University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course

1. Type of Action

[ ] A. Addition □ Regular or [ ] Experimental or □ Other (click and type to specify)
□ B. Deletion
□ C. Modification: □ in credits □ in title □ in number or alpha
□ in prerequisites or co-requisites □ Other (click to specify)

2. New Alpha, Number and Title
ICS 197 Web Applications

3. Credits
3 credits

4. Old Alpha, Number and Title

5. Credits

6. New Catalog Description
Develop skills to leverage the power of the Internet and mobile devices to deliver applications that can be executed on Computers and other Desktop and Mobile platforms. Use HTML, CSS, javascript and jquery to build rich, robust web applications.

7. Select box and type specific information in text box.
Prerequisites □ Corequisites or Recommended Preparation Grade of C or better in ICS 107 or consent of instructor.

8. Student Contact Hours Per Week
Lecture 3
Lab Other (click to specify)

9. Proposed Date of First Offering
Semester Spring Year 2011

10. This course □ is proposed for the * Program. □ can fulfill * If Other, specify

11. This course Makes No Difference in the number of credits required for the program/core.

12. Equivalent or similar courses offered in the UH System:

<table>
<thead>
<tr>
<th>Campus</th>
<th>Alpha, Number, Title</th>
<th>Campus</th>
<th>Alpha, Number, Title</th>
</tr>
</thead>
</table>
| HonoluluCC | ICS 197 Web Applications | * | *
| * | * | * |
| * | * | * |
| * | * | * |

13. This course is (check one and click in appropriate textbox and provide details):
[ ] Already articulated with

Provide details of existing or desired articulation (date, college(s), purposes, pre-major, etc.) in this space:

[ ] Appropriate for Articulation with

Provide details of existing or desired articulation (date, colleges(s), purposes, pre-major or major, etc.) in this space:

[ ] Not yet appropriate for Articulation.

14. Reason for Initiating, Modifying or Deleting Courses or Other Pertinent Comment:
The Business Department is preparing technology courses to support the WCC Strategic Plan and the one-year scheduling plan. The web applications course will support the following objectives:

4.3 Expand the curriculum that prepares students for nursing, social work, information technology, and other critical workforce shortage areas by adding at least one new course per year.

4.5 Promote the knowledge, skills, and opportunities that support current and emerging STEM fields and careers by increasing credit and noncredit STEM course enrollments by 3% per year.

4.6 Increase the number of degrees awarded, and/or transfers to UH baccalaureate programs that lead to occupations where there is a demonstrated state shortage of qualified workers and where the average wage is at or above the U.S. average ($38,651 YR 2006) by 3% per year.

4.8 Increase the number of degrees and certificates awarded in Science, Technology, Engineering, and Math (STEM) fields. (includes both credit and noncredit) by 3% per year.

Requested by: [Signature]
Department Chairperson

Approved by: [Signature]
Faculty Senate Chairperson

CCCM #6100 (Amended for WCC use October 2002)
Levels of Review of Course Proposal at Windward Community College

Course Alpha, Number, and Title:

<table>
<thead>
<tr>
<th>Signatures</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2/19/2010</td>
</tr>
<tr>
<td></td>
<td>2/18/2010</td>
</tr>
</tbody>
</table>

1. Department Area (more than one departmental instructor's signature required)

2. Department

   Department Chairperson

   Was this course discussed in a department meeting? Yes □ No □

   2/18/2010

3. Division

   Paul R. [Signature]

   03/02/10

4. Curriculum Committee Review

   Approved □

   Disapproved □

   Reason:

   [Signature]

   Curriculum Committee Chairperson

   2/1/2010

CCCM #6100 (Amended for WCC use October 2002)
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
New Course Proposal Form – Go to next page for Course Modification)

WCC Form for New Course Proposals
(This sheet was originally pink.)

1. How is this course related to the education needs and goals of the College/Department/Community as reflected in the EDP/ADP?

   The Business Department is preparing technology courses to support the WCC Strategic Plan and the one-year scheduling plan. The web applications course will support the following objectives:
   4.3 Expand the curriculum that prepares students for nursing, social work, information technology, and other critical workforce shortage areas by adding at least one new course per year.
   4.5 Promote the knowledge, skills, and opportunities that support current and emerging STEM fields and careers by increasing credit and noncredit STEM course enrollments by 3% per year.
   4.6. Increase the number of degrees awarded, and/or transfers to UH baccalaureate programs that lead to occupations where there is a demonstrated state shortage of qualified workers and where the average wage is at or above the U.S. average ($38,651 YR 2006) by 3% per year.
   4.8. Increase the number of degrees and certificates awarded in Science, Technology, Engineering, and Math (STEM) fields. (includes both credit and noncredit) by 3% per year.

2. Provide details of any additional staff, equipment, facilities, library/media material, faculty preparation and other financial support that would be required to implement this course. (Include an estimate of the actual cost of supplies and equipment.) What has been done to provide for these additional costs for the proposed date of offering? Who will teach the course?

   none

3. Is a similar course taught elsewhere in the UH system? * If yes, provide details of how this course differs from existing similar courses.

   Yes, Sam Rhoades at HCC has offered this course at least twice. LCC is also developing a similar course.

4. Is this course experimental and/or unique to Windward Community College? Yes If yes, provide rationale and details of its impact on the College Curriculum.

   The course will be offered as an experimental course first to see if the course will have a following at WCC. At this point a decision will be made to either give the course an established numbering or not.

5. Is a similar course taught in the upper division level by a 4-year UH college? No If yes, explain why this course is appropriate at the lower division or how it differs from its upper division counterpart.

6. Please attach a complete course outline. Your course outline should address all the items listed in the Guidelines for Course Outlines.

7. If this course is numbered 100 or above or appropriate for transfer to a 4-year college, complete and attach WCC Form for Transfer Courses (blue). See criteria for transfer courses.

CCCM #6100 (Amended for WCC use September 2002)
Original dated WCC 9/91
Windward Community College Mission Statement

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

CATALOG DESCRIPTION

Develop skills to leverage the power of the Internet and mobile devices to deliver applications that can be executed on Computers and other Desktop and Mobile platforms. Use HTML, CSS, javascript and jquery to build rich, robust web applications.

PREREQUISITES

ICS 107 (C grade or better)

STUDENT LEARNING OUTCOMES

The student learning outcomes for the course are:

1. Understand the difference between a web application and native applications.
2. Design, using agile development techniques, a web application.
3. Use javascript and jquery to build dynamic web applications.
4. Use CSS and HTML5 to create simple User Interfaces.
5. Build client-side session storage for persistent data.

COURSE CONTENT

Concepts

1. Understand the difference between a web application and native applications.
   a. Web Applications
      1) Positives
      2) Negatives
   b. Native Applications
      1) Positive
      2) Negatives
2. Design, using agile development techniques, a web application.
   a. Determine the purpose and requirements for the application.
b. Formulate a plan to build and distribute the application using agile methodology.

3. Use javascript and jQuery to build dynamic web applications.
   a. Dynamic web application fundamentals.
   b. Javascript concepts and programming for basic dynamic pages.
   c. Jquery library for advanced features such as animation, sliding panels, and thumbwheels.

4. Use CSS and HTML5 to create simple User Interfaces.
   a. New features of HTML5 and CSS3.
   b. Design and create the user-interface.
   c. Design and create a logo.
   d. Link dynamic elements of the user-interface such as buttons to javascript and jQuery.

5. Build client-side session storage for persistent data.
   a. Use localStorage to store data between sessions.
   b. Use localSession to store data during each session

COURSE TASKS

Students must independently complete reading assignments, class exercises, homework assignments and programming projects.

ASSESSMENT TASKS AND GRADING

The requirements for this course consist of eight projects, three exams, and assigned readings from the required texts. Exams will contain a written and hands-on section. A student must average at least 60% on each exam to pass the course.

POINTS

The assignment of points may vary slightly each semester but the following is typical:

<table>
<thead>
<tr>
<th>Projects</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>25 points</td>
</tr>
<tr>
<td>3 Exams</td>
<td>50 points</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>350 points</strong></td>
</tr>
</tbody>
</table>

The letter grade for the course will be given as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 - 100%</td>
<td>200 points</td>
</tr>
<tr>
<td>B</td>
<td>80 - 89%</td>
<td>150 points</td>
</tr>
<tr>
<td>C</td>
<td>70 - 79%</td>
<td>100 points</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69%</td>
<td>50 points</td>
</tr>
<tr>
<td>F</td>
<td>Below 60%</td>
<td>0 points</td>
</tr>
</tbody>
</table>

LEARNING RESOURCES AND MATERIALS

Text: "Building iPhone Apps with HTML, CSS, and JavaScript" by Jonathan Stark. This non-generic text was chosen as there are few texts to date that cover web applications and this is the best.

Students may want to utilize their own iPhone in class but the iPhone is not a requirement for the course. Students have the option of testing their applications for compatibility by using a free iPhone simulator provided by Apple Computers.
ASSESSMENT TASKS AND GRADING

The requirements for this course consist of eight programming projects, three exams, and assigned readings from the required texts. Exams will contain a written and hands-on section. A student must achieve at least 60% on each exam to pass the course.

POINTS

The assignment of points may vary slightly each semester but the following is typical:

- 8 Projects: 25 points = 200 points
- 3 Exams: 50 points = 150 points

TOTAL: 350 points

The letter grade for the course will be given as follows:

- A: 90 - 100% of possible points
- B: 80 - 89% of possible points
- C: 70 - 79% of possible points
- D: 60 - 69% of possible points
- F: Below 60% of possible points

LEARNING RESOURCES AND MATERIALS

Text: "Java Software Structures" by John Lewis and John Chase.

Supplies: Storage Media – flash drive.