Course Syllabus

HUMAN COMPUTER INTERACTION

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Program: Computer Science

1. Course number and name

CCPG1023 - HUMAN COMPUTER INTERACTION

2. Credits and contact hours

3 credits and 4 contact hours

3. Instructor's course or coordinator's name

KATHERINE MALENA CHILUIZA GARCIA

4. Text book, tittle, author, and year

*Sharp, Helen M. & Jennifer Preece & Rogers, Yvonne. Interaction designbeyond human-computer interaction (4th ed.)

a.Other supplemental materials

*Norman, Donald A. & Norman, Donald A.. The design of everyday things (Rev. and expanded ed.;)

5. Specific course information

a. Brief description of the content of the course (catalog description)

This course covers strategies used to design and implement technology based solutions. These strategies follow a design process that includes user research, tempathizing with the user, problem definition, protototyping and evaluation of proposed solutions. This course complements students' knowledge in the software design component. In addition, students explore a variety of ways to solve problems, using creativity and innovation.

b. Prerequisites

PROBLEM SOLVING USING APPLIED COMPUTER SCIENCE - CCPG1007

c. This course is a: Required

6. Specific goals for the course

a. Specific outcomes of instruction

1.- Analyzing profiles, tasks and needs of groups of users involved in the interaction of computer based systems.

2.- Designing user centered systems considering: differences between mental models of developers and users; application of cognitive psychology and interaction principles; and, modern paradigms beyond systems based on mouse, windows, pointers and keyboards.

3.- Evaluating a user-centered design proposal using techniques such as low fidelity prototypes, cognitive walkthroughs, design guidelines, among others.

4.- Creating prototypes and documentation based on a graphical user interface.

b. Explicity indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course

(2) Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program’s discipline.

(4) Recognize professional responsibilities and make informed judgments in computing practice based

on legal and ethical principles.

7. Brief list of topics to be covered

1.- Fundamentals of human computer interaction.
2.- User centered design: Scope and importance.
3.- User centered design: Exploration, synthesis and design implications.
4.- User centered design: Concept generation and early prototypes.
5.- Human side the interaction design.
6.- Prototyping iterations.
7.- Computer supported collaborative work.
8.- Interaction evaluation.
9.- Technologies and interaction paradigms.