

CSI 3500: Human Computer Interaction

**Credits Hours:** 4 credits, 3.57 contact hours/week.

**Instructor:** Simon Ellis, Ph.D.

**Text book:** The Design of Everyday Things. Norman, Don; Basic Books, 2013

### **Specific course information**

Surveys various components, techniques of Human Computer Interaction (HCI). Topics include the basic perceptual, cognitive and performance capabilities of people and external factors that affect these capabilities, tools, techniques for understanding, predicting, evaluating the interactions of people with technology. Systematic processes for designing, evaluating and revising interactive systems are studied.

**Prerequisites:** major standing

**Required course** for IT major

**Course Objectives:** Upon successful completion of this course, students should be able to

- Analyze human perceptual and cognitive capabilities to be considered while designing user interfaces [ABET IT: (j)]
- Assess various interactions modalities including its uses and limitations [ABET IT: (j)]
- Design human centric user interfaces [ABET IT: (j, m)]
- Create and perform usability analysis [ABET IT: (j)]
- Use tools for designing user interfaces [ABET IT: (j)]

### **List of Topics:**

- Cognition, memory and focus
- Sensation and perception
- Models and modeling
- Concepts and design of systems
- Informatics and information theory
- Semiotics and metaphor
- User-centric and user-focused design. User Analysis, Interface and eXperience
- Usability