APPLICANT: Ka‘iulani Murphy

E-MAIL: kmurphy@hawaii.edu

COURSE ALPHA and NUMBER: HWST 281L

COURSE TITLE: Ho‘okele I: Hawaiian Astronomy and Weather Lab

ESTIMATED NUMBER OF SECTIONS:
   Fall: 1
   Spring:

APPLICATION IS FOR:
   □ New Course    □ Modified Course    X Existing Course    □ Re-designation
   □ Certification   X Re-Certification. Date of last certification: 2008

DIVERSIFICATION AREA DESIGNATION SOUGHT:
   □ DA (Arts)         □ DP (Physical Sciences)
   □ DB (Biological Sciences)  □ DS (Social Sciences)
   □ DH (Humanities)       X DY (Laboratory)
   □ DL (Literature and Language)

What percentage of the CONTENT of this course focuses on this diversification area? 75%

What percentage of CLASS MEETINGS focuses on this diversification area? 75%
1. **Hallmarks and SLOs.** Please explain how course-specific SLOs align with the diversification area’s hallmarks.

Students will be taught to utilize traditional and western methodologies of instrument and non-instrument navigation in the context of Polynesian history and culture, and the revival of voyaging in modern times. Students will also demonstrate an understanding of both Hawaiian and Western terminology as it relates to voyaging. The majority of the course content will consist of scientific knowledge (astronomy, meteorology, oceanography, geography, ethnobotany, and physics) and the variety of processes used (observations of celestial bodies, tides, winds, clouds and currents) in non-instrument and instrument navigation.

Course materials will also enable the student to demonstrate the usage of inquiry that involves Polynesian and Micronesian navigational methods and how these methods compare with Western concepts.

The following SLO’s relate to the DY hallmark #1: The course uses the laboratory methods of the physical sciences:

- Apply practical knowledge of traditional Hawaiian and Polynesian concepts of the cosmos, space, direction, and time and explain how these concepts compare with Western concepts.
- Identify and name the component parts of the star compass used by Polynesian Voyaging Society trained navigators in a live setting.

To meet these SLO’s students must demonstrate their ability to understand both astronomy and earth science through observation and practical non-instrument navigation.

The following SLO’s relate to the DY hallmark #2: The course involves processes and issues of design, testing, and measurement:

- Identify and name (both Hawaiian and non-Hawaiian names) the four star lines used by contemporary Hawaiian wayfinders in a live setting.
- Identify and name the stars and constellations that make up the individual star lines in a live setting.
- Identify and explain the declination of each star and how they relate to significant places in broader Polynesia.
- Apply knowledge of the stories, both traditional and contemporary, that are attached to the stars, constellations and star lines used by wayfinding navigators in a live setting.

To meet these SLO’s students must demonstrate their ability to observe, name, measure, and test theories of non-instrument navigation.

The following SLO’s relate to the DY hallmark #3: The course demonstrates the strengths and limitations of the scientific method:

- Identify and explain significance of celestial bodies and atmospheric and oceanic features and conditions used in navigation and weather prediction in a live setting.
- Demonstrate a basic knowledge of non-instrument and instrument-aided navigation and weather in a live setting.

To meet these SLO’s students must demonstrate their ability to observe, measure, test and modify a theory of non-instrument navigation and then recognize strengths and weaknesses of the method by which theories are proved or disproved.

Students will meet these outcomes through various laboratory and outdoor activities, which
include: class discussion, lecture, oral quizzes, and observations of nature including sunsets, stars, planets, moon phases, clouds, wind, swells and sea conditions. To further assist the student in achieving these SLO’s, the instructor will provide feedback on all graded and non-graded assignments, tests and quizzes.

2. **Assessment strategies.** Explain assessment strategies you have used (or plan to use) to measure the degree to which students exit the course with the course-specific SLOs. If there are multiple sections of the course taught by different instructors, please discuss how assessment is (or will be) carried out across instructors.

A combination of tests and quizzes are used to determine grades for the students. In their oral exams students are asked to identify celestial bodies and weather phenomena, compare and contrast the differences between the methods, tools and practices of non-instrument wayfinding as practiced by the traditional navigators. In addition they are expected to know the Hawaiian and non-Hawaiian names, declinations and locations of the individual stars, constellations and star lines used by the navigators. Only one section of the course is offered.

3. **Assessment of assessment.** How have you used (or plan to use) the assessment findings to modify or improve this course? If there are multiple sections of the course taught by different instructors, please discuss how review of assessment results is (or will be) carried out across instructors.

Student assessment in various tests and quizzes help to determine how to modify and enhance the course to meet the diversification requirements of a Laboratory. Student evaluations of the course and instructor have also helped to improve delivery and assignments. Only one section of the course is offered.
DIVERSIFICATION BOARD DECISION:

☑ Approved
Re-Certification Due: Spring 2018

☐ Not approved
If not approved, reasons for disapproval:

Diversification Board Chair Signature: [Signature]
Date: 2/8/13
Hawaiian Studies 281 Ho’okele I: Hawaiian Astronomy and Weather
Honolulu CC, Fall 2012
W 6:00 - 9:00pm; METC Rm. 2

Kumu: Ka’iulani Murphy
Office: METC Office 4 (or on main campus 7-433L)
Office hours: TR 2:30-4:30 or by appointment
Contact: kmurphy@hawaii.edu or 842-9852

This course is a stargazing laboratory to accompany and reinforce the concepts introduced in HWST 281. HWST 281 provides an introduction to the concepts of non-instrument navigation with a focus on celestial bodies and how they are used as a basic wayfinding tool by Polynesian Voyaging Society trained navigators. HWST 281L fulfills a DY requirement for the AA degree. Labs will meet on Wednesday nights from 6-9pm.

STUDENT LEARNING OUTCOMES
Through our work in this course, you should be able to:

• Apply practical knowledge of traditional Hawaiian and Polynesian concepts of the cosmos, space, direction, and time and explain how these concepts compare with Western concepts.
• Identify and name the component parts of the star compass used by Polynesian Voyaging Society trained navigators in a live setting.
• Identify and name (both Hawaiian and non-Hawaiian names) the four star lines used by contemporary Hawaiian wayfinders in a live setting.
• Identify and name the stars and constellations that make up the individual star lines in a live setting.
• Identify and explain the declination of each star and how they relate to significant places in broader Polynesia.
• Apply knowledge of the stories, both traditional and contemporary, that are attached to the stars, constellations and star lines used by wayfinding navigators in a live setting.
• Identify and explain significance of celestial bodies and atmospheric and oceanic features and conditions used in navigation and weather prediction in a live setting.
• Demonstrate a basic knowledge of non-instrument and instrument-aided navigation and weather in a live setting.

COURSE REQUIREMENTS:
Oral Examinations and Quizzes:
There will be three oral exams throughout the semester, including the final exam. Exams will be based primarily on your command of the information and terminology introduced in this course. Consistent attendance is advised.
COURSE EXPECTATIONS:
Attendance and participation will be scored, please be on time and prepared for class. It is your responsibility to get notes if you miss a class. You may only take exams during your regularly scheduled class time. Check your hawaii.edu email accounts for any announcements pertaining to class. Cell phones should not be used in class (calls or texts) and ringers should be off.

GRADING:

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<tr>
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<th>Points</th>
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<tbody>
<tr>
<td>3 Exams (100 pts each)</td>
<td>300</td>
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<tr>
<td>Attendance/Participation</td>
<td>50</td>
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<tr>
<td>TOTAL</td>
<td>350</td>
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A = 315-325
B = 280-314
C = 245-279
D = 210-244
F = Below 210

COURSE SCHEDULE:

Week 1                  Course introduction, expectations; Intro to starline concept as a way to familiarize one’s self with the sky. Hawaiian Star Compass

Week 2 - 5              Hawaiian Star Compass; Celestial sphere and movement of celestial bodies; Starline identification: Ka Iwikuamo‘o and Manaiaakalani; Declinations and relationships to significant places in Polynesia

Week 6                  MIDTERM #1 – Material covered in preceding classes

Week 7 - 11             Starline identification: Manaiaakalani and Ka Lupe o Kawelo; Star stories; Meridian Pointers to the North and South Celestial Poles; Observation of cloud, wind and ocean conditions; Observation of sunsets and weather prediction

Week 12                 MIDTERM #2 – Material covered in preceding classes

Week 13 - 15            Starline identification: Ka Lupe o Kawelo and Ke Kā o Makali‘i; Meridian Pointers; Telling time with circumpolar stars; Non-instrument navigation theory and practice

Week 16                 Evaluations; Review for Final Exam

FINAL EXAM: Wednesday, December 12 6:00 pm

Learning Resources:
Rhoads, Samuel E. 1993. The Sky Tonight, A Guided Tour of the Stars Over Hawai‘i. Hong Kong: South China Printing Company
http://www.pvs.kcc.hawaii.edu
*Student ACCESS is committed to assuring equal access to Honolulu Community College facilities, programs, activities, and services by students with disabilities. Its goals are to provide reasonable accommodations to qualified students, to promote an informed and hospitable learning community, and to advocate for campus-wide ADA/Section 504 compliance. Please contact Wayne Sunahara at (808) 845-9272 for more information.