NEW COURSE PROPOSAL

PROGRAM AREAS _____ BIOLOGICAL AND PHYSICAL SCIENCES, MATH AND COMPUTER SCIENCE

1. Catalog Description of the Course. [Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of ___ units); time distribution (Lecture ___ hours, laboratory ___ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]

COMP 449. HUMAN-COMPUTER INTERACTION (3)
Three hours of lecture in the lab per week.
Prerequisites: Programming experience or consent of the instructor.

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. GenEd: B4, E and Interdisciplinary

2. Mode of Instruction.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Hours per Unit</th>
<th>Enrollment</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Seminar</td>
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<tr>
<td>Laboratory</td>
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<tr>
<td>Activity</td>
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3. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) [Use as much space as necessary]

The course is an elective course for Computer Science majors.

Through this course, students will be able to –
- 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.

4. Is this a General Education Course

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>YES</th>
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<tbody>
<tr>
<td>A (English Language, Communication, Critical Thinking)</td>
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<tr>
<td>B (Mathematics &amp; Sciences)</td>
<td>B4</td>
</tr>
<tr>
<td>C (Fine Arts, Literature, Languages &amp; Cultures)</td>
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<tr>
<td>D (Social Perspectives)</td>
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<tr>
<td>E (Human Psychological and Physiological Perspectives)</td>
<td>E</td>
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5. Course Content in Outline Form. [Be as brief as possible, but use as much space as necessary]

NEWCRSFR 9/30/02
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

6. References. [Provide 3 - 5 references on which this course is based and/or support it.]


7. List Faculty Qualified to Teach This Course.

Computer Science faculty with coorperation of Psychology faculty.

8. Frequency.
   a. Projected semesters to be offered: Fall ___X__ Spring _X____ Summer _____

9. New Resources Required.
   a. Computer (data processing), audio visual, broadcasting needs, other equipment

      Use of existing computer lab.

   b. Library needs

      none

   c. Facility/space needs

      none

10. Consultation.
    Attach consultation sheet from all program areas, Library, and others (if necessary)

    Psychology ________________________________

11. If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

___________________________________________________
Proposer of Course Date

NEWCRSFR 9/30/02