Lecture Professor: Professor Naima Hill
Email: naimahill@dcccd.edu Office Number: H124
Laboratory Professor: Professor Christopher Hilton Email: CHilton@dcccd.edu
Meeting Days & Time: Lecture: Online
                      Lab: Monday-Thursday 9-11am, Room H119
Credit Hours: 4 Semester Hours
Science, Technology, Engineering and Math (STEM) Office Phone: 214-860-8649, 214-860-8760
Division Office Location: H129, Monday – Friday: 8:00 a.m. – 5:00 p.m.
Mission Statement: Mountain View College empowers people and transforms communities.

Course Description: An introductory survey of current biological concepts for students majoring in the sciences. The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Laboratory activities will reinforce study of these concepts. (3 Lac., 3 Lab.)

Course Prerequisites: Required: BIOL 1406

Course Materials/Supplies Needed
- LAB MANUAL: Print labs from eCampus prior to attending each lab session.
- Must Purchase Chemical Splash Goggles and Nitrile Gloves to participate in lab. Make sure to have every lab. Can either buy:
  o gloves and goggles available in the College Bookstore or at local store (Walmart, Target, etc)
  OR
  o Lab Safety Kit SKU 019071998: which includes: 1 Chemical Splash Goggles, 10 pairs Nitrile Gloves for working with chemicals, and 1 clear plastic apron (available in the College Bookstore- $30.00)
- Scantrons: 882E for lab practicals.
- 3-Ring Binder with dividers for the labs and lab assignments printed from eCampus (2 inch binder recommended)

Core Objectives
- Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- Communication Skills - 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

Lecture Student Learning Outcomes
After successful completion of this course the student should be able to:
1. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
2. Describe phylogenetic relationships and classification schemes.
3. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
4. Describe basic animal physiology and homeostasis as maintained by organ systems.
5. Compare different sexual and asexual life cycles noting their adaptive advantages.
6. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

Lab Student Learning Outcomes
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. Demonstrate knowledge of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
5. Distinguish between phylogenetic relationships and classification schemes.
6. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
7. Describe basic animal physiology and homeostasis as maintained by organ systems.
8. Compare different sexual and asexual life cycles noting their adaptive advantages.
9. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

Course Outline:
Objectives, which are determined by the district curriculum committee, are measurable or observable and will be evaluated. Different modes of instruction will be utilized for presentation and evaluation. Lecture topics will include evolution, protists, plant diversity, fungi, plant structure and transport, plant reproduction, plant responses, animal diversity, animal systems, ecology, population ecology, and ecosystems. The course calendar is on ecampus.

Evaluation Procedures:
LECTURE EXAMS: 60% of the total grade
• Four required lecture exams cover the assigned chapters from the book and are listed on the course calendar. The fifth exam is a comprehensive final exam given during exam week. – Lowest grade will be dropped only if all exams are taken.
• ALL lecture exams will be taken online and require the use of the Respondus Lockdown Browser which must be downloaded onto your computer. OR exams can be taken at the testing center, MVC library or computer lab on campus as computers on site have the Respondus Lockdown Browser downloaded.
• In the event of a missed exam, the instructor must be notified within 24 hours of the scheduled exam and documentation will be required for the absence.

ONLINE ASSIGNMENTS: 10% of the total grade
• 5% Discussion Board posts
  o Students must post an initial post and response to a fellow classmate for each discussion board post
• 5% Online quizzes/activities/assignments etc.

LABORATORY PRACTICALS: 20% of the total grade
• Laboratory Practicals MUST be taken during the scheduled lab exam time (see course calendar). Scantron 882E required for each lab practical.
• There is a time limit of 1 hour - 15 minutes for all lab exams.
• A laboratory practical tests your knowledge of laboratory information, ability to interpret data, and ability to successfully perform laboratory skills.

LABORATORY NOTEBOOK: 10% of total grade
• Requirements for the lab notebook will be provided by the lab professor.

GRADING SCALE - FOR EACH EXAM, ASSIGNMENT AND FINAL GRADE:
\[
\begin{align*}
A & = 89.5 + \\
B & = 79.5 - 89.4 \\
C & = 69.5 - 79.4 \\
D & = 59.5 - 69.4 \\
F & < 59.4 \\
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*Grades are finalized at the end of the semester after the final exam. Ecampus final grade column can be used as an estimate of your grade but may not be 100% accurate. If you want an accurate calculation use the information in this syllabus.
*A limited number of extra credit assignments may be given throughout the semester. If you miss the opportunity you will not be able to go back. You will not have to option for extra credit if you are late to class, late turning in assignments or missing assignments, do not participate, or have too many absences. Excessive absences and late to class effect your ability to participate.

Instructor Attendance Policy:
• Students are expected to sign into eCampus multiple times a week. Students have the responsibility to go through the course material and complete all assignments by due dates provided. If for some reason you can not complete an
assignment by the due date, an email must be sent to the professor within 24 hours with a notice of issue. Logging in multiple times per week is vital to your success in this course. Plan your own due dates in advance of when items are actually due - work ahead.

**Student Expectations:**

- Students will develop personal responsibility in the areas of on-time attendance (logging in multiple times per week to the course), completing all assignments on time, and studying 12-15 hours per week outside of class.
- Students will develop personal responsibility in the areas of proper care for scientific equipment, proper care and respect for biological specimens, safety in the laboratory, proper storage of laboratory equipment, and cleanliness of laboratory stations.
- Students must type their name, course and section and instructor name on all assignments.

**Late Work Policy:**

- Students must contact the instructor if they will miss lab, or the due date for an assignment within 24 hours.
- Documentation of an excused absence is required. Arrangements must be made with the instructor to make-up a lab, exam, or assignment.
- Work is due on the due date.
- Twenty points may be deducted per day for an assignment that is late if accepted. In class work that has a late start due to tardiness will have a minimum of 10 points deducted if accepted.

**Makeup Exam Policy:**

- Students must contact the instructor if they will miss an exam within 24 hours of the due date. Documentation of an excused absence is required. Arrangements must be made with the instructor to make-up an exam.

**LABORATORY EXPECTATIONS:**

**ATTENDANCE IS MANDATORY** and each exercise will require laboratory participation. Attendance will be taken at the beginning of each class period.

- Students are required to print a copy of the lab for each day from eCampus prior to class. The labs are formatted for the Arial font. If you do not have access to a computer and printer, you can print the pages for a small fee in the campus computer labs, W139 (W141 and W142).
- Instructions are given at the beginning of each lab and WILL NOT be repeated. Students who miss instruction will not be allowed to participate in lab.
- Labs for each lab practical must be kept in a lab notebook and brought to each lab session.
- Nitrile Gloves and chemical splash goggles are **required** when working with chemicals. **Purchase them before class! NO GLOVES, NO GOGGLES, NO LAB!**
- Hazardous Materials are used in the laboratory areas. Material Safety Data Sheets (MSDS), required by OSHA, are available for all students to observe upon request.
- **Cell Phones** are not permitted to ring in the lab. **No texting in class or lab – please step out into hall**
- Students who bring computers to class are not permitted to check email or the Internet.
- **Eating, Drinking, Gum Chewing, and/or Applying Cosmetic are NOT ALLOWED** in the laboratory at any time. Do not bring any beverage containers or water bottles into the lab.

**eCampus:**

- Log into the class website multiple times per week.
- Weekly material will be opened up before Monday morning of the new week. The class will have 2 weeks ahead open for students to work ahead if they choose. Discussion board initial posts will be due by Friday at midnight and second discussion board posts due by Sunday at midnight. Assignments and tests will be due Sundays at midnight unless otherwise noted on eCampus.
- Go to the website: http://ecampus.dcccd.edu. Your login is an “e” and your seven-digit student identification number (example: e7654321). If you have never used eCampus before, your password is the same as your user name until you change it under personal information.

**eConnect:** Your final grade will be posted to eConnect and the course will be made unavailable.

**Disclaimer:** Instructor reserves the right to change course calendar and syllabus if needed.

**Withdrawal date: July 30, 2019**

Please speak with the instructor if you are having difficulty in the course. Students often drop courses when help is available that would enable them to continue. I hope you will discuss your plans with your instructor if you feel the need to withdraw.
**Academic Dishonesty:**
Students caught plagiarizing an assignment will receive a “0” on the test or assignment and will be subject to an “F” in the course and possible expulsion from the college. Any testing or exam no phone or notes may be used in Testing Center, Classroom or Lab Practical and may result in a “0” on the assignment and possible “F” and or expulsion.

Make sure to study the materials in the course to learn the information to use to answer the test questions. Software is used to limit your internet use during test taking.

**Mountain View College Institutional Policies:**

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### BIOL 1407 Summer 2019 Schedule, LEC online, LAB in person

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
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<tr>
<td><strong>Week 1</strong></td>
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<td>Jul 9-14</td>
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<td>Watch Get Started Video</td>
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<td>LAB 1: Safety/MSDS Video</td>
<td>LAB 3: Classification and Dichotomous Keys</td>
<td>LAB 5: Phylogeny and Characteristics</td>
<td>LAB 7: Protista and Microscopy Review</td>
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<td>LAB 2: Data Collection and analysis</td>
<td>LAB 4: Hardy-Weinberg Equilibrium</td>
<td>LAB 6: Evolution of Hominid Skulls</td>
<td>LAB 8: Fungi</td>
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<td><strong>Week 2</strong></td>
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<td>Ch 23 Protista</td>
<td>Ch 24 Fungi</td>
<td>Ch 25 Bryophytes and Seedless Vascular Plants</td>
<td>Ch 26 Angiosperms and Gymnosperms</td>
<td>Ch 30 Plant Tissues</td>
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<td>CH 22/24 Quiz</td>
<td>CH 25 Quiz</td>
<td>CH 26 Quiz</td>
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<td>LAB 9: Bryophytes and Seedless Vascular Plants</td>
<td>Lab Practical #1, Lab Notebook #1</td>
<td>LAB 11: Plant Structure and Function</td>
<td>LAB 13: Photosynthesis</td>
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<td>LAB 10: Gymnosperms and Angiosperms</td>
<td>LAB 12: Plant Reproduction</td>
<td>LAB 15: Photosynthesis</td>
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<td><strong>Week 3</strong></td>
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<td>Ch 27 Introduction to Animal Diversity</td>
<td>Ch 27 Invertebrates</td>
<td>Ch 29 Vertebrates</td>
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<td>LAB 14: Mollusca, Annelida, and Nematoda</td>
<td>LAB 10: Vertebrates</td>
<td>LAB PRACTICAL 2 (Labs 11-16) - Lab Notebook #2</td>
<td>LAB 17: Reproduction</td>
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<td>LAB 15: Arthropoda and Echinoderms</td>
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<td>Ch 45 Population and Community Ecology</td>
<td>Ch 46 Population and Community Ecology</td>
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<td>LAB PRACTICAL 3 (Labs 17-22), Lab Notebook #3</td>
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*Items are due on date listed in calendar unless otherwise noted.*