: The publisher provides free courtesy access for the first two weeks of the semester, so advance purchase of the textbook is not necessary to begin working in this course.

Lab Kit and Manual

Biology for Non-Science Majors I, DCCCD Custom Lab Kit, eScience Labs, LLC., SKU# kit1519 (“kit” is part of ID number) *Note: If you require your kit to be shipped, you must purchase it during the first week of classes to ensure it arrives in time to complete the first set of required experiments during Week 2. Please plan ahead for this expense!

INSTRUCTOR POLICIES AND SUGGESTIONS FOR STUDENT SUCCESS

• This course is split into 6 units that cover a total of 11 textbook chapters. Learning is enhanced by hands-on experiments and virtual lab activities associated with specific concepts throughout the semester. Each unit ends with a test covering two chapters, and the final exam is comprehensive.

• Online lecture modules support what you read in the textbook by providing alternate explanations of the chapter material, interactive animations, self-assessments, and discussing applications to real life.

• Each online lab is introduced through a digital module, video demonstrations, and detailed procedures. Completion and understanding of the lab experiments is demonstrated by submission of a lab report.

• This online course is NOT self-paced. The course calendar provides the due dates for each graded assignment at the beginning of the semester. Although you may work ahead, all discussion activities are cooperative and must be completed during the week they are assigned.

• Provided learning objectives summarize what you should learn in each chapter and associated modules. Graded assessments evaluate whether you have learned the material sufficiently to demonstrate the
objectives, not just remember terms and definitions. Therefore, you should use the learning objectives to guide your learning and study activities.

TECHNICAL REQUIREMENTS

A basic level of technical competence is necessary for participating in this class. You should have access to the internet for at least several hours a week to allow you to access the eBook and online homework assignments. You should also check eCampus and your email regularly (at least 1-2 times per week) to ensure you are receiving messages from your instructor.

You should also be able to perform the following tasks:
- Access eCampus.
- Turn pop-up blocker off throughout the entire semester.
- Send/receive email, including attaching and downloading document files within e-mail.
- Complete assignments online, use word processing software and work with PDF files.
- Read and submit comments and post images to a discussion board.
- Use a web browser like Mozilla Firefox or Google Chrome and know how to adjust settings such as your pop-up blocker and clearing your cache and cookies.

You must have regular, reliable access to a COMPUTER with the following software and internet resources (access to only a mobile device is NOT enough to succeed in this class):

<table>
<thead>
<tr>
<th>Hardware/Software Required</th>
<th>if using a PC</th>
<th>if using a Mac</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Windows XP or newer</td>
<td>OS 10.7 or later</td>
</tr>
<tr>
<td>Free disk space</td>
<td>at least 2 GB</td>
<td>at least 2 GB</td>
</tr>
<tr>
<td>Audio and Visual Capabilities</td>
<td>Screen display set to 1024x768 or higher</td>
<td>Screen display set to 1024x768 or higher</td>
</tr>
<tr>
<td>Internet connection</td>
<td>Ethernet (Local area network) Wireless network card T1, DSL, cable, fiber optic or satellite a 56K modem is not recommended</td>
<td>Ethernet (Local area network) Wireless network card T1, DSL, cable, fiber optic or satellite a 56K modem is not recommended</td>
</tr>
<tr>
<td>Web Browser (at least one of these)</td>
<td>check main eCampus page for currently supported browsers – do NOT use a non-supported browser or version</td>
<td>check main eCampus page for currently supported browsers – do NOT use a non-supported browser or version</td>
</tr>
<tr>
<td>PDF Viewer</td>
<td>Adobe Reader (latest version)</td>
<td>Adobe Reader (latest version)</td>
</tr>
<tr>
<td>Word Processing</td>
<td>Microsoft Word /Office, OpenOffice.org, or Google Docs</td>
<td>Microsoft Word /Office, OpenOffice.org, or Google Docs</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Email address Digital camera (or camera phone) to document lab activities</td>
<td>Email address Digital camera (or camera phone) to document lab activities</td>
</tr>
</tbody>
</table>
Hardware/Software Required

<table>
<thead>
<tr>
<th>if using a PC</th>
<th>if using a Mac</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic photo editing ability (to crop or resize lab photos)</td>
<td>Basic photo editing ability (to crop or resize lab photos)</td>
</tr>
</tbody>
</table>

**LATE WORK, LAB AND/OR MAKE-UP EXAM POLICY**

Regardless of type of assignment, all submissions are DUE by 10:00 p.m. on the due date, but will be accepted until 11:59 p.m. with no late penalty applied. This 2-hour grace period is for unexpected problems or delays. Plan to finish on time at 10:00 p.m., not 2 hours late!

**Late Submissions:** If any problem, emergency or minor, will prevent you from completing a particular week’s assignments by the due date and time, the following policy applies.

- Discussion-based assignments are NEVER accepted late because interaction with classmates during the assigned time period is a necessary part of the learning. All late posts will earn zero points.
- You may submit any other lecture or lab assignments late, but I will deduct a late penalty of **10% for each week** after the original due date, to a maximum deduction of 50%. For example, work submitted 9 days late would be subject to a penalty of 20% because it was submitted more than one week late, but not more than 2 weeks.
- To ensure your late work receives credit, you must EMAIL me to request that a late submission be graded – the gradebook does not always show me the late submissions, so an email is the only way to ensure you earn credit for late work. The last date to submit late work is Monday, December 9, 2019.

**Technical Problems:** If a technical problem arises while you are working on an assignment, contact me immediately and then stay online and watch your email for my response to avoid being charged a late penalty. Technical problems occurring after the 10:00 p.m. due time can receive technical support (such as re-setting the assignment), but will be subject to the late penalties if the problem cannot be fixed before the end of the grace period (because the assignment was already late when the problem occurred).

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**STUDENT-INSTRUCTOR CONTRACT**

To create a course environment focused on understanding of the course content, application to the student’s life, and fostering student responsibility, both instructor and student will attempt to follow these guidelines:

- The instructor agrees to provide timely responses to student requests or inquiries, and to communicate frequently through email, course announcements, and timely grading (typically within one-two weeks after the due date passes).
- In return, the student agrees to devote a reasonable amount of time and energy to successful completion of the course, to meet deadlines, to avoid plagiarism and other forms of cheating, and to communicate frequently and clearly with the instructor, particularly when difficulties arise. Because timely communication is so important to learning and assessment, technical problems reported more than 24 hours after the problem occurs (or is discovered) will be considered too late to allow a student to re-take or otherwise earn points on that graded work.

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**COMMUNICATION AND INSTRUCTOR AVAILABILITY**

The primary means of communication for this class will be EMAIL. You are responsible for ensuring that your email address is correctly listed in the course (check this on the first day!) and that you are receiving emails from the instructor. To ensure you receive all notices from me in a timely manner, check your email frequently (at least once per day).
If you send me an email with a technical problem or other request that requires a rapid response to meet a deadline, make sure to use the correct subject line and then check your email frequently between the time you send your request/problem and the due date. If I respond to your problem before the due date with instructions for what to do next, you’ll need to check frequently enough to see my response in time!

**Required subject line format:** When contacting me, the SUBJECT LINE must contain the course ID (2019FA-BIOL-1408-81422) AND your first and last name. The email itself (the body/message) should ALSO contain the course ID and your name at the end of the message. Emails sent without this format may receive a reply asking who you are and what class you’re in, which slows down response time.

I will reply to all emails sent in the proper format within 24 hours, so double check your format and re-send your email if you do NOT hear back from me within this time frame. Do NOT assume that an unanswered email was received – ALWAYS RE-SEND if you do not receive a reply in 24 hours.

**CORE OBJECTIVES**

- **Critical Thinking:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Communication:** to include effective development, interpretation and expression of ideas through written, oral and visual communication
- **Empirical and Quantitative Skills:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- **Teamwork:** to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

**Core Objectives Development Statement for Biology:** Critical thinking and empirical & quantitative skills will be demonstrated by students researching, analyzing & interpreting data derived from an experimental setting and drawing a well-informed conclusion of the data through the application of sound biological concepts. Examples: research paper, case studies, lab report

**STUDENT LEARNING OUTCOMES**

**LECTURE**

1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
5. Describe karyotyping, pedigrees, and biotechnology and provide an example of the uses of each.
6. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
7. Analyze evidence for evolution and natural selection.
8. Connect information about basic molecular structures, features and properties as they relate to biology.*

*Outcomes 1-7 above were determined by the Texas Higher Education Coordinating Board. Outcome #8 was determined by Richland College faculty (Institution) as a learning outcome that must be achieved within this course to allow students to achieve the other, state-determined course-level learning outcomes.

**LAB**

1. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
5. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
6. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
7. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
8. Identify the importance of karyotypes, pedigrees, and biotechnology.
9. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
10. Analyze evidence for evolution and natural selection.

STUDENT ACADEMIC PROGRESS

Students are encouraged to discuss academic goals and degree completion with their instructors. Specific advising is available throughout the semester. Check the Richland College Admissions Office and Advising for more details.

Finish the Race (text link: https://www.richlandcollege.edu/apply-reg/finishrace/pages/default.aspx) is where students can find -- in one place -- all types of assistance and resources that can help them complete their degree(s) and/or certificate(s), seamlessly transfer to a university or enter the workforce with better opportunities.

INSTITUTIONAL POLICIES

Institutional Policies relating to this course can be accessed on the Richland College website for Institutional Policies (text link: www.richlandcollege.edu/syllabipolicies). I strongly encourage you to review these policies at least once a year (because they are subject to change) to ensure you know how the Richland College and DCCCD policies may affect your academic progress, financial aid, number of available drops, religious holiday absences, etc.

Richland College provides free tutoring to all students. For science tutoring schedules and information, visit the Science Corner website. Online tutoring for science and many other subjects is also available inside the Thunderduck Commons, an organization inside eCampus for which you should be enrolled automatically. To check that you have access, log into eCampus and check under either the “Community” tab at the top of your eCampus page or inside the “My Organizations” box on your main “My DCCCD” tab.

UNITS OF INSTRUCTION/CLASS CALENDAR

Due dates for discussion activities are on specific days throughout those weeks, but all other assignments are officially due on Sunday of the assigned week. See next 2 pages for table listing the assignments and due dates.
# BIOL 1408 Late Start Flex Fall 2019 Calendar of Assignments

**All work in each row in this calendar of assignments table is due by the START of class on the date listed.**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Textbook Reading Assigned in Hoefnagels, 4e</th>
<th>Lab</th>
<th>Graded Assignments</th>
<th>Due Date</th>
</tr>
</thead>
</table>
| Orientation               | *None. Instead, complete all orientation activities in the Getting Started menu, in order.* |                         | ☐ Orientation Checklist  
                          ☐ Orientation Quiz                                      | By the end of WEEK 1  
                          (Due Sunday, Sept. 22)                                   |
| Chapter 1                 | Chapter 1: The Scientific Study of Life     | ☐ LAB 1 (Safety)  
                          *only lab that does NOT require kit*                     | ☐ LearnSmart: Chapter 1  
                          ☐ Modules 1A & 1B  
                          ☐ Lab Report 1                                            | By the end of WEEK 1  
                          (Due Sunday, Sept. 22)                                   |
| Chapter 2                 | Chapter 2: The Chemistry of Life            | ☐ LAB 2 (Polar Bonding) | ☐ LearnSmart: Chapter 2  
                          ☐ Modules 2A & 2B  
                          ☐ Lab Report 2                                            | By the end of WEEK 2  
                          (Due Sunday, Sept. 29)                                   |
| Finish Unit 1             | *Review Chapters 1 & 2*                     |                         | ☐ Unit 1 Review  
                          ☐ Unit Test #1                                            | By the end of WEEK 2  
                          (Due Sunday, Sept. 29)                                   |
| Chapter 3                 | Chapter 3: Cells                            | ☐ LAB 3 (Biomolecules) | ☐ LearnSmart: Chapter 3  
                          ☐ Modules 3A & 3B  
                          ☐ Lab Report 3                                            | By the end of WEEK 3  
                          (Due Sunday, Oct. 6)                                     |
| Discussion Activity 1, Part 1 | *None. Instead, read ALL instructions and follow the steps for part 1 in the Discussion Activity 1: Cells discussion forum.* |                         | ☐ Discussion Activity 1, Original Post                   | Original post (Part 1) due by the end of WEEK 3  
                          (Due Sunday, Oct. 6)                                     |
| Discussion Activity 1, Parts 2 & 3 | *None. Instead, read and follow the instructions for parts 2 and 3 in the Discussion Activity 1: Cells discussion forum.* |                         | ☐ Discussion Activity 1, Two Replies  
                          ☐ Discussion Activity 1, Concluding Post                   | DURING WEEK 4:  
                          ☐ Part 2 (two replies) by TUESDAY, Oct. 8  
                          ☐ Part 3 (conclusion) on WEDNESDAY, Oct. 9               |
| Chapter 4                 | Chapter 4: The Energy of Life               | ☐ LAB 4 (Enzymes)  
                          ☐ LAB 5 (Diffusion & Osmosis)                             | ☐ LearnSmart: Chapter 4  
                          ☐ Modules 4A & 4B  
                          ☐ Lab Report 4  
                          ☐ Lab Report 5                                            | By the end of WEEK 4  
                          (Due Sunday, Oct. 13).                                   |
| Finish Unit 2             | *Review Chapters 3 & 4*                     |                         | ☐ Unit 2 Review  
                          ☐ Unit Test #2                                            | By the end of WEEK 5  
                          (Due Sunday, Oct. 20)                                   |
| Chapter 5                 | Chapter 5: Photosynthesis                   | ☐ LAB 6 (Photosynthesis)  
                          *requires light*                                          | ☐ LearnSmart: Chapter 5  
                          ☐ Modules 5A & 5B  
                          ☐ Lab Report 6                                            | By the end of WEEK 5  
                          (Due Sunday, Oct. 20)                                   |
| Chapter 6                 | Chapter 6: How Cells Release Energy         | ☐ LAB 7 (Respiration)  
                          *three-day lab*                                          | ☐ LearnSmart: Chapter 6  
                          ☐ Modules 6A & 6B  
                          ☐ Lab Report 7                                            | By the end of WEEK 6  
                          (Due Sunday, Oct. 27)                                   |
| Finish Unit 3             | *Review Chapters 5 & 6*                     |                         | ☐ Unit 3 Review  
                          ☐ Unit Test #3                                            | By the end of WEEK 6  
                          (Due Sunday, Oct. 27)                                   |
| Chapter 7                 | Chapter 7: DNA Structure & Function         | ☐ LAB 8 (gene expression)                                   | ☐ LearnSmart: Chapter 7  
                          ☐ Modules 7A & 7B  
                          ☐ Lab Report 8                                            | By the end of WEEK 7  
                          (Due Sunday, Nov. 3)                                   |
<table>
<thead>
<tr>
<th>Activity</th>
<th>Textbook Reading Assigned in Hoefnagel, 4e</th>
<th>Lab</th>
<th>Graded Assignments</th>
<th>Due Date</th>
</tr>
</thead>
</table>
| Chapter 8A                       | Chapter 8: DNA Replication, Binary Fission, & Mitosis, sections 8.1 – 8.2 only | ☐ LAB 9 (DNA Replication) | ☐ Module 8A  
☐ LearnSmart: Chapter 8A  
☐ Lab Report 9  
☐ Unit 4 Review  
☐ UNIT TEST #4 | By the end of WEEK 8  
(Due Sunday, Nov. 10) |
| Finish Unit 4                    | Review Chapters 7 & 8A                   |              |                                        | By the end of WEEK 8  
(Due Sunday, Nov. 10) |
| Chapter 8B                       | Chapter 8: DNA Replication, Binary Fission, & Mitosis, sections 8.3 – 8.7 | ☐ LAB 10 (Mitosis) | ☐ Module 8B  
☐ LearnSmart: Chapter 8B  
☐ Lab Report 10 | By the end of WEEK 9  
(Due Sunday, Nov. 17) |
| Discussion Activity 2, Part 1    | None. Instead, read ALL instructions and follow the steps for part 1 in the Discussion Activity 2: Cancer discussion forum. |              | ☐ Discussion Activity 2, Original Post | Original post (Part 1) due by the end of WEEK 9  
(Due Sunday, Nov. 17) |
| Discussion Activity 2, Parts 2 & 3| None. Instead, read and follow the instructions for parts 2 and 3 in the Discussion Activity 2: Cancer discussion forum. |              | ☐ Discussion Activity 2, Two Replies  
☐ Discussion Activity 2, Concluding Post | DURING WEEK 10:  
☐ Part 2 (two replies) by TUESDAY, Nov. 19  
☐ Part 3 (conclusion) on WEDNESDAY, Nov. 20 |
| Chapter 9                        | Chapter 9: Sexual Reproduction and Meiosis | ☐ LAB 11 (Meiosis) | ☐ LearnSmart: Chapter 9  
☐ Modules 9A & 9B  
☐ Lab Report 11 | By the end of WEEK 10  
(Due Sunday, Nov. 24) |
| Finish Unit 5                    | Review Chapters 8B & 9  
*I recommend finishing these Unit 5 assignments by Wednesday to allow time to do Ch. 10 of Unit 6.* |              | ☐ Unit 5 Review  
☐ UNIT TEST #5 | By the end of WEEK 11  
(Due Sunday, Dec. 1) |
| Chapter 10                       | Chapter 10: Patterns of Inheritance      | ☐ LAB 12 (Mendelian Genetics) | ☐ LearnSmart: Chapter 10  
☐ Modules 10A & 10B  
☐ Lab Report 12 | By the end of WEEK 11  
(Due Sunday, Dec. 1) |
| Chapter 11                       | Chapter 11: DNA Technology               | ☐ LAB 13 (Biotechnology) | ☐ LearnSmart: Chapter 11  
☐ Module 11  
☐ Lab Report 13 | By the end of WEEK 12  
(Due Sunday, Dec. 8) |
| Finish Unit 6                    | Review Chapters 10 & 11                  |              | ☐ Unit 6 Review  
☐ UNIT TEST #6 | By the end of WEEK 12  
(Due Sunday, Dec. 8) |
| Final Exam                       | Review all 11 chapters in your textbook, as well as all major lab concepts. |              | ☐ Final Exam | By the end of the short WEEK 13 (Due THURSDAY, Dec. 12) |