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.**

	Units	Hours per Unit	Benchmark Enrollment
Lecture	3	1	24
Seminar	_____	_____	_____
Laboratory	_____	_____	_____
Activity	_____	_____	_____

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 devises 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   YES**
   If Yes, indicate GE category:

A (English Language, Communication, Critical Thinking)	
B (Mathematics & Sciences)	B4
C (Fine Arts, Literature, Languages & Cultures)	
D (Social Perspectives)	
E (Human Psychological and Physiological Perspectives)	E

5. **Course Content in Outline Form.** *[Be as brief as possible, but use as much space as necessary]*

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/Cyberspacer

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

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)

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

   c. Facility/space needs

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