**HUMAN COMPUTER INTERACTION/INTERFACE**

**ACMP 446/ SOEN 426/COMP 401/BIT 316**

**Contact Hours:** Lectures 30 and Practicals/Tutorials 30

**Purpose of the course:**

The course intends to provide the leaners with an overview of human-centered computing (HCC), particularly from the view of user-oriented computing system design and research. As an emerging, multidisciplinary field, HCC is commonly

referred to and characterized by the idea of devising designs of computing systems based on properties, needs and constraints of the users and their tasks, rather than the inverse.

**Expected Learning Outcomes of the Course:**

At the end of this course, the student should be able to;

1. Demonstrate an understanding that HCC embodies more than technology building and has to include issues such as how to the software and hardware systems supports people
2. Demonstrate an understanding of people and the interactions between people and technologies.

**Course Content:**

1. Introduction to Human Centered Design
2. Understanding and Conceptualizing Interaction
3. Cognitive Aspects
4. User Interfaces: Usability and Usefulness
5. Design Methods and Processes
6. Tangible and Physical Interaction
7. Social Aspects (including Collaborative and Social Computing)
8. Human Computation and Crowdsourcing
9. Introduction to Evaluation
10. Prototyping

**Mode of Delivery:**

This course adopts active learning, project-based learning and group based discussion, e-learning.

There will be weekly reading tasks to be completed before class, lectures, lab sessions (and practical sessions) and presentations.

**Course Assessment:**

Class Attendance & Participation, and Reading Tasks 15%

Assignments & Mini-Projects 15%

End Term Exams 70%

Total 100%

**Core References**

* Yvonne Rogers, Helen Sharp, Jenny Preece. Interaction Design: Beyond Human-Computer Interaction. 3rd Ed. 2011 (the “ID book”)
* Dix, Alan; Finlay, Janet; Abowd, Gregory; and Beale, Russell, “Human-Computer Interaction”, 3rd Edition, Prentice Hall, 2004