APPLICANT: Reg Wood
regwood@hcc.hawaii.edu

E-MAIL:

COURSE ALPHA and NUMBER: PSY 225

COURSE TITLE: Statistical Techniques

ESTIMATED NUMBER OF SECTIONS: Fall 1 Spring

Is this request for a: ☒ New Course ☐ Modified Course ☐ Existing Course

☐ Re-designation

Is this request for a: ☒ Certification ☐ Re-Certification. Date of last certification:

DIVERSIFICATION AREA DESIGNATION SOUGHT:

☐ DA (Arts) ☐ DP (Physical Sciences)
☐ DB (Biological Sciences) ☒ DS (Social Sciences)
☐ DH (Humanities) ☐ DY (Laboratory)
☐ DL (Literature and Language)

What percentage of the CONTENT of this course focuses on this diversification area? 90%

What percentage of CLASS MEETINGS focuses on this diversification area? 90%

1. Please explain how the course SLOs align with the diversification area's hallmarks.

Explanatory notes. The hallmarks (three for each designation) are posted on the HCC Intranet. In the text-box below, state the hallmarks for the diversification designation you are seeking and explain how the course SLOs meet each hallmark. For example, an SLO for Hallmark #3 for a DS designation would be to understand how descriptive and inferential statistics are used to summarize and evaluate results from psychological studies.

| DS.1 | uses the terminology of theories, structures, or processes in the social or psychological sciences; |
| Classroom examples and demonstrations, homework problem sets, and mid-term and final |
examination problems will, wherever possible, draw upon social science examples and data. Understand the role of probability and probability distributions in statistics. Perform hypothesis testing. Understand correlation and regression.

DS.2 involves concepts, models, practices, or issues of concern in the scientific study of these theories, structures, or processes; Understand the role of probability and probability distributions in statistics in order to evaluate social science research data.

DS.3 demonstrates inquiry that is guided by quantitative and/or qualitative methods employed in the scientific study of structures or processes of these sciences; Prepare visual presentations of data, including charts, graphs, and tables. Calculate confidence intervals and perform hypothesis testing. Test differences between Means, Variances, and Proportions. Utilize computer resources to perform data analysis.

2. Explain assessment strategies you plan to use (or have used, in the case of recertification) to measure the degree to which students exit the course with the expected SLOs. If there are multiple sections of the course, please discuss how assessment will be carried through all sections.

Graded homework assignments and mid-term and final examination questions will require students to summarize study data by calculating means, variances, and other descriptive statistics, calculate confidence intervals and perform hypothesis testing, and test differences between Means, Variances, and Proportions. Mid-term and final examination questions will also specifically assess the student’s understanding of probability and probability distributions, correlation, regression, and other statistical concepts.

Explanatory notes. The applicant should clearly connect assessment strategies to the course SLOs stated in Question #1. For example, an assessment strategy for an SLO would be to have a set of questions on an exam, which requires students to evaluate a hypothetical study in terms of research methodology, and descriptive statistics (calculate the mean, median, mode of a data set).

3. How have you used the assessment findings to modify or improve this course?

N/A

Explanatory notes. If this is a new course, enter “N/A” as an answer. Courses being re-certified should include a summary of how assessment strategies and measures (Question #2) were used to modify or improve the course.

Reminder: If this is an application for an EXISTING or MODIFIED course, please attach a copy of your course syllabus that includes information described in the instruction part of this form.
☑ Approved
Re-Certification Due: 5/20/16

☐ Not approved
If not approved, reasons for disapproval:

Diversification Chair Signature: [Signature]
Date: 1/31/11
PROPOSAL SUMMARY (Include reasons for adding course, and similar courses offered elsewhere, i.e. college, alpha, number, title):

Psychology 225 Statistical Techniques is a required course for the Academic Subject Certificate in Psychology at Honolulu Community College. Psychology 225 Statistical Techniques is offered at UH Manoa and is cross-listed with SOCS 225 Statistical Techniques.
**CURRICULUM ACTION PROPOSAL**

**ADD a New Course**

**INSTRUCTIONS:** Complete all applicable fields. Continue overflow text on p. 3 under “Additional information”.

<table>
<thead>
<tr>
<th>Course Alpha &amp; No.:</th>
<th>PSY 225</th>
<th>Effective Term:</th>
<th>Fall 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Type:</td>
<td>Regular</td>
<td>Experimental Course Expiration Date:</td>
<td></td>
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</tbody>
</table>

**Title:** Statistical Techniques  
**Banner Title (30 characters):** Statistical Techniques

- [X] YES  [ ] NO  
  **Does this course satisfy Career & Technical Education GEN ED Requirements (A.S. / A.A.S.)?**
  If “YES”, select GEN ED requirement  
  1b. Quantitative or Logical Reasoning (ASQL)

- [X] YES  [ ] NO  
  **Does this course satisfy Liberal Arts A.A. GEN ED Requirements &/or UHM GEN ED Core Articulation?**
  If “YES”, select GEN ED requirement below.

<table>
<thead>
<tr>
<th>FOUNDATION</th>
<th>DIVERSIFICATION</th>
<th>DIVERSIFICATION</th>
<th>OTHER</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>A.A. UHM</td>
<td>LBART A.A. UHM</td>
<td>LBART A.A. UHM</td>
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<tr>
<td>Written Communication (FW)</td>
<td>□ □</td>
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<tr>
<td>Symbolic (FS)</td>
<td>□ □</td>
<td>Humanities (DH)</td>
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<tr>
<td>Global/Multicultural Perspectives (FG)</td>
<td>□ □</td>
<td>Literature (DL)</td>
<td>□ □</td>
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<tr>
<td>Social Sciences (DS)</td>
<td>□ □</td>
<td>Physical Sciences Lab (DY)</td>
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**Class Length (weeks):** 16  
**Credits:** 3  
(For Variable Credits give range)

**Repeat & Credit Limit:** May be repeated ___ time(s) for a maximum of ___ credits

**Schedule Type:** LEC (Lecture)

**Weekly Student Contact Hrs:** 3 Hours Lecture per Week  
3 Hours Lab per Week  
3 Total Contact hrs per Week

**Details for special cases:**

**Grading Option:** Letter Grade Only

**Enrollment Maximum:** 30

**Special Approval:** Click To Select

**Major Restriction:**  

**Prerequisite:** MATH 99M C or better in PSY 100

**Prerequisite or Corequisite:**

**Corequisite:**

**Bracket Course with:**

**Recommended Prep:**

**Cross-Listed Courses:**

**Comment for online SOC:**
**Course Alpha & No.:** PSY 225  
**Effective Term:** Fall 2011

### COURSE

**Catalog Course Description:**
PSY 225 Statistical Techniques (3). Frequency distributions; graphic methods; central tendency; variability; correlation; reliability; tests of significance. PRE: MATH 15A, PSY 100.

*Additional Information to print with Course Description:*

### IMPACT ON COHORTS

<table>
<thead>
<tr>
<th>YES ☒ NO</th>
<th>Does this proposal affect Programs and/or Courses? (If “Yes” continue below.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES ☒ NO</td>
<td>Were the affected Programs/Departments consulted and notified?</td>
</tr>
</tbody>
</table>

- **This Proposal affects Program requirements:**
  - The number of Credits for these Programs: _____ *
  - Prerequisite for these Programs: _____ *
  - Requirement for these Programs: _____ *
  - Elective for these Programs: _____
  - Other

* Attach Program Modification Forms

- **This Proposal affects other Courses:**
  - Prerequisite for these Courses: _____ **
  - Prerequisite or Co-requisite for these Courses: _____ **
  - Co-requisite for these Courses: _____ **
  - Recommended Prep for these Courses: _____ **
  - Cross-list for these Courses: _____ **
  - Other **

** Attach Course Modification Forms

### Describe changes marked above:

- **YES ☒ NO** Does this proposal require additional resources? (Such as staff, equipment, facilities, etc.)
  - If yes, provide details and indicate whether or not resources are available.

### Additional Information:
### Course Outline

See Instructions for information on each item.

<table>
<thead>
<tr>
<th>Course Alpha &amp; No.: PSY 225</th>
<th>Semester Credit Hours: 3</th>
<th>Effective Term: Fall 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Title:</strong> Statistical Techniques</td>
<td><strong>Prerequisites:</strong> MATH 90M, C or better in PSY 100</td>
<td><strong>Co-requisites:</strong></td>
</tr>
<tr>
<td><strong>Prerequisites or Co-requisites:</strong></td>
<td></td>
<td><strong>Recommended Prep:</strong></td>
</tr>
<tr>
<td><strong>Major Restrictions:</strong></td>
<td></td>
<td><strong>Instructor Approval or other Approval:</strong></td>
</tr>
</tbody>
</table>

1. **Catalog Course Description:**
   PSY 225 Statistical Techniques (3). Frequency distributions; graphic methods; central tendency; variability; correlation; reliability; tests of significance. PRE: MATH 90M, PSY 100

2. **Student Learning Outcomes:**
   Upon successful completion of this course, a student will be able to:
   - Prepare visual presentations of data, including charts, graphs, and tables.
   - Understand the role of probability and probability distributions in statistics in order to evaluate social science research data.
   - Calculate confidence intervals and perform hypothesis testing.
   - Test differences between Means, Variances, and Proportions.
   - Understand correlation and regression.
   - Utilize computer resources to perform data analysis.

3. **Means by which the assessment of the SLOs will be accomplished:**
   Graded homework assignments.
   Mid-term and final examinations.

4. **Program Learning Outcomes addressed by this course:**
   Communicate effectively by means of listening, speaking, reading, and writing in varied situations, understanding basic quantitative information (mathematical skills), and writing in varied situations.
   Apply symbolic reasoning skills to solve problems, evaluate arguments and chains of reasoning, and interpret information.
   Demonstrate a comprehension and skill with research methods and scientific inquiry.

5. **Method(s) of Instruction:**
   Lecture and classroom demonstrations.

6. **Method(s) of Evaluation:**
   Graded homework assignments.
   Mid-term and final examinations.

7. **Course Content:**
   - The nature of probability and statistics.
   - Frequency distributions and graphs.
   - Describing data.
   - Discrete probability distributions.
   - The Normal Distribution.
   - Confidence intervals and sample size.
   - Hypothesis testing.
   - Testing for Differences between Means, Variances, and Proportions.
   - Correlation and Regression.
   - Analysis of Variance.

8. **Possible Texts:**

9. **Reference and/or Auxiliary Materials (if any):**
10. Resource Requirements (if applicable):

11. Relationship to other courses in the program (if applicable):

12. General Education or other requirement(s) satisfied:

   We are seeking DS designation at HCC.

13. Articulation (if applicable):

   Request articulation at UH Manoa and UHWO.

14. Additional information of importance: