

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS
COURSE MODIFICATION PROPOSAL
Courses must be submitted by October 15, 2010,
to make the next catalog (2011-12) production

DATE (CHANGE DATE EACH TIME REVISED): 8/30/10; REV 10.11.10

PROGRAM AREA(S): COMPUTER SCIENCE

Directions: All of sections of this form must be completed for course modifications. Use YELLOWED areas to enter data. All documents are stand alone sources of course information.

1. Course Information.

[Follow accepted catalog format.] (Add additional prefixes if cross-listed)

OLD

Prefix COMP/PSY Course# 449 Title Human-Computer Interaction Units (3)
 3 hours lecture per week
 hours blank per week

X Prerequisites: Programming experience or consent of the instructor

Consent of Instructor Required for Enrollment

Corequisites:

Catalog Description (Do not use any symbols): The information exchange between humans and computer systems will be examined. Aspects of input/output devices, software engineering, and human factors will be discussed with respect to human-computer interactions. Topics include: text and graphic display; user modeling; program design, debugging, complexity and comprehension; and current research studies and methodologies.

X General Education Categories B4, E, UDIGE
 Lab Fee Requested

Course Level:
 X Undergraduate
 Post-bac/Credential
 Graduate

Graded
 CR/NC X A - F

Repeatable for up to units
 Total Completions
 Multiple Enrollment in same semester

NEW

Prefix COMP/PSY Course# 449 Title Human-Computer Interaction Units (3)
 3 hours lecture per week
 hours blank per week

Prerequisites:

Consent of Instructor Required for Enrollment

Corequisites:

Catalog Description (Do not use any symbols): The information exchange between humans and computer systems will be examined. Aspects of input/output devices, software engineering, and human factors will be discussed with respect to human-computer interactions. Topics include: text and graphic display; user modeling; program design, debugging, complexity and comprehension; and current research studies and methodologies.

X General Education Categories B4, E, UDIGE
 Lab Fee Requested

Course Level:
 X Undergraduate
 Post-bac/Credential
 Graduate

Graded
 CR/NC X A - F

Repeatable for up to units
 Total Completions
 Multiple Enrollment in same semester

2. Mode of Instruction (Hours per Unit are defaulted)

Hegis Code(s) _____
 (Provided by the Dean)

Existing

Proposed

	Units	Hours Per Unit	Benchmark Enrollment	Graded		Units	Hours Per Unit	Benchmark Enrollment	Graded	CS No. (filled out by Dean)
Lecture	<u>3</u>	<u>1</u>	<u>24</u>	y	Lecture	<u>3</u>	<u>1</u>	<u>24</u>	<u>y</u>	<input type="text"/>
Seminar	<input type="text"/>	<u>1</u>	<input type="text"/>	<input type="text"/>	Seminar	<input type="text"/>	<u>1</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lab	<input type="text"/>	<u>3</u>	<input type="text"/>	<input type="text"/>	Lab	<input type="text"/>	<u>3</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Activity	<input type="text"/>	<u>2</u>	<input type="text"/>	<input type="text"/>	Activity	<input type="text"/>	<u>2</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Field Studies	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Field Studies	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Indep Study	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Indep Study	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other blank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other blank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Course Attributes:

X General Education Categories: All courses with GE category notations (including deletions) must be submitted to the GE website: <http://summit.csuci.edu/geapproval>. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing.

A (English Language, Communication, Critical Thinking)

- ☐ A-1 Oral Communication
- ☐ A-2 English Writing
- ☐ A-3 Critical Thinking

B (Mathematics, Sciences & Technology)

- ☐ B-1 Physical Sciences
- ☐ B-2 Life Sciences – Biology
- ☐ B-3 Mathematics – Mathematics and Applications
- ☒ B-4 Computers and Information Technology

C (Fine Arts, Literature, Languages & Cultures)

- ☐ C-1 Art
- ☐ C-2 Literature Courses
- ☐ C-3a Language
- ☐ C-3b Multicultural

D (Social Perspectives)

- ☒ E (Human Psychological and Physiological Perspectives)

X UDIGE/INTD Interdisciplinary

- ☐ Meets University Writing Requirement
- ☐ Meets University Language Requirement

☐ American Institutions, Title V Section 40404: ☐ Government ☐ US Constitution ☐ US History

Refer to website, Exec Order 405, for more information: <http://senate.csuci.edu/comm/curriculum/resources.htm>

☐ **Service Learning Course** (Approval from the Center for Community Engagement must be received before you can request this course attribute).

4. Justification and Requirements for the Course. *[Make a brief statement to justify the need for the course]*

OLD

The course is an elective course for Computer Science and Psychology majors.

- ☐ Requirement for the Major/Minor
- ☒ Elective for the Major/Minor
- ☐ Free Elective

NEW

The course is an elective course for Computer Science and Psychology majors.

- ☐ Requirement for the Major/Minor
- ☒ Elective for the Major/Minor
- ☐ Free Elective

Submit Program Modification if this course changes your program.

5. Student Learning Outcomes. (List in numerical order. You may wish to visit resource information at the following website: <http://senate.csuci.edu/comm/curriculum/resources.htm>)

Upon completion of the course, the student will be able to:

OLD

- Explain human use of digital devices in modern society
- Explain aspects of psychological and behavioral issues in designing input/output devices,
- Analyze influence of society on interface design and use.
- Analyze influence of society on Internet development and access to information.

Upon completion of the course, the student will be able to:

NEW

- Explain human use of digital devices in modern society
- Explain aspects of psychological and behavioral issues in designing input/output devices,
- Analyze influence of society on interface design and use.
- Analyze influence of society on Internet development and access to information.

- Design interface for specific applications
- Design interface for specific types of users
- Explain influence of GUI design on users behavior
- Solve problems in various context.
- Organize and express ideas clearly and convincingly in oral and written forms.

6. Course Content in Outline Form. (Be as brief as possible, but use as much space as necessary)

OLD

Aspects of psychological and behavioral issues in designing input/output devices
 User-Centered Design, Psychology of users
 Work Context in Design
 Design for Special Populations
 Universal Design
 Visual Input/Output
 Auditory Input/Output
 Computer Workstation Design
 Cognitive Work Design, Influence of GUI design on users behavior
 Activity Theory
 Multimedia/Hypermedia
 Adaptive Human-Computer Systems
 Virtual Environments
 Internet/Cyberspace

NEW

Aspects of psychological and behavioral issues in designing input/output devices
 User-Centered Design, Psychology of users
 Work Context in Design
 Design for Special Populations
 Universal Design
 Visual Input/Output
 Auditory Input/Output
 Computer Workstation Design
 Cognitive Work Design, Influence of GUI design on users behavior
 Activity Theory
 Multimedia/Hypermedia
 Adaptive Human-Computer Systems
 Virtual Environments
 Internet/Cyberspace

Does this course content overlap with a course offered in your academic program? Yes ☐ No ☒ X

If YES, what course(s) and provide a justification of the overlap. ☐

Does this course content overlap a course offered in another academic area? Yes ☐ No ☒ X

If YES, what course(s) and provide a justification of the overlap. ☐

Overlapping courses require Chairs' signatures.

7. Cross-listed Courses (Please note each prefix in item No. 1)

- List cross-listed courses (Signature of Academic Chair(s) of the other academic area(s) is required).
- List each cross-listed prefix for the course: COMP PSY
- Program responsible for staffing: Computer Science

8. References. [Provide 3-5 references]

OLD

Making Use: Scenario-Based Design of Human-Computer Interactions by John M. Carroll, MIT Press; ISBN: 0262032791 ; 1st edition (2000)
 User and Task Analysis for Interface Design by JoAnn T. Hackos, Janice C. Redish, John Wiley & Sons; ISBN: 0471178314 ; 1 edition (1998)
 Where the Action Is: The Foundations of Embodied Interaction by Paul Dourish, MIT Press; ISBN: 0262041960 ; (2001)

NEW

Making Use: Scenario-Based Design of Human-Computer Interactions by John M. Carroll, MIT Press; ISBN: 0262032791 ; 1st edition (2000)
 User and Task Analysis for Interface Design by JoAnn T. Hackos, Janice C. Redish, John Wiley & Sons; ISBN: 0471178314 ; 1 edition (1998)
 Where the Action Is: The Foundations of Embodied Interaction by Paul Dourish, MIT Press; ISBN: 0262041960 ; (2001)

9. Tenure Track Faculty qualified to teach this course.

Computer Science Faculty with the co-operation of the Psychology faculty.

10. Requested Effective Date or First Semester offered: Fall 2011

11. New Resource Requested: Yes ☐ No ☒

If YES, list the resources needed.

A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)

☐

B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.)

☐

C. Facility/Space/Transportation Needs:

☐

D. Lab Fee Requested: Yes ☐ No ☐ (Refer to the Dean's Office for additional processing)

E. Other. ☐

12. Indicate Changes and Justification for Each. [Check all that apply and follow with justification. Be as brief as possible but, use as much space as necessary.]

☐ Course title
☐ Prefix/suffix
☐ Course number
☐ Units
☐ Staffing formula and enrollment limits
☒ Prerequisites/Corequisites
☐ Catalog description
☐ Mode of Instruction

☐ Course Content
☐ Course Learning Objectives
☐ References
☐ GE
☐ Other ☐
☐ Reactivate Course

Justification: Programming experience is no longer required for the course. Psychology approves the change.

13. Will this course modification alter any degree, credential, certificate, or minor in your program? Yes ☐ No ☒

If, YES attach a program update or program modification form for all programs affected.

Priority deadline for New Minors and Programs: **October 4, 2010** of preceding year.

Priority deadline for Course Proposals and Modifications: **October 15, 2010.**

Last day to submit forms to be considered during the current academic year: **April 15th.**

Peter Smith

8/30/10

Proposer(s) of Course Modification

Date

Type in name. Signatures will be collected after Curriculum approval.

Request for COMP-PSY 449: Human-Computer Interaction to be added to GE Category B4: Computers and Information Technology.

Committee Response:

Approved by committee on 09-24-2010

Criteria and Justifications Submitted:

- *Promote the understanding and appreciation of the methodologies of math or science as investigative tools and the limitations of mathematical or scientific endeavors*
Extensive use of scientific criteria in the design of interfaces to computer systems.
- *Present mathematical or scientific knowledge in a historical perspective and the influences of math and science on the development of world civilizations, both past and present*
Examination of the evolution of interfaces from switches, to command-line to icons to hands-free interaction. Examination of societal impacts.
- *Apply inductive and deductive reasoning processes and explore fallacies and misconceptions in the mathematical or scientific areas*
Students devise experiments in which alternative interfaces are presented, used and evaluated.
- *Include use of computers or information technology to solve problems as appropriate*
Extensive use of computers in the design of effective interfaces.

Request for COMP-PSY 449: Human-Computer Interaction to be added to GE Category E: Human Physiological and Psychological Perspectives.

Committee Response:

Approved by committee on 09-24-2010

Criteria and Justifications Submitted:

- *Focus on some aspect of human physiology, psychology, health, or physical activity*
Particular emphasis on the ways in which humans interact with computer systems. What makes a system "user-friendly"?
- *Promote an understanding the humans, as physiological and psychological beings, exist and live in a social and physical environment*
Increasingly, humans live in a wired (and wireless) world in which they are always connected, always reachable. What are the implications of this, what interactions are seamless, what are intrusive.

Request for COMP-PSY 449: Human-Computer Interaction to be added to GE Category UDIGE: Upper Division Interdisciplinary GE.

Committee Response:

Approved by committee on 09-24-2010

Criteria and Justifications Submitted:

- *Emphasize interdisciplinarity by integrating content, ideas, and approaches from two or more disciplines*
Ideas from psychology and physiology are important in combination with ideas from Computer Science in designing an interface that is user-friendly.
- *Include substantive written work consisting of in-class writing as well as outside class writing of revised prose. Examples of appropriate written work include: short papers, long papers, term papers, lab reports, documentation, disciplinary-based letters and memos, and essays.*
Student design teams produce design reports and document computer interfaces.

Approval Sheet

Course: COMP/PSY 449

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

Program Chair		
Signature		Date
Program Chair		
Signature		Date
Program Chair		
Signature		Date
General Education Chair		
Signature		Date
Center for Intl Affairs Director		
Signature		Date
Center for Integrative Studies Director		
Signature		Date
Center for Multicultural Engagement Director		
Signature		Date
Center for Civic Engagement and Service Learning Director		
Signature		Date
Curriculum Chair		
Signature		Date
Dean of Faculty		
Signature		Date