**CSC 3103 User Interface Design (4 CU)**

**Course Description:** The course introduces the principles of user interface development, focusing on design, implementation and evaluation.

**Aims:** The course aims at providing the skills listed below to students:

• Developing efficient, flexible and interactive User Interfaces (UI)

• Provide ability to identifying system users, the tasks they want to carry out and the environment in which they will be working;

• Creating conceptual designs;

• Designing various kinds of UI, in particular graphical user interfaces

• (GUIs) and websites; evaluating UIs;

• Appreciation of realities of developing usable UIs in an organization

**Learning outcomes**: On completion of this course, the students will be able to:

• Developing efficient, flexible and interactive User Interfaces(UI)

• Have the ability to identify system users, the tasks they want to carry out and the environment in which they will be working;

• Create conceptual designs;

• Design various kinds of UI, in particular graphical user interfaces (GUIs) and websites;

• Evaluate UIs;

• Appreciate realities of developing usable UIs in an organization.

**Teaching and learning outcome**: The teaching pattern is by lectures, lab sessions and projects.

**Indicative content**:

• Usability

• User-Centered Design

• UI Software Architecture

• Human Capabilities

• Output Models

• Conceptual Models and Metaphors

• Input Models

• Design Principles

• Paper Prototyping

• Constraints and Layouts

• Graphic Design

• Computer Prototyping

• Heuristic Evaluation

• User Testing

• Experiment Design

• Experiment Analysis

**Assessment method**: Assessment will be in form of a assignments and tests (40%) and final written exam

(60%)

**Reference books**:

i. Norman, D. A. The Design of Everyday Things, New York, NY: Doubleday, 1990. ISBN: 0385267746. ii. Nielsen, J. Usability Engineering. Burlington, MA: Academic Press, 1994. ISBN: 0125184069.

iii. Mullet, K., and D. Sano. Designing Visual Interfaces: Communication oriented techniques. Upper

Saddle River, NJ: Prentice Hall, 1994. ISBN: 0133033899.