BIOL 108L DEA Human Biology Lab

March 2015 Session 14-54

Monday, March 23 - Saturday, May 16, 2015

Course Description

Laboratory experiences to complement BIOL 108. This course is intended for non-majors and those majors who need an introductory course before enrolling in BIOL 110.

You are required to purchase an at-home lab kit. Access to the lab reading and supplemental materials will be provided through the D2L Content area. In addition, access to a digital camera is required for submitting photos electronically to the instructor.

Prerequisite: BIOL 108 or concurrent enrollment. BIOL 108 must be completed before BIOL 108L can be used for general education credit.

Proctored Exams: None

Textbooks

You are required to order an at-home Lab Kit. Kits may be purchased from MBS. In addition, students are responsible for gathering weekly supplies for labs. These will be readily available at your local supermarket.

Important! *Please do not* order your Lab Kit until you are certain you will take this course. Lab Kits, if eligible for a refund, may be returned for refund only under **very strict conditions**, within only **two (2)** weeks of receipt. So, please do not order your Lab Kit until you are committed to taking this course!

In addition, access to a digital camera is required for submitting photos electronically to the instructor.

The Lab Kit for the course may be ordered from MBS Direct. You can order

- online at http://direct.mbsbooks.com/columbia.htm (be sure to select Online Education rather than your home campus before selecting your class)
- by phone at 800-325-3252

For additional information about the bookstore, visit <u>http://www.mbsbooks.com</u>.

Course Overview

Welcome to *BIOL 108 Human Biology Laboratory*, online! This course will introduce you to hands-on approaches for studying scientific reasoning, basic human cellular structure and function, human organ systems, genetics and reproduction, and how humans interact with their environment. Each week we will focus on different issues and concepts relating to the human body through our at-home laboratory kit, with additional online activities and discussions that will reinforce and expand on lab content. Hopefully when this class is finished, you will have a good basic understanding of human

biology and health.

We will cover the following topics:

- Week 1 Setting up a Safe Lab
- Week 2 The Scientific Method; Introduction to the Microscope
- Week 3 Biological Macromolecules; Comparative Cell Membranes and Transport;
- Week 4 Tissues, Organs, and Homeostasis
- Week 5 Cardiovascular System: The Heart
- Week 6 Mitosis and Meiosis; Human Genetics and Karyotyping
- Week 7 -Human Reproduction (NOVA Life's Greatest Miracle movie); Cloning case study
- Week 8 Human Populations; Ecological Footprints

Technology Requirements

Participation in this course will require the basic technology for all online classes at Columbia College:

- A computer with reliable Internet access,
- a web browser,
- Acrobat Reader,
- Microsoft Office or another word processor such as Open Office.

You can find more details about standard <u>technical requirements</u> for our courses on our site.

Digital Photo Documentation Capability: Most of your lab reports will require digital photographs to document various steps of the experiments, or shown hand-drawn observations. You must have digital photography capability. (Also See "Photo Documentation" in the Assignment Overview Section.)

Course Objectives

- To demonstrate basic laboratory techniques of experimentation and measurement using exercises which complement topics covered in BIOL 108 lecture.
- To practice scientific reasoning and methods.
- To examine basic characteristics common to all life forms.
- To examine basic human structure and function.
- To describe how humans have evolved.
- To describe how living organisms interact with their environment.

Measurable Learning Outcomes

- Describe and use the scientific method.
- Recognize basic structures and functions of cells.
- Demonstrate basic genetic crosses.
- Explain the basis for several human genetic diseases.

- Define biotechnology and give examples of its use.
- Describe the structure and function of one or more human organ systems.
- Define evolution and list the evidence for evolution.
- Apply population concepts to human populations.
- Study the components of an ecosystem.
- Describe how humans impact their environment.

Grading

Grading Scale

GRADE	POINTS	PERCENT
А	369-410	90-100
В	328-368	80-89
С	287-327	70-79
D	246-286	60-69
F	0-245	0-59

Grade Weights

ASSIGNMENT	POINTS	PERCENT
Discussion	110	27%
Dropbox Assignments (Lab Report Assistants, Case Studies, Quizzes, Etc.)	300	73%
TOTAL	410	100%

Schedule of Due Dates

WEEK	ASSIGNMENT	POINTS	DUE DATE
1	Lab 1: Setting up a Safe Lab		
	Discussion 1: Describe your Home Lab	10	Thurs
	Dropbox Assignments:		
	LabPaq Contents List	10	Thurs
	Safety Quiz	15	Sun
	"Signed" Lab Safety Contract	5	Sun
	Photo Set Lab 1	5	Sun
2	Lab 2: The Scientific Method		
	Discussion 2: Post-lab Reflection	10	Thurs
	Dropbox Assignments:		
	Pre-lab Hazard Assessment	10	Wed
	Lab Report Assistant	15	Thurs
	Photo Set Lab 2	5	Thurs
	Lab 3: Introduction to the Microscope		
	Discussion 3: Post-lab Reflection	10	Sun
	Dropbox Assignment:		
	Microscope Post-lab Report	15	Sun
3	Lab 4: Biological Macromolecules		
	Discussion 4: Post-lab Reflection	10	Thurs
	Dropbox Assignment:		
	Pre-lab Hazard Assessment	10	Wed
	Lab Report Assistant	15	Thurs

	Photo Set Lab 3	5	Thurs
	Lab 5: Comparative Cell Membranes and Transport		
	Discussion 5: Post-lab Reflection	10	Sun
	Dropbox Assignment:		
	Pre-lab Hazard Assessment	10	Sat
	Lab Report Assistant	15	Sun
	Photo Set Lab 4	5	Sun
	Lab 6: Tissues, Organs and Homeostasis		
	Discussion 6: Post-lab Reflection	10	Sun
4	Dropbox Assignment:		
	Lab Report Assistant	20	Sun
	Lab 7: Cardiovascular System: The Heart		
	Discussion 7: Post-lab Reflection	10	Sun
5	Dropbox Assignment:		
	Pre-lab Hazard Assessment	10	Sat
	Lab Report Assistant	20	Sun
	Lab 8: Mitosis and Meiosis		
	Discussion 8: Post-lab Reflection	10	Thurs
	Dropbox Assignment:		
6	Lab Report Assistant	20	Thurs
6	Lab 9: Human Genetics and Karyotyping		
	Discussion 9: Post-lab Reflection	10	Sun
	Dropbox Assignment:		
	Lab Report Assistant	20	Sun
	Lab 10: Human Reproduction		
	Discussion 10: Reproduction	10	Thurs
7	Dropbox Assignment:		
7	NOVA Post-movie Questions	15	Thurs
	Fetal Alcohol Syndrome Questions	15	Thurs
	Cloning Case Study	15	Sun
	Lab 11: Human Populations		
8	Discussion 11: Post-lab Reflection	10	Sat
	Discussion 12: Ecological Footprint	10	Sat
	Dropbox Assignment:		
	Human Populations Lab Report	15	Sat
	TOTAL	410	

Assignment Overview

Each student is responsible for:

- Completing weekly reading assignments.
- Answering weekly discussion questions and responding to your classmates

- Completing lab reports and post-lab questions
- Submitting photo documentation

Readings can be found in the Content area of D2L. These should be completed prior to submitting assignments or weekly discussion postings. All graded assignments will rely on information derived from the text.

Discussion: Discussion postings should be completed by Thursday or Sunday of each assigned week depending on the lab schedule (with the exception of Week 8, when all assignments are due on the final day of the course). Discussion postings will be graded according to the rubric provided in the Grading Criteria section below.

Dropbox Assignments must be completed and posted to the appropriate folder in the Dropbox area of the course by the due dates listed above. Dropbox assignments are graded according to the rubric provided in the Grading Criteria section below.

Dropbox Assignment descriptions are as follows:

Lab Report Assistants are required for most labs. Under Content for each week, open the Lab Report Assistant for the lab. This basically includes all the questions and tables that you should fill out as you work your way through the lab. As you complete the lab, fill out these questions, data tables, graphs, etc. Each Lab Report Assistant should be submitted to the appropriate folder in the Dropbox no later than the assigned due date.

During weeks when TWO labs will be completed, the first lab will be conducted Monday through Thursday, and the second lab will be conducted Thursday through Sunday. Check the schedule above for specific due dates for quizzes, assignments, and discussion questions.

Photo Sets: Photo documentation is required for certain steps of most labs. Required photos include documenting various steps of the experiments, hand-drawn observations, or personal observations. Digital photos should be pasted into the appropriate place on the Lab Report Assistant, or for additional photos not specifically required in the lab procedure, should be placed into a single Word document. In the Content area of the course, you will find a document called Required Photo Sets. This is a week-by-week list of required photos to be submitted based on each lab. The required photos that are specific steps of an experiment should be embedded directly into the Lab Report Assistant. All others should be submitted as a Word document to the dropbox each week.

Pre-lab Hazard Assessments: Some labs will require a Pre-lab Hazard Assessment to be completed. <u>Use the Prelab Hazard Assessment Template</u> provided under General Course Information to complete these assignments. This assessment involves reviewing possible safety hazards for each lab, researching any potentially harmful chemicals using the MSDS information provided, and writing a brief summary of each hazard. Each Pre-lab Hazard Assessment should be submitted to the appropriate folder in the Dropbox no later than the assigned due date.

Other Dropbox Assignments: Lab Safety Agreement, Safety Quiz, LabPaq Contents List, Microscope Post-lab Report, NOVA Post-movie Questions, Fetal Alcohol Syndrome Questions, Cloning Case Study, and Human Populations report. These should all be completed according to the instructions provided in the syllabus and course. All must be submitted to the appropriate folder in the Dropbox area of the course by each assigned due date.

Course Schedule

Week 1 – Setting up a Safe Lab

Activities: Complete the following activities.

Weekly Shopping List: In the Content area of the course, you will find a document called "Student Shopping List". This is a week-by-week list of supplies that you must provide. Print this off and make sure to find or purchase supplies needed for each week.

Lab 1: Setting up a safe lab

Readings: Complete the following readings from the Content area.

General Course Information: Please review the *Introduction, Weekly Required Photo Sets, Syllabus, Student Shopping List* and the *Prelab Hazard Assessment template.* **Safety Information:** from this module, read *Safety Information* and the *Safety Contract.*

Appendices: In this module you will find a lot of general information. Please make note of *Specimen Care, Final Cleanup, How to Handle Preserved Specimens,* and the files dealing with technical help for images, etc.

Other Readings: Read the Week 1 Overview, and any Instructor Notes for this lab, located in the Content area of the course.

Activities: Open your kit and examine the contents. Also, watch the safety video provided by LabPaq available in the Content area.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

LabPaq Contents List: Watch *Unpacking Your Kit*, found in the Video module under course Content. Using the Contents List provided with your kit, remove each item from the kit and check it off the list. Also, at the beginning of each lab in the lab readings, locate the Materials list. Check the 'LabPaq Provides' list and make sure that it aligns with the kit Content List. Complete your check of the LabPaq Contents List. Make sure it is checked and initialed. Scan or photograph the initialed sheet and submit to the appropriate dropbox.

Lab Safety Contract: In the Content area of the course under Safety, you will find a Lab Safety Contract. Read this document, and initial and "sign". Submit to the appropriate dropbox.

Safety Quiz: Under course Quizzes you will find the "Safety Quiz". Complete this quiz and submit.

Photo Set Lab 1: For this lab, submit a photo of *you* with your kit in your home lab.

Discussion 1: Describe your home laboratory. Why did you choose this area? What are the potential problems with using this area? How might you resolve those problems?

Week 2 - The Scientific Method/Introduction to the Microscope

Lab 2: The Scientific Method

Readings: Complete the following readings under course Content for this week.

Week 2: From this module, read the *Overview*, *Prelab Instructor Notes*, and *The Scientific Method* lab.

Other Readings: Read the User's Manual for the Digital Scale, which can be found in the scale.

Activities: After reading the lab and completing the pre-lab hazard assessment, go through the lab kit and find all items listed as needed. Also, gather any supplies listed under "student provides." Once all materials are laid out, you can begin the lab. For this lab, you will follow the steps of the Scientific Method (question, hypothesize, experiment, compile data, and draw conclusions) to predict and then identify 6 unknown substances.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

Pre-lab Hazard Assessment: Using the *Prelab Hazard Assessment Template* found under General Course Information, review potential hazards of this lab, both chemical and physical.

Lab Report Assistant: Under Content, locate the Lab Report Assistant for the Scientific Method Lab. This report includes all the questions and tables that you should complete as you work your way through the lab. As you complete the lab, fill out these questions and tables. Finally, type your writings onto the Lab Report template.

Photo Set 2: In addition to any photos required as a part of the Lab Report Assistant, submit a photo of each of the following: (1) all materials for the lab laid out on your work surface prior to the experiment and (2) the results of the solubility test (the 6 test tubes). Paste these photos into a single Word document.

Discussion 2: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain about the scientific method?

Lab 3: Introduction to the Microscope

Readings: Read the *Introduction to the Microscope* Lab located in the Content area of the course, as well as *Operating Instructions for the Pocket Microscope*.

Activities: In this lab, you will become familiar with the field microscope that came with your kit. Since there is no lab in your lab manual that directly addresses the microscope, I have provided this supplemental lab for you to complete. In this lab, you will first learn the parts of your microscope, and also of an actual light microscope that might be used in a laboratory. You will also make some slides of your own in order to study properties of the microscope. You will practice viewing a letter "e" slide virtually on a compound microscope.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

Lab Report for the Introduction to the Microscope: Read the Introduction to Microscope Lab reading, located in the Content area, and complete the report, including drawings and questions.

Required Photo Documentation: The only required photos this week are the drawings completed with the Microscope Post-lab Report.

Discussion 3: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain about the microscope?

Week 3 – Biological Macromolecules/Comparative Cell Membranes and Transport

Lab 4: Biological Macromolecules

Readings: Under Week 3 Content, review the *Overview* and *Prelab Instructor notes*. Read the *Biological Macromolecules* lab.

Activities: After reading the lab, complete a prelab hazard assessment. Next, go through the lab kit and find all items listed as needed in the lab. Also, gather any supplies listed under "student provides." Once all materials are laid out, you can begin the lab. For this lab, you will be studying 3 of the 4 main macromolecules of life (proteins, sugars/starches, and lipids or fats). This lab teaches the simple qualitative tests for identifying these substances.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

Pre-lab Hazard Assessment: Using the template provided under General Course Information, review potential hazards of this lab, both chemical and physical.

Lab Report Assistant: Under Content, open the Biological Macromolecules Lab Report Assistant. This report includes all the questions and tables that you should complete as you work your way through the lab. As you complete the lab, fill out these questions and tables. Type up your report, using the Lab Report template and submit it to the dropbox.

Photo Set Lab 3: Submit a photo of each of the following: (1) the results of the protein test (your test tubes), (2) the results of your sugar test (your test tubes), (3) a photo of the drawings from the Observations Table: Exercise 3, and (4) the results of your lipid test. Paste your photos into a single Word document.

Discussion 4: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain?

Lab 5: Comparative Cell Membranes and Transport

Readings: Under Week 3 Content, read the Comparative Cell Membranes and Transport lab.

Activities: After reading the lab and completing the prelab hazard assessment, go through the lab kit and find all items listed on the first page of the lab. Also, gather any supplies listed under "student provides." Once all materials are laid out, you can begin the lab. For this lab, you will be studying the ways in which certain materials move across the plasma membrane of the cell, including the concepts of diffusion and osmosis.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

Pre-lab Hazard Assessment: Using the template provided, review potential hazards of this lab, both chemical and physical.

Lab Report Assistant: Open the Comparative Cell Membrane Transport Lab Report Assistant. This report includes all the questions and tables that you should complete as you work your way through the lab. As you complete the lab, fill out these questions and tables. Type up your report, using the Lab Report template and submit it to the dropbox.

Photo Set 4: Submit a photo of each of the following: (1) photo of the diffusion through an artificial membrane during the 1-hour waiting period and (2) a photo of the results of the diffusion at different temperatures test. Paste your photos into a single Word document.

Discussion 5: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain about cell membranes?

Week 4 - Tissues, Organs, and Homeostasis

Lab 6: Tissues, Organs and Homeostasis

Readings: Under Week 4 Content, review the *Overview* as well as the *Prelab Instructor Notes*. Read the *Tissues, Organs and Homeostasis* lab.

Activities: After reading the lab, go through the lab kit and find all items listed on the first page of the lab. Also, gather any supplies listed under "student provides". Once all materials are laid out, you can begin the lab. For this lab, you will be studying the main types of tissues in the human body (nervous, muscle, connective, and epithelial) and also the process of homeostasis.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

Lab Report Assistant: Open the Tissues, Organs and Homeostasis Lab Report Assistant. This report includes all the questions and tables that you should complete as you work your way through the lab. As you complete the lab, fill out these questions and tables. Type up your report, using the Lab Report template and submit it to the dropbox..

Photos: Photos and graph required for this lab should be embedded in the Lab Report Assistant. <u>There is no separate submission required for this lab.</u>

Discussion 6: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain?

Week 5 - Cardiovascular System: The Heart

Lab 7: The Heart

Readings: Under Week 5 Content, review the *Overview* and *Prelab Instructor Notes* containing a set of dissection videos. Read *Cardiovascular System: The Heart* and view the images of Cardiac Muscle provided.

Activities: After reading the lab and completing the prelab hazard assessment, go through the lab kit and find all items listed as needed for this lab. Also, gather any supplies listed under "student provides". Once all materials are laid out, you can begin the lab. For this lab, you will be studying the structures and functions of the cardiovascular system, specifically the heart. You will be dissecting a sheep heart.

Dropbox Assignments: Complete the following nd submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates

table above.

Pre-lab Hazard Assessment: Using the template provided, review potential hazards of this lab, both chemical and physical.

Lab Report Assistant: Open the Cardiovascular System: The Heart Lab Report Assistant. This report includes all the questions and tables that you should complete as you work your way through the lab. As you complete the lab, fill out these questions and tables. Type up your report, using the Lab Report template and submit it to the dropbox

Photos: Photos and drawings required for this lab should be embedded in the Lab Report Assistant. <u>There is no separate submission required for this lab.</u>

Discussion 7: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain?

Week 6 - Mitosis and Meiosis/Human Genetics and Karyotyping

Lab 8: Mitosis and Meiosis

Readings: Under Week 6 Content, review the *Overview* and *Prelab Instructor Notes*. Read the *Mitosis and Meiosis* lab, and view the images of Onion Mitosis and Whitefish Mitosis provided.

Activities: After reading the lab, go through the lab kit and find all items listed on the first page of the lab. Also, gather any supplies listed under "student provides." Once all materials are laid out, you can begin the lab. For this lab, you will be studying cell division. Mitosis and meiosis are two similar but also very different ways in which cells divide.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

Lab Report Assistant: Open the Mitosis and Meiosis Lab Report Assistant. This report includes all the questions and tables that you should complete as you work your way through the lab. As you complete the lab, fill out these questions and tables. Type up your report, using the Lab Report template and submit it to the dropbox.

Photos: Photos and drawings required for this lab should be embedded in the Lab Report Assistant. <u>There is no separate submission required for this lab.</u>

Discussion 8: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain?

Course Evaluations: Please evaluate the course. You will be able to submit your course evaluation between Sunday of Week 5 and Thursday of Week 7. A link will be sent to your CougarMail that will allow you to access the evaluation.

Lab 9: Human Genetics and Karyotyping

Readings: Read the Human Genetics and Karyotyping lab.

Activities: After reading the lab, go through the lab kit and find all items listed as needed for the lab. Also, gather any supplies listed under "student provides." Once all materials are laid out, you can begin the lab. For this lab, you will be studying human traits and inheritance patterns.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

Lab Report Assistant: Open the Human Genetics Lab Report Assistant. This report basically includes all the questions and tables that you should complete as you work your way through the lab. As you complete the lab, fill out these questions and tables. Type up your report, using the Lab Report template and submit it to the dropbox.

Photos: Photos and drawings required for this lab should be embedded in the Lab Report Assistant. <u>There is no separate submission required for this lab.</u>

Discussion 9: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain?

Week 7 - Human Reproduction

Lab 10: Human Reproduction

Readings: "Fetal Alcohol Syndrome and Human Development," and "Bringing back baby Jason: To clone or not to clone" located in the Content area of the course.

Activities: We will be taking a break from laboratory exercises this week and instead viewing a movie, answering a set of questions, and completing two exercises related to human reproduction. Visit the link provided in the Content area and watch the 60-minute movie on human reproduction and fetal development.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

NOVA Post-movie questions: Open NOVA Life's Greatest miracle available in the Content area. After viewing the movie online, complete the set of post-movie questions and submit them to the dropbox.

Fetal Alcohol Syndrome Questions: Open the Fetal Alcohol Syndrome available in the Content area. Use the information provided and information from the movie to answer the listed questions and submit your answers to the dropbox.

Cloning Case Study: Read the Cloning Case Study ("Bringing back baby Jason: To clone or not to clone") available in the Content area. After reading the case study, open and complete the Cloning Case Study Questions. Submit your answers to the dropbox.

Discussion 10: Genetic and environmental factors influence both male and female reproductive systems. What are some of the positive and negative environmental influences on sperm production and pregnancy, including nutrition, exercise, and exposure to chemicals?

Week 8- Human Populations

Lab 11: Human Populations

Readings: Read the *Human Population Lab* located in the Content area.

Activities: After reading the lab, open the Virtual Cemetery located in the Content area. For this lab, you will be collecting information from grave markers in order to study changing demographic patterns over time. You will also complete an Ecological Footprint Quiz and discuss how you have an impact on the environmental around you.

Dropbox Assignments: Complete the following and submit each to their corresponding folders in the Dropbox area of the course. Confirm the due date of each assignment on the Schedule of Due Dates table above.

Human Populations Lab Report: Open the Human Population Lab located in the Content area. For this lab, you will be collecting grave marker information for men and women based on year of birth. Open the Virtual Cemetery file and find as many graves as you can to complete Data Table I. Complete the Pre-lab Questions, all data tables, and the end-of-lab questions. Submit the completed lab to the dropbox no later than **11:59 p.m. CT Saturday**.

Discussion 11: Post-lab reflection: What worked? What problems did you encounter? What might you do differently if you were to do this again? What insights did you gain?

Discussion 12: Visit the website provided in the Content area and complete the 'Calculate your Ecological Footprint' quiz. How many planets would you need assuming your current lifestyle? What about your lifestyle contributes the most towards you footprint? What one thing would be the easiest to change dramatically?

Course Policies

Student Conduct

All Columbia College students, whether enrolled in a land-based or online course, are responsible for behaving in a manner consistent with Columbia College's <u>Student Conduct Code</u> and <u>Acceptable Use</u> <u>Policy</u>. Students violating these policies will be referred to the office of Student Affairs and/or the office of Academic Affairs for possible disciplinary action. The Student Code of Conduct and the Computer Use Policy for students can be found in the Columbia College *Student Handbook*. The <u>Handbook</u> is available online; you can also obtain a copy by calling the Student Affairs office (Campus Life) at 573-875-7400. The teacher maintains the right to manage a positive learning environment, and all students must adhere to the conventions of online etiquette.

Plagiarism

Your grade will be based in large part on the originality of your ideas and your written presentation of these ideas. Presenting the words, ideas, or expression of another in any form as your own is plagiarism. Students who fail to properly give credit for information contained in their written work (papers, journals, exams, etc.) are violating the intellectual property rights of the original author. For proper citation of the original authors, you should reference the appropriate publication manual for your degree program or course (APA, MLA, etc.). Violations are taken seriously in higher education and may result in a failing grade on the assignment, a grade of "F" for the course, or dismissal from the College.

Collaboration conducted between students without prior permission from the instructor is considered plagiarism and will be treated as such. Spouses and roommates taking the same course should be particularly careful.

All required papers may be submitted for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers may be included in the Turnitin.com reference database for the purpose of detecting plagiarism. This service is subject to the Terms and Conditions of Use posted on the Turnitin.com site.

Non-Discrimination

There will be no discrimination on the basis of sex, race, color, national origin, sexual orientation, religion, ideology, political affiliation, veteran status, age, physical handicap, or marital status.

Disability Services

Students with documented disabilities who may need academic services for this course are required to register with the Coordinator for Disability Services at (573) 875-7626. Until the student has been

cleared through the disability services office, accommodations do not have to be granted. If you are a student who has a documented disability, it is important for you to read the entire syllabus before enrolling in the course. The structure or the content of the course may make an accommodation not feasible.

Online Participation

You are expected to read the assigned texts and participate in the discussions and other course activities each week. Assignments should be posted by the due dates stated on the grading schedule in your syllabus. If an emergency arises that prevents you from participating in class, please let your instructor know as soon as possible.

Attendance Policy

Attendance for a week will be counted as having submitted a course assignment **for which points have been earned** during that week of the session or if the proctoring information has been submitted or the plagiarism quiz taken if there is no other assignment due that week. A class week is defined as the period of time between Monday and Sunday (except for Week 8, when the week and the course will end on Saturday at midnight). The course and system deadlines are all based on the Central Time Zone.

Cougar E-mail

All students are provided a CougarMail account when they enroll in classes at Columbia College. You are responsible for monitoring e-mail from that account for important messages from the College and from your instructor. You may forward your Cougar e-mail account to another account; however, the College cannot be held responsible for breaches in security or service interruptions with other e-mail providers.

Students should use e-mail for *private* messages to the instructor and other students. The class discussions are for *public* messages so the class members can each see what others have to say about any given topic and respond.

Late Assignment Policy

An online class requires regular participation and a commitment to your instructor and your classmates to regularly engage in the reading, discussion and writing assignments. Although most of the online communication for this course is asynchronous, you must be able to commit to the schedule of work for the class for the next eight weeks. You must keep up with the schedule of reading and writing to successfully complete the class.

No late assignments will be accepted without a penalty assessment unless there are truly extenuating circumstances beyond the control of the student. I will count off 20% of the total points possible for lab reports and photo documentation **each day** they are late (11:59 p.m. CT marks the end of a day). Late pre-lab quizzes will not be accepted. The instructor must be notified prior to the due date of the assignment if it will be late.

Course Evaluation

You will have an opportunity to evaluate the course near the end of the session. Course evaluations will open on Sunday of Week 5 and will remain open until Thursday of Week 7. A link will be sent to your CougarMail that will allow you to access the evaluation. Be assured that the evaluations are anonymous and that your instructor will not be able to see them until after final grades are submitted.

Additional Resources

Orientation for New Students

This course is offered online, using course management software provided by Desire2Learn and Columbia College. The <u>Student Manual</u> provides details about taking an online course at Columbia College. You may also want to visit the <u>course demonstration</u> to view a sample course before this one opens.

Technical Support

If you have problems accessing the course or posting your assignments, contact your instructor, the Columbia College Helpdesk, or the D2L Helpdesk for assistance. Contact information is also available within the online course environment.



Online Tutoring

Smarthinking is a free online tutoring service available to all Columbia College students. Smarthinking provides real-time online tutoring and homework help for Math, English, and Writing. The Writing Center can be used for writing assistance in any course.

Smarthinking also provides access to live tutorials in writing and math, as well as a full range of study resources, including writing manuals, sample problems, and study skills manuals. You can access the service from wherever you have a connection to the Internet. I encourage you to take advantage of this free service provided by the college.

Access Smarthinking through CougarTrack under Students->Academics->Academic Resources.

Grading Criteria

Discussion

Criteria	Description	Points
Initial Response	Answers are complete, concise, and demonstrate familiarity with the readings.	5
Response to Classmates	Responses to classmates are substantive and help to advance the discussion and/or our understanding of the subject. Responses pose questions or respond to questions of classmates. At least two responses for each topic are required for full points.	3
Participation	The number and timeliness of posts submitted and read. Those who post early and often contribute more to the discussion than those who post the minimum number of posts just before the deadline.	2

Lab Assistant Reports

Criteria	Description	Points
Content	Report addresses all the necessary components and demonstrates mastery of the concepts and applications	10

Organization	Report is well thought out and organized	3
Mechanics	Report is well written; errors in spelling and grammar are rare.	2
Photo Sets (if required)	Report includes appropriate photographs to document the lab. Photos clearly show the necessary elements, are well organized and have appropriate captions.	5