**CSC 1207 Programming Methodology II**

(a) Description

The course is to give an in depth understanding of Object Oriented programming. It is to cater for Object Oriented programming practices like inheritance, interfaces, exception handling, action handling, security, software reuse and robustness.

(b) Aims

The aim of the course is to:

*•* Move the students’ programming skills from basic to advanced

*•* Avail students with skills to handle nonfunctional program as- pects like robustness and security

*•* Train students to develop complete computer applications

(c) Teaching and learning pattern

This will include lectures, practical’s and lab assignments

(d) Indicative content

*•* The object oriented paradigm

*•* Classes and objects

*•* Inheritance and visibility modifiers

*•* Interfaces and abstract classes

*•* Graphical user interface and action handlers

*•* Exception handling

*•* Working with files

*•* Working with databases

*•* Sessions and user management

(e) Assessment method

The assessment will be done by tests and take home assignments (40%), practical examination (30%) and written examination (30%)

(f ) Reading list

(i) Java Software Solution: Foundations of Program Design (6*th* Edi- tion) by John Lewis and William Loftus, Addison-Wesley, 2009.

(ii) A Programmer’s Guide to Java*T M* Certification: A comprehensive Primer by Khalid A. Mughal and Rolf W. Rasmussen, Addison- Wesley, 1999.