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

1. Type of Action
   - A. Addition
   - B. Deletion
   - C. Modification

2. New Alpha, Number and Title
   Economics 297-Introduction to Environmental Economics

3. Credits
   3 credits

4. Old Alpha, Number and Title

5. Credits
   *

6. New Catalog Description
   Environmental Economics uses the basic tools of economic analysis to focus on issues pertaining to the natural environment and its resources. The central theme is that there are competing demands for our limited natural resources necessitating that difficult choices be made regarding how those resources are used. Topics related to global warming, Hawaii's environment, and other current environmental policy issues will be discussed.

7. Select box and type specific information in text box.
   - Prerequisites
   - Corequisites or
   - Recommended Preparation

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

9. Proposed Date of First Offering
   - Semester: Spring
   - Year: 2011

10. This course is proposed for the Liberal Arts Program. Program. can fulfill Social Sciences. 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>
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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:
   This course is proposed to enhance sustainability studies at Windward Community College and as a core course in a future Sustainability Studies certificate at the college. This course can provide a bridge between the Natural Sciences and the Social Sciences in this important area. The environment and the economy is a very topical area right now as the impact of pollution is being seen (i.e. Global Warming). This course will discuss various solutions to pollution in terms of economic analysis and the pros and cons of these solutions upon the environment and the economy.

Requested by: [Signature]
Approved by: [Signature]
Dean of Instruction: [Signature]
Chancellor: [Signature]

Date: 12/10/10
Date: 2/10/10
Date: 1/10/10
Date: 2/8/10

CCCM #6100 (Amended for WCC, Oct 2008)
Levels of Review of Course Proposal at Windward Community College

Course Alpha, Number, and Title:

<table>
<thead>
<tr>
<th>Signatures</th>
<th>Dates</th>
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<td>11-25-09</td>
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<td>11-25-09</td>
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<td>11-25-09</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

   11/25/09

3. Division

   11/30/09

4. Curriculum Committee Review

   Approved □

   Disapproved □

   Reason:

   ________________________________
   Curriculum Committee Chairperson

CCCM #6100 (Amended for WCC use October 2002)
1. How is this course related to the education needs and goals of the College/Department/Community as reflected in the EDP/ADP?

Environmental Economics fulfills the Windward Community College Action Outcome 4.1 through the analysis of such high demand and emerging fields as alternative energy, ocean and marine science and earth science through the lens of an economist. WCC Action Outcome 4.1 states the following:
Increase by 3% per year 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 US average ($38,651 YR 2006).

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?

There would be no additional costs to the implementation of this course. Social Science Faculty will teach this course.

3. Is a similar course taught elsewhere in the UH system? No If yes, provide details of how this course differs from existing similar courses.

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

An introductory course in Environmental Economics would look at environmental issues through the lens of an economist. Such a course would benefit all students at Windward Community College who are either business majors or who are taking Environmental Science courses. Environmental Economics would be a good elective course for the Academic Subject Certificate in Bio-Resources and Technology. ECON 297 will offered in addition to current offerings of Economics courses at Windward Community College. Thus a lecturer may be needed to teach sections of ECON 130 or ECON 131 that would be beyond the workload of the current full-time Economics Professor.

5. Is a similar course taught in the upper division level by a 4-year UH college? Yes If yes, explain why this course is appropriate at the lower division or how it differs from its upper division counterpart.

UH Manoa-ECON 350: Sustainable Development
UH Manoa-ECON 358: Environmental Economics

As an introductory course, ECON 297 will not have the high level of economic analysis that an upper level economics course would require. To be more specific, this course will use simple supply and demand graphical analysis and not calculus, econometrics or other statistical analysis that upper level economics often would use.

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.
1. What change is proposed in the course? Provide specific information comparing both the “new” and “old” course.

2. What is the rationale for the change?

3. Is the change substantive enough to require a change in course identification? If so, explain thoroughly.

4. Is the course articulated with any 4-year program? *
   If yes, give details of the agreement(s) and explain any impact the proposed modifications may have on articulation.

5. Provide details of any additional staff, equipment, facilities, library/media material, faculty preparation and other financial considerations that would be required to implement this course modification. What has been done to provide for these additional costs? Who will teach the course? Is additional preparation needed?

6. Will this course modification result in any alterations in the number of hours required to attain a certificate or degree? * If yes, provide details and justification for these alterations.

7. If the course is renumbered to 100 or above, does it meet the criteria for transfer level courses? (Go to next page for transfer course criteria.) *
Course Alpha and Number

Submitted by

Date November 24, 2009

1. List the counterpart to this course on any 4-year UH campus. Describe the relationship between the course and related baccalaureate program area.

2. Is this course taught or accepted by major accredited colleges or universities? Give one or two examples.

3. Please attach a complete course outline if you have not done so already. Your course outline should address all the items listed in the Guidelines for Course Outlines.
University of Hawaii Community Colleges  
Proposal to Initiate, Modify or Delete a Course  
Articulation with 4-year UH Campus Form  

**COURSE ARTICULATION FORM (GENERAL EDUCATION CORE)**

**ORIGINATING CAMPUS:** Windward Community College  
**DATE SUBMITTED:** November 24, 2009

**COURSE ALPHA & NUMBER:**  
**SEMESTER CREDITS:** *

**COURSE TITLE:**

**DATE OF OUTLINE:** November 24, 2009  
**Year:** *

(** Representative outline, no multiple syllabi, please.)

1. Articulation committee to review this course:

   Standing Committees  
   - Written Communication  
   - Mathematical & Logical Thinking  
   - World Civilizations  
   - Languages  
   - Arts & Humanities  
   - Natural Science  
   - Social Science

2. The information in this item is required by the reviewing committee so that it has a starting point for reviewing the course. It is the responsibility of the submitting campus to do the necessary research to provide this information.

   In the opinion of the originating campus, this course is equivalent to the following and/or meets the criteria for the indicated core categories. Every core category space, except your own campus, must be filled in (can include ‘none’). An equivalent course, if known, may be helpful to committee members but is not required.

<table>
<thead>
<tr>
<th>Receiving Campus</th>
<th>Equivalent Course (Alpha and Number)</th>
<th>Core Category</th>
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<tbody>
<tr>
<td>UH Hilo</td>
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<td>UH Manoa</td>
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<td>UH West Oahu</td>
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<td>Hawaii CC</td>
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<td>Honolulu CC</td>
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<td>Kapiolani CC</td>
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<td>Kauai CC</td>
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<td>Leeward CC</td>
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<td>Maui CC</td>
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<td>Windward CC</td>
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</table>

3. If submitted electronically, I understand that this outline will be posted to a publicly accessible web site to enable open access for reviewing committees and campuses. The outline will be taken off the site upon completion of the review.

   ________________
   Typed Name or Signature

Note: If possible submit coversheet and course outline electronically as e-mail attachments (preferably in ‘pdf’ format). If submitting in printed form, 20 copies of coversheet and course outline are required for distribution for appropriate review.

**Note: UCA Clearinghouse**  
John Muth, Office of the Chancellor for Community Colleges, is acting as staff to the University Council on Articulation and is responsible for tracking all courses submitted for articulation.

Revised 1/29/2001
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Articulation with 4-year UH Campus Form

COMMITTEE LEVEL:

1. When the committee has completed its review of a course, the "ARTICULATION RECOMMENDATION FORM" (revised 1/18/2001) should be filled in and attached to the outline. The committee chair should also sign the form.

2. If the committee choice is "accept," indicate receiving campus core area. If the committee choice is "not recommended," a reason must be provided. Outlines with missing or incomplete recommendation forms will be returned to the committee.

   If a committee requires updated or more complete outlines, such requests should be made through the UCA Clearinghouse so that the new outline material can be tracked and placed in the file. If a committee requires more general supporting information, this should be requested through the course’s supporting campus representative on the committee.

3. All committee recommendations should be sent to the UCA Clearinghouse for recordation and dissemination to the campuses. DO NOT SEND THE RECOMMENDATIONS DIRECTLY TO ANY CAMPUS.

RECEIVING CAMPUS:

1. Courses will be sent to each campus for consideration after they come out of committee. Each campus has its own internal process for the approval of courses for its general education core.

2. In all cases where a campus accepts a course into its general education core, it must also indicate which area or part of its core the course fits.

3. In all cases where a campus does not accept a course for articulation, it must supply a reason (even it is "we agree with the committee").

4. When campus actions are completed, these actions should be conveyed back to the UCA Clearinghouse for recordation and publication

5. The Community College Policy on Acceptance of UCA Reviewed Courses is a follows:

   (a) All Community Colleges agree to accept positive UCA committee recommendations for core, including core categories assigned by the committee.

   (b) All Community Colleges agree to accept the UCA committee judgment of not-Recommended (nR) without further review.

   (c) This policy is retroactive to the time the current articulation effort started.

   (d) The Community Colleges reserve the right to review and modify core category assignments as necessary to insure appropriate categorization and to realign such assignments if changes are made to the campus core structure. Such modifications shall not interfere with the timely publication of the student transfer handbook.

Note: UCA Clearinghouse
John Muth, Office of the Chancellor for Community Colleges, is acting as staff to the University Council on Articulation and is responsible for tracking all courses submitted for articulation.

Revised 1/29/2001
Proposal to Initiate, Modify or Delete a Course Articulation with 4-year UH Campus Form

ARTICULATED COURSE
CHANGE IN ALPHA/NUMBER/TITLE

Old Course

Course Alpha & Number:
Title:

Revised Course

Course Alpha & Number:
Title:

Semester and Year when the revised course was/will be first offered:

Reason for the change in Alpha/Number/and/or Title:

Note: A current outline of the course must be submitted with this form. Undated outlines are not acceptable.

I certify that this course has had its alpha, number, and/or title changed, but that it is substantially the same course as the course that was reviewed and approved for articulation.

Campus: Windward Community College

Certifying Authority (Typed Name or Signature and Title)

Date:

SUBMIT TO: UCA Clearinghouse, Attn: John Muth
Chancellor's Office for CC, 2327 Dole Street
Revised 1/19/01
TO: Curriculum Committee
Windward Community College

FROM: Denise Eby Konan
Professor of Economics

SUBJECT: ECON 297

DATE: November 29, 2009

I am writing to strongly endorse the new course, ECON 297: Introduction to Environmental Economics, by Instructor Paul Briggs. I am personally delighted that Windward Community College students will have an opportunity to take an expanded economics curriculum. The science of economics provides students with outstanding tools for decision-making and equips them for a variety of careers and continuing educational opportunities.

Environmental economics is a fundamental field within the profession. This ECON 297 course will also provide foundational instruction on some of the most consequential issues facing Hawai‘i and our planet. Scarcity of natural resources, human impacts on global climate change, adaptation to a changing environment, and analysis of appropriate economic and environmental policies are among the topics that will be covered.

As I review the proposed course, I am very impressed by the selection of text, assignments, and student learning outcomes. I encourage the Committee to approve this course and recommend that it become a standard part of the Windward Community College Curriculum.
Economics 297  Introduction to Environmental Economics
3 credit hours
Course will be offered online

INSTRUCTOR: Paul Briggs
OFFICE: Naauao 118
OFFICE HOURS:
TELEPHONE: 236-9218
EFFECTIVE DATE: Spring 2011

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

Environmental Economics uses the basic tools of economic analysis to focus on issues pertain to the natural environment and its resources. The central theme is that there are competing demands for our limited natural resources necessitating that difficult choices be made regarding how those resources are used. Topics related to global warming, Hawaii’s environment, and other current environmental policy issues will be discussed as time permits.

Activities Required at Scheduled Times Other Than Class Times

All assignments will be completed online with occasional field trips included.

STUDENT LEARNING OUTCOMES

The student learning outcomes for the course are:

1. Students will examine the relationship between the economy and the environment.

2. Students will recognize and explain how prices allocate resources in a free market economy and relate that allocation mechanism to the environment.

3. Students will identify and discuss various approaches of policies and their effect on the environment and the economy.
4. Students in a group will meet task demands and role assignments, and collaborate with other team members to successfully accomplish collective goals.

5. Students will write informational, analytical and technical documents, which are organized, precise and relevant.

COURSE TASKS

• Take 10-15 end-of-chapter quizzes or problem sets.
• Participate in online discussions.
• Participate in an individual multimedia project based on an environmental problem for a locale, region or an industry.
• Participate on a team of 3 to 5 students to evaluate an environmental problem for a locale, region or an industry.

ASSESSMENT TASKS AND GRADING

• Online Quizzes 40%
• Online Discussions 20%
• Individual Project 20%
• Group Project 20%

LEARNING RESOURCES

Handout compiled by the instructor.
**COURSE SCHEDULE**

This course schedule reflects the order of assignments for the course. The first part of the course will consist of textbook reading, quizzes and discussions that will serve as preparation for the individual and group projects. The second part of the course will consist of team selection and team completion of the group project as well as the individual project.

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<thead>
<tr>
<th>Date</th>
<th>Subject</th>
<th>Textbook Readings</th>
<th>Discussion Board</th>
<th>Online Quizzes</th>
<th>Individual Project</th>
<th>Group Project</th>
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</thead>
<tbody>
<tr>
<td>January 17</td>
<td>What is Environmental Economics?</td>
<td>Chapter 1</td>
<td>Introductions</td>
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<td>January 24</td>
<td>Introduction to Economics</td>
<td>Chapter 2</td>
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<td>January 31</td>
<td>Costs, Benefits, Supply and Demand</td>
<td>Chapter 3</td>
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<td>February 7</td>
<td>Economic Efficiency and Markets</td>
<td>Chapter 4</td>
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<td>Economics of Environmental Quality</td>
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<td>Frameworks of Analysis</td>
<td>Chapter 6</td>
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<td>Benefit-Cost Analysis:Benefits</td>
<td>Chapter 7</td>
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<td>Benefit-Cost Analysis:Costs</td>
<td>Chapter 8</td>
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<td>March 14</td>
<td>Team Selection</td>
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<td>March 21(Spring Break)</td>
<td>Team Activity</td>
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<td>March 28</td>
<td>Individual Research Projects</td>
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<td>April 4</td>
<td>Individual Research Projects</td>
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<td>April 11</td>
<td>Team Research Update</td>
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<td>Individual Research Presentations</td>
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<td>April 25</td>
<td>Online Quiz on Individual Research Presentations</td>
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<td>May 2</td>
<td>Team Research Update</td>
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<td>May 9</td>
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http://www.hawaii.edu/ccc/Docs/MasterCourseList.pdf

Existing or Archived Alpha #’s