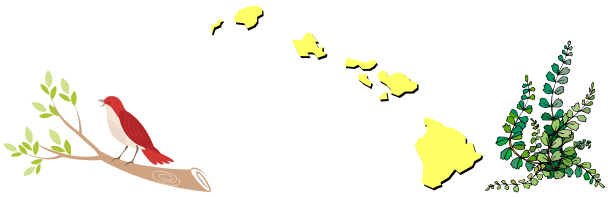
# BIO 156/156L: Natural History of the Hawaiian Islands
## Spring 2010



10am – 3:30*pm  Mondays Bldg 3393, Room 103 (Manono Campus)

Instructor: Dr. Pamela Scheffler  email: Pamela.scheffler@hawaii.edu
Office phone: 933-0835
Office Hours: Mon, Weds 9-9:50am, Mon 3:30-4:20pm,
or by appointment

**Texts**:
*Hawaii's Plants and Animals: Biological Sketches of Hawaii Volcanoes National Park* by Stone and Pratt. 2002
*Roadside Geology of Hawaii* by Hazlett and Hyndman. 1996
**Optional Text**:
*Hawaiian Natural History, Ecology, and Evolution* by Ziegler. 2002

"To a person uninstructed in natural history, his country or sea-side stroll is a walk through a gallery filled with wonderful works of art, nine-tenths of which have their faces turned to the wall" – Thomas Henry Huxley

**Course Description:** The formation of the Hawaiian Islands, establishment and evolution of their native flora and fauna, effects of man

**Note:** The lecture and laboratory sections must be taken concurrently. There is a mandatory weekend fieldtrip March 5&6. Advise the instructor ASAP if you cannot make this fieldtrip.

Grades will be based on the following:

| | |
|---|---|
| Trip Reports: | 20 pts |
| Attendance/Participation: | 20 pts |
| Weekly quizzes/In-class assignments: | 20 pts |
| Species collection: | 20 pts |
| Naturalist report | 10 pts |
| Final Presentation: | 10 pts |
| Total | 100 pts |

***There may be days when we are delayed in returning to campus. Please try not schedule anything immediately following this class. To the best of my knowledge I will let you know in advance of changes in the schedule, but not all will be possible to predict.**

**Learning environment:** I expect each of you to contribute positively to the learning experience, both your own and that of your classmates. As such, I will expect you to have completed all reading assignments by the day indicated on this syllabus and be prepared to ask questions and/or discuss the material in class. I expect honesty and integrity in all your work and interactions with other students*.

If you need any special assistance, please ask**. **Attendance** is mandatory. All missed classes will count against your attendance/participation grade. If you have a legitimate excuse for the absence you will be allowed to make up exams and assignments provided you inform the instructor of the reason you were absent within 24 hours. You are responsible for all missed material – you may want to exchange contact information with one or more classmates early on in the semester so that you can figure out what assignments and information you have missed. Up to 2 missed classes may be made up through participation in a Service Learning*** project with a written trip report.

**Email:** You must check your hawaii.edu email account regularly while taking this course since email *will* be used for critical communication during the semester.

**Materials needed:** Please come to each class with material for writing (i.e., pen(cil) and paper) and appropriate clothing. On field trips you need to be prepared to be outside, regardless of the weather: please bring comfortable and sturdy shoes, a water bottle, and raingear; you will need to be prepared for both rain and sun every day. You might want to invest in a clipboard for taking notes in the field.

**Trip Reports:**
For every fieldtrip you will write a report that includes the following information: **Where** we went. **Site description** (if there were multiple sites give a detailed description of one and a brief description of the rest); include the substrate age and ecological zone. **Objectives** of trip (e.g., "why?"). **Research question & Hypothesis** (based on an observation at the site). **Methods** to answer this question. This report is due at the next class (i.e., one week later). Late trip reports will lose points; after two weeks, they will receive an automatic F and will not be graded for content. Those not turned in will receive a zero.

**Species Collection (terrestrial):**
You may choose to do either a plant or insect collection. Your collection will contain 30 specimens that have been properly preserved, identified (species and status: exotic, indigenous, endemic), and contain location and collector information. Each specimen should be accompanied by a short description of its natural history. For your **Final Presentation** you will pick one species from your collection and give a summary of its natural history based on your own observations and supplemented with information from the literature.

**Naturalist Report:**
You will be given the name of a famous naturalist. You will give a 5-10 minute **presentation** on his/her life on March 15.

**Passing Grades:**

| | |
|---|---|
| 90-100% A | 70-79% C |
| 80-89% B | 60-69% D |

**Counselors are available:** please call 974-7741 if you would like to speak with a counselor about any issues which have a negative impact on you ability to successfully complete this, or any other, class.

***Compliance with HawCC Student Conduct Code:**
Every student is expected to comply with the student conduct code: "Impermissible behavior includes… interference in the rights of others, interference with university processes, theft of mutilation of college property, disruption, abuse of controlled substances, off-campus behavior, academic dishonesty which includes cheating and plagiarism."

****Individual Accomodation**
H.C.C. is committed to provide equal access to the campus, classes, and programs for students who have disabilities. If you have a documented disability qand/or related access needs, please see your instructor during office hours or contact Karen Kane of the Ha`awi Kokua Program (933-0702) as early as possible. If you are a student who needs to have an accommodation, please discuss your needs and make your request in a timely manner.

***http://www.hawcc.hawaii.edu/laurab/servicelearning/default.htm

# Tentative Schedule Spring 2010

| Day | Class | Reading* |
|---|---|---|
| January 11 | Introduction | |
| January 18 | Martin Luther King Day Holiday | |
| January 25 | A History of Natural History | H: Chap 1, S&P: Intro |
| February 1 | Geology and the formation of Islands | H: pp 63-88, S&P: pp 45-50 |
| February 8 | Geology and the formation of Islands II | S&P: pp 7-44 |
| February 15 | Presidents' Day Holiday | |
| February 22 | Geology and plant succession | H: pp 117-124, S&P: pp 283-308 |
| March 1 | Climate | S&P: pp 123-167 |
| March 5 | Weekend Trip to Mauna Kea | |
| March 8 | No Class | |
| March 15 | Naturalist presentations | |
| March 22 | Spring Break | |
| March 29 | Evolution, adaptive radiation | S&P: pp 171-231 |
| April 5 | Endangered Species | H: 95-104, S&P: pp 321-335 |
| April 12 | Why Earth Day? | |
| Friday, April 16 | Earth Day Tours | |
| April 19 | Collections | |
| April 26 | Cave species | S&P: pp 48-49 |
| May 3 | Natural History of the Ocean | H: 110-111, S&P: pp 53-82 |
| May 10 | 9:40-11:40am: Species Presentations | |

* Expect reading to be supplemented by handouts
H: Hazlett & Hyndman
S&P: Stone & Pratt