Polynesian Voyaging and Seamanship Lab

IS 160L, CRN 61432

1 credit

Laboratory/field trip course designed to acquire seamanship skills and apply knowledge of astronomy, geology, oceanography, meteorology, marine biology, ethnobotany and archaeology through sailing and environmental exploring activities. Optional coastal and/or inter-island voyaging field trips may be offered. (Students will be responsible for fees for each activity.) (3 hours laboratory)

PREREQUISITES: 1. Minimum water skills and survival requirements
   Student must demonstrate an:
   • Ability to swim a minimum of 500 yards in the open ocean using any strokes, except backstroke.
   • Ability to tread water for 30 minutes in the open ocean.
   (Note: Accredited water skill and survival tests passed within the past year are acceptable upon instructor approval. The 'swim test must be completed by the date of the first sailing lab.)

   2. Health Clearance: from a licensed physician must be provided.
   (Note: Health clearance submitted within the past year is acceptable upon instructor approval. Health clearance must be submitted by the date of the first sailing lab.)

CO-REQUISITE: Concurrent enrollment in IS 160B: Polynesian Voyaging and Seamanship (not required).

THE STUDENT LEARNING OUTCOMES ARE:

- Apply both traditional Polynesian skills and modern scientific methods when engaged in sailing and environmental exploring activities.
- Apply basic sailing and navigational skills to prepare and carry out a sailing plan.
- Apply water safety skills.
- Conduct basic canoe operations, including rigging, sailing and maintenance.
• Identify Polynesian-introduced plants and native plants that are valuable for voyaging and discuss their value as food source, medicine, building material, and cordage.

ARTICULATION BY CAMPUS: WCC: students may choose to receive credit for either:
Natural Sciences, Group 3
Or Arts and Humanities, Group 2

REQUIRED TEXT/MATERIAL:
  • Handouts given in class.
  • Bound notebook for recording a daily log/journal and note taking

RECOMMENDED TEXT/MATERIAL:
  • Reading lists provided by the instructor(s).
  • Lycra shirt, wet suit top, or something for warmth on the ocean. Cotton highly NOT recommended.
  • Sunscreen, hat, shades, water, snacks.
  • Warm, dry clothes and towel for after labs. Cotton okay.
  • Current tide calendar.
  • Snorkel, mask, and fins.
  • Tabis or other foot gear suitable for reef walking.

ACTIVITIES REQUIRED AT TIMES OTHER THAN REGULAR CLASS TIMES:
  • See syllabus

ACTIVITIES REQUIRED OFF-CAMPUS DURING REGULAR CLASS TIMES:
  • See syllabus

INSTRUCTORS: Leimomi Dierks
  Natural Science Lecturer, Polynesian Voyaging Lab Instructor
  Office:
  Phone: 284-1252
  Email: kekina@hawaii.edu
SCI 160L: POLYNESIAN VOYAGING & SEAMANSHIP LAB

SUPPLEMENTARY INFORMATION

A. Expectations of Students

Success in this course will be enhanced by:

1. A positive, inquiring attitude toward learning.
2. Setting aside adequate time for studying and working problems.
3. Making notes and reading the suggested recommended literature.
4. Seeking assistance from the instructor(s).
5. Lab attendance and promptness. When you are late or miss labs, you become a safety risk to yourself as well as the rest of your crew.
6. Responsibly obtaining all assignments and/or changes to the course syllabus.
7. Keeping abreast with or ahead of the syllabus.
8. Completion of assigned tasks.

B. Mode of Instruction

Laboratory Activity: Students are required to attend all lab sessions. The lab instructor(s) will give an overview of the theory and procedures related to the lab activity. Students will work in teams setting up the necessary apparatus, conducting the specific lab activity safely as they gather important information and knowledge as related to the course, and disassembling equipment, including cleaning and rinsing (maintenance, caring for...) of the equipment. The instructor will be available throughout each lab session to assist and answer questions.

Co-Requisite Lecture Section: Students may be enrolled in SCI 160B, which is the lecture counterpart to this laboratory course.

C. Method of Evaluation

Evaluation of the successful completion of the objectives of this course will be based on the following: (Points will be given for each lab attended and for each lab there is a journal entry for.)

1. SAILING
   Attendance & participation + log book with journal entries.
   10 points per 3 hour session (5 for attendance, 5 for a journal entry).
   20 points per 6 hour session (10 for attendance, 10 for a journal entry).

   Total Possible Sailing Points  ........................................... 150 points
2. **QUIZZES**

A total of 5 quizzes will be given. They will be worth 10 points each. This is to ensure you did your homework and reading assignments and are prepared for class for the day. It is part of the day’s safety briefing.

**Total Possible Quiz Points** .......................................... 50 points

3. **FINAL EXAMINATION:** A written final examination and lab practicum will be given. The lab practicum is of a hands-on nature. For example, the students may be asked to conduct a knot test, a star /constellation/star compass identification test, and/or a canoe performance test. **There are no make-ups or re-tests for the written final examination or the lab practicum.**

**Written Final Examination** ............................................. 25 points

**Lab Practicum** .................................................................. 25 points

**TOTAL POINTS:** 250

The lab will be graded based on attendance, promptness and participation. Each student will be responsible for turning in a journal at the conclusion of the semester. This journal should be a log of their learning and reflections with a minimum 1 page typed, double-spaced entry each session. **If a student fails to submit their journal, they will automatically fail the lab! No late journals will be accepted, no exceptions!**

This class is based heavily on attendance. Please advise the instructors of any anticipated absences. **More than 3 absences from the lab per semester and the student will fail the semester.** Journals can be made up for these absences, with a reflection on a self-selected topic on Polynesian voyaging from the voyaging lab manual or sailing text. However, points cannot be made up for missing class and being absent, points can only be made up for the journal entry for that day that was missed.

Classes may be modified and/or cancelled due to weather factors etc. Any changes to the schedule will be announced during class and lab. The student is responsible for keeping abreast with any changes in the syllabus which are announced in class and/or lab. A phone tree/list may be generated.

**The lecture section is graded separately.**

Each letter grade with its respective level of achievement is as follows:
The Cr/NC option must be declared by the end of the 10th week of classes. Written consent of instructor is required for this option.

Cr
Achievement of objectives at the C level or higher.

NC
Achievement of objectives at less than C level. (Formal grade)

N
Achievement of objectives at less than C level. (Optional instructor's grade)

W
Official withdrawal after the third week of a 16-week course and prior to the end of the 10th week. If a student officially withdraws by the end of the 3rd week of a 16-week course, the record of registration in this course will not appear on the student's transcript.

D. Other Information

1. 3 tardies will constitute an absence.
   2 absences is an automatic drop in 1 letter grade.
   3 absences constitute a failure grade of F.

   Failure to submit your learning log (journal) will result in a failure grade of F.

2. If a student is unable to attend a lab or field trip at the scheduled time, the student is responsible for notifying the instructor of the situation and reason(s).
3. A student can determine how his/her current grade during any time of the semester by dividing his/her cumulative score by the cumulative points possible and converting into a percentage and referring to the table of Letter Grades.

4. Any student wishing to be informed of his/her semester grade in advance of the official mailing of report cards should email the instructor.
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Saturday, August 26, 2017</td>
<td>Welcome, Protocol, Orientation, Program History</td>
</tr>
<tr>
<td>12 pm - 3 pm (3 hours)</td>
<td>Swim Test</td>
</tr>
<tr>
<td>5 A + 5 J = 10 points</td>
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<tr>
<td>Saturday, September 2, 2017</td>
<td>Parts of the Wa’a</td>
</tr>
<tr>
<td>12 pm - 3 pm (3 hours)</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
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<tr>
<td>Saturday, September 9, 2017</td>
<td>Wa’a Safety</td>
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<tr>
<td>12 pm - 3 pm (3 hours)</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
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<tr>
<td>Saturday, September 16, 2017</td>
<td>Seamanship Basics</td>
</tr>
<tr>
<td>12 pm - 3 pm (3 hours)</td>
<td>Terminology/Vocabulary</td>
</tr>
<tr>
<td>5 A + 5 J = 10 points</td>
<td></td>
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<tr>
<td>Saturday, September 23, 2017</td>
<td>Life on the Wa’a</td>
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<tr>
<td>12 pm - 3 pm (3 hours)</td>
<td>Crew Responsibilities</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
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<tr>
<td>Saturday, September 30, 2017</td>
<td>Knots</td>
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<tr>
<td>12 pm - 3 pm (3 hours)</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
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<tr>
<td>Saturday, October 7, 2017</td>
<td>Pacific Geography</td>
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<tr>
<td>12 pm - 3 pm (3 hours)</td>
<td>‘Ohana Wa’a</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
<td>Kaneʻohe Bay Geography</td>
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<tr>
<td>Saturday, October 14, 2017</td>
<td>Meteorology</td>
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<td>12 pm - 3 pm (3 hours)</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
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<tr>
<td>Saturday, October 21, 2017</td>
<td>Oceanography</td>
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<tr>
<td>12 pm - 3 pm (3 hours)</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
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<tr>
<td>Saturday, October 28, 2017</td>
<td>Navigation Basics</td>
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<tr>
<td>12 pm - 3 pm (3 hours)</td>
<td>Non-instrument Navigation</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
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<tr>
<td>Saturday, November 4, 2017</td>
<td>Sail Planning</td>
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<tr>
<td>12 pm - 3 pm (3 hours)</td>
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<tr>
<td>5 A + 5 J = 10 points</td>
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<td>Date</td>
<td>Time</td>
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<tr>
<td>Saturday, November 11, 2017</td>
<td>12 pm</td>
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<td>Saturday, November 18, 2017</td>
<td>12 pm</td>
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<tr>
<td>Saturday, November 25, 2017</td>
<td>12 pm</td>
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<tr>
<td>Saturday, December 2, 2017</td>
<td>12 pm</td>
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<tr>
<td>Saturday, December 9, 2017</td>
<td>12 pm</td>
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***Journals due by 4:30 pm, Monday, December 11, 2017***

**POINT SYSTEM**

Attendance/participation + Log Book with 15 Journal entries 150 points
Total contact hours = 45.
15 lab at 3 hours each = 45 hours.
10 points per 3 hour session:
  5 for Attendance (A), 5 for Journal (J) entry

Quizzes (5 at 10 points each) 50 points
Written Final Examination 25 points
Lab Practicum 25 points

TOTAL 250 points