

**University of Hawaii Maui College
Curriculum Action Request (CAR) Form
Course**

<i>For Banner use:</i>	
___	SCACRSE
___	SCAPREQ
___	CAPPs
___	WebCT-Detl
___	CoReq-Detl
___	Equiv-Detl
___	Old Inactivated
___	Crosslist done
___	Another prereq

1. Author(s): Refugio Gonzalez and Debasis Bhattacharya

2. Department: Business/Hospitality

3. Date submitted to Curriculum Committee: 10/14/2011

4. Type of action:

Addition:

- regular
 other; specify:

Modification:

- alpha/number pre-requisite
 title co-requisite
 credits recommended prep
 description other; specify:

5. Existing course:

Alpha: Number: Title: Credits: credits

6. Proposed new/modified course:

Alpha: BUS Number:310 Title: Statistical Analysis for Business Decisions Credits: 3

7. Reason for this curriculum action:

Course offering to fill gap in business curriculum that focuses on decision making using statistical analysis and data. This course requires background in MATH Statistics and Calculus and intermediate accounting principles.

8. New course description (*or year of catalog and page number of current course description, if unchanged*):

Problem recognition and formulation; stress on cross-disciplinary complex problem solving and communication; computer intensive. Coverage of descriptive statistics, probability and hypothesis testing with emphasis on quality, productivity, and regression analysis.

9. Pre-requisite(s) – *see Prerequisite Style Sheet for samples:*MATH 115, and MATH 203 or 205; ACC 300, all with a grade of C or better; or consent. no yes

10. Co-requisite(s): none

11. Recommended preparation: none

12. Cross listed: no yes; cite course alpha & number:

13. Student contact hours per week:

3 hr. lecture _____ hr. lab _____ hr. lecture/lab _____ hr. other; explain:

14. Grading: Standard (Letter, Cr/NCr, Audit)

Explain, if not Standard grading:

15. Repeatable for credit: no yes; maximum is _____ credit or unlimited.

(Most courses are not repeatable for additional credit; exceptions are courses such as internships and co-op courses.)

16. Special fees required: no yes; explain:

17. Proposed term of first offering: Spring semester of 2013 year.

18. List catalog used and then degrees, certificates, prerequisites, and catalog sections **and their page numbers** affected by this proposal: New Course at UHMC. Update needed in catalog 2011-2012 on page 23 ABIT requirements, page 24 ABIT program map, and page 101 course descriptions, .

19. Maximum enrollment: 30 Rationale, if less than 35: Current room capacity in KLMA 107

20. Special resources (personnel, supplies, etc.) required: no yes; explain:

21. Course is restricted to particular room type: no yes; explain:

22. Special scheduling considerations: no yes; explain:

23. Method(s) of delivery appropriate for this course: (check all that apply)

Traditional HITS/Interactive TV Cable TV Online Hybrid

Other, explain:

24. Mark all college-wide general education SLOs this course supports.

Std 1 - Written Communications

Std 2 - Quantitative Reasoning

Std 3 - Information Retrieval and Technology

Std 4 - Oral Communication

Std 5 - Critical Reasoning

Std 6 - Creativity

Other General Education SLOs, such as Ethics, Scientific Inquiry, or Service Learning.

Explain:

25. List all program SLOs this course supports? (Explain, if necessary)

Program SLO 1: 2.3 Demonstrate knowledge of complex problem solving Explain:

Program SLO 2: 2.2 Utilize statistical techniques to conduct hypothesis testing and regression analysis

Explain:

Program SLO 3: 3.1 Apply critical thinking skills to evaluate information, solve problems, and make decisions Explain:

Program SLO 4: 3.3 Apply quantitative reasoning to enhance independent or group decision-making skills Explain:

Program SLO 5: Explain:

26. Course fulfills the following general education elective (GE) for CTE (Career Technical Education) AS/AAS degrees (GE):

English (EN)/Communication (CM) Quantitative Reasoning (QR)

- Humanities (HU) Natural Science (NS) Social Science (SS)
- Other:
- Course is a requirement for the AAS program(s) AS/AAS degree or certificate
- Course is a program elective for the _____ program(s) AS/AAS degree or certificate

27. Course fulfills the following general education elective (GE) for the ABIT BAS degree:
- English (EN)/Communication (CM) Quantitative Reasoning (QR)
 - Humanities (HU) Natural Science (NS) Social Science (SS)
 - Other:
- Course is a requirement for the ABIT BAS degree
- Course is a program elective for the ABIT BAS degree

28. Course fulfills a requirement for a proposed BAS _____ degree:
- Pre-requisite course Core
 - Capstone Course (CC) Other:
- Course is a program elective for a proposed BAS _____ degree
- Course fulfills the following general education elective (GE) for the proposed BAS _____ degree:
- English (EN)/Communication (CM) Quantitative Reasoning (QR)
 - Humanities (HU) Natural Science (NS) Social Science (SS)
 - Other:
- Course is applicable to the following additional BAS degrees:

29. Course satisfies the following category for the AA degree*:
- Category I: Foundations/Skills: Foundations I
 - Written Communication in English (FW)
 - Global and Multicultural Perspectives (FG)
 - Group A (before 1500 CE)
 - Group B (since 1500 CE)
 - Group C (pre-history to present)
 - Symbolic Reasoning (FS)
 - Category I: Foundations/Skills: Foundations II
 - Numeracy (FN)
 - Oral Communication in English (FO)
 - Computer/Information Processing and Retrieval (FI)
 - Category II: Breadth of Understanding and Experience
 - Human Understanding
 - The Individual (IN)
 - The Community (CO)
 - The Community – Global Perspective (CG)
 - Human Expression (HE)
 - Environmental Awareness (EA)
 - Environmental Awareness – Global Perspective (EG)
 - Asia/Pacific Perspective (AP)
 - Category III Focus/Specialization/Area of Interest
 - Interest Area Discipline/Alpha:
 - Elective (LE)

Other Graduation Requirements

- Writing Intensive (is appropriate for WI)
 Environmental Awareness Lab/course with lab (EL)
 Hawaii Emphasis (HI)

* Submit the appropriate form(s) to have the course placed in the requested category (ies). Submit a course outline, CAR, and appropriate forms to both the Curriculum Committee and the Foundations Board, if the course satisfies Category I: Foundations/Skills: Foundations I or II.

30. Course increases decreases makes no change to number of credits required for program(s) affected by this action. Explain, if necessary:

31. Course is taught at another UH campus (*see Sections 5 and 6 above*):

- no Explain why this course is proposed for UHMC:
 yes Specify college(s), course, alpha, and number where same or similar course is taught: BUS 310 offered at UH Manoa.

32. Course is:

- Not appropriate for articulation.
 Appropriate* for articulation as a general education course at:
 UHCC UH Manoa UH Hilo UHWO
 Previously articulated* as a general education course at:
 UHCC UH Manoa UH Hilo UHWO


*Note: Submit Course Articulation Form if course is already articulated, or is appropriate for articulation, as a general education (100-, 200-level) course.

- Standardized and/or appropriate for articulation by PCC or other UH system agreement at:
 UHCC UH Manoa UH Hilo UHWO Explain:
 Appropriate for articulation or has previously been articulated to a specific department or institution:
 UHCC UH Manoa UH Hilo UHWO Outside UH system Explain:

33. Additional Information (*add additional pages if needed*): Students learn techniques of complex problem solving and communication. Course is equivalent to BUS 310 offered at UH Manoa.

University of Hawaii Maui College
Curriculum Action Request (CAR) Signature Page



Proposed by: Author or Program Coordinator Date 10/14/11


Checked by: Academic Subject Area Representative to Curriculum Committee Date 10/14/2011


Requested by Department: Department Chair Date 10/14/11


Recommended by: Curriculum Chair Date 1-30-12


Approved by Academic Senate: Academic Senate Chair Date 2-1-12


Endorsed by: Chief Academic Officer Date 2-4-12


Approved by: Chancellor Date 2/8/12

University of Hawaii Maui College
Course Outline

1. Alpha BUS Number 310
- Course Title Statistical Analysis for Business Decisions
- Credits 3
- Department Business/Hospitality Author Refugio Gonzalez and Debasis Bhattacharya
- Date of Outline 10/14/2011 Effective Date Spring 2013 5-year Review Date Fall 2017
2. Course Description: Problem recognition and formulation; stress on cross-disciplinary complex problem solving and communication; computer intensive. Coverage of descriptive statistics, probability and hypothesis testing with emphasis on quality, productivity, and regression analysis.
- Cross-list none
- Contact Hours/Type 3 hr. lecture
3. Pre-requisites MATH 115, and MATH 203 or 205; ACC 300, all with a grade of C or better
- Pre-requisite may be waived by consent yes no
- Co-requisites none
- Recommended Preparation none
4. Function/Designation AA Category Additional Category
- AS Program Category List Additional Programs and Category:
- AAS Program PR - Program Requirement List Additional Programs and Category:
- BAS ABIT BC - ABIT Business Core List Additional Programs and Category:
- Developmental/Remedial Other/Additional: Explain:

Chancellor

2/8/12

Approval Date

See Curriculum Action Request (CAR) form for the college-wide general education student learning outcomes (SLOs) and/or the program learning outcomes (PLOs) this course supports.

This course outline is standardized and/or the result of a community college or system-wide agreement.
Responsible committee:

5. Student Learning Outcomes (SLOs): List one to four inclusive SLOs.

For assessment, link these to #7 Recommended Course Content, and #9 Recommended Course Requirements & Evaluation. Use roman numerals (I, II, III) to designate SLOs

On successful completion of this course, students will be able to:

- I. Apply critical thinking skills to evaluate information, solve problems, and make decisions
- II. Apply quantitative reasoning to enhance independent or group decision-making skills
- III. Demonstrate knowledge of statistical business decisions
- IV. Utilize statistical analysis tools to evaluate probability, hypothesis testing, regression analysis

6. Competencies/Concepts/Issues/Skills

For assessment, link these to #7 Recommended Course Content, and #9 Recommended Course Requirements & Evaluation. Use lower case letters (a., b...zz.) to designate competencies/skills/issues

On successful completion of this course, students will be able to:

- a. Recognize and diagnose business problems
- b. Review descriptive statistical analyses
- c. Identify and explain variations in data
- d. Formulate and test hypotheses
- e. Determine reliability and validity of research models
- f. Demonstrate concepts in probability
- g. Identify conditional probability
- h. Explain random variables
- i. Demonstrate association between random variables
- j. Discuss the role of inference in business decisions
- k. Demonstrate techniques in samples and surveys
- l. Explain sampling variation and quality
- m. Analyze confidence intervals and statistical tests
- p. Examine business problems with regression analysis

7. Suggested Course Content and Approximate Time Spent on Each Topic

Linked to #5. Student Learning Outcomes and # 6 Competencies/Skills/Issues

1. Core concepts in data tables - 3 weeks (SLO IV; Competency a to f)
2. Details of probability and random variables and inference - 10 weeks (SLO I, II and III; Competencies f to j)
3. Samples and surveys, statistical tests and regression analysis - 3 weeks (SLO IV; Competency k to p)

8. Text and Materials, Reference Materials, and Auxiliary Materials

Appropriate text(s) and materials will be chosen at the time the course is offered from those currently available in the field. Examples include: Statistics for Business: Decision Making and Analysis, Stine & Foster, or latest edition

Appropriate reference materials will be chosen at the time the course is offered from those currently available in the field. Examples include: Internet references on statistics and business decision making

Appropriate auxiliary materials will be chosen at the time the course is offered from those currently available in the field. Examples include: Internet references on statistics and business decision making

9. Suggested Course Requirements and Evaluation

Linked to #5. Student Learning Outcomes (SLOs) and #6 Competencies/Skills/Issues

Specific course requirements are at the discretion of the instructor at the time the course is being offered.

Suggested requirements might include, but are not limited to:

20%	Written midterm exam covering lectures (SLO I, II and III; Competencies a to e)
30%	Written final exam covering lectures (SLO I, II and III; Competencies a to q)
30%	4 Individual Assignments (SLO I, II, III and IV; Competencies a to q)
20%	2 Learning Team Assignments (SLO I, II, III and IV; Competencies a to q)

10. Methods of Instruction

Instructional methods will vary considerably by instructor. Specific methods are at the discretion of the instructor teaching the course and might include, but are not limited to:

- a. quizzes and other tests with feedback and discussion;
- b. lectures and class discussions;
- c. problem solving;
- d. lab activities including experiments, lab skill lessons, data analysis, and other activities;
- e. group activities;
- f. web-based assignments and activities;
- g. group and/ or individual research projects with reports
- h. other contemporary learning techniques (such as problem-based learning, investigative case-based learning, co-op, internships, self-paced programs, etc.)

11. Assessment of Intended Student Learning Outcomes Standards Grid attached

12. Additional Information: