

Course Title and Code IT 215 Human Computer Interaction

#### I. Course Identification and General Information:

Course Title	Human-Computer Interaction	Course Code	IT 215	Pre-requisite	IT 214
Department	Information Technology	Course Level	7	Credit Hours	2(2+0)

### II. Course Description/Topics: The following course topics will be covered.

This course introduces the field of Human-Computer Interaction (HCI) and an overview of software architectures used in modern graphical user interfaces. A variety of analysis and design methods are introduced (e.g. GOMS. heuristic evaluation, User-Centered Design and contextual design techniques). Visual programming topics include file manipulation, related data structures; exception handling and Graphical User Interfaces (event handling and models), and windows applications. Evaluations of user interfaces according to usability and accessibility standards will be covered. Throughout the course, the quality of design and the need for a professional and user-centered approach to interface development is emphasized.

# III. Course Outcomes: Summary of the main learning outcomes for students enrolled in the course.

- The student knows the generic structure and deployment of graphical user interfaces.
- The student is able to evaluate the usability, performance and ease of learning of user interfaces.
- The student acquires an ability to design and implement ergonomic, user-friendly software applications and interactive Web pages using some GUI design tool and taking into account human-centered design principles and user experience.

### IV. Required Text:

 Ben Shneiderman, Catherine Plaisant, Maxine Cohen, Steven Jacobs, Niklas Elmqvist and Nicholas Diakopoulos "Designing the User Interface: Strategies for Effective Human-Computer Interaction" 6th Edition, ISBN 9780134380384.

## V. References:

- Alan Dix, Janet E. Finlay, Gregory D. Abowd and Russell Beale, "Human-Computer Interaction", third Edition, ISBN 978-0130461094.
- Prototype Tools ex: Justinmind.