



Greenwich University

COURSE OUTLINE

SPRING 2019 Term

- **Course** : **Intro. To Information Technology**
- **Code** : **GCSE 101**

ADMINISTRATIVE INFORMATION

- **Instructor** : **Mr. Arbaaz Lallmahomed**
- **Instructor's Email** : **arbaaz@greenwich.edu.pk**
(Assignments given should be sent to the instructor via email above for marking. After checking they will be returned before the next class.)
- **Class Session** : **March 25, 2019 – July 20, 2019**
- **Class Timings** : **Monday, 09:00 Am - 11:00 Am**

A 10-minute break will be given. Any student coming late or returning late after the break will be considered absent for that day.

In case of cancellation / makeup of a class you will be notified through the website of Greenwich and / or through your Greenwich email account.

ATTENDANCE:

100% class attendance is mandatory for the students to enable them to appear in the final examination. However, in case of an emergency / serious illness the students will be eligible to (02) absences during the whole semester.

RULES AND REGULATIONS:

- All mobile phones must remain switched off or kept on silent / vibration mode) for the entire duration of a class. Any breach of this rule will lead to immediate confiscation of the phone, which will only be returned after the semester is over.
- Smoking is strictly prohibited on the entire campus, except the cafeteria.
- No food, drinks, gum or beetle-nut (chalia) are allowed inside the classroom.
- In order to maintain the sanctity and decorum on the University Campus, all male and female students are required to be dressed in a decent and appropriate manner. The University shall take a particularly stern view of any kind of immodest and revealing clothes.
- The Student ID Card must be displayed while attending class.
- Cheating, plagiarism, offensive language and disruptive behavior will be addressed according to policies for academic misconduct mentioned in the Students' Handbook.

COURSE OBJECTIVE:

It is an introductory course in Information Systems. It is designed to introduce basic concepts of Information and Data Processing, an introduction to computers, how they work and their impact on society.

LEARNING OUTCOMES

Upon completing this course, students will be able to:

1. Describe how data is captured, organized and managed using a data management system and design a simple database using data modeling techniques;
2. Discuss the strategic considerations in information system development and their impacts on the organization;
3. Design effective user interfaces and explain the importance of internal controls for information systems;
4. Describe the different technologies, techniques and infrastructure of transaction processing systems associated with various transaction cycles;
5. Explain the e-commerce technology architecture and discuss the strategies for successful E-commerce;
6. Identify and analyze risk factors, discuss measures to mitigate risks and the importance of business continuity planning; and
7. Explain how various information systems are designed to support the decision making process for business managers.

TEACHING METHODOLOGY:

- Lectures
- Assignments
- Presentation by students
- Research Paper on Articles Presented at HEC Digital Library
- Seminar / Workshop
- Report
- Guest Speaker: A professional from the IT Sector will be invited to share his / her experiences with the students.
- On Line Coursera Course; Computer Vision: The Fundamentals (<https://www.coursera.org/courses>)

The students are advised to submit the certificate of online course along with portfolio

Case Studies:

PERFORMANCE REQUIREMENTS:

Complying with the course requirements with active class participation and timely submission of assignments.

MATERIAL / RESOURCES:

RECOMMENDED TEXTS:

Main Text:

- Computers Tools for an Information Age (Fifth Edition) by H.L. Capron
- Information System by Stephen Doyle

Supplementary Text:

Computing, by: C. Leadbetter

Compulsory Reading:

- i. Spider
- ii. Internet

❖ Students are urged to seek assistance from www.hecdigitallibrary.edu.pk for preparation of research papers, assignments and term reports.

- Use the following link for research
 - Bentham Science
 - Blackwell Synergy
 - Ebrary
 - Springerlink
 - Oxford University Press
 - Francis and Taylor
- Greenwich Research facility Development Center (GRDC) and computer laboratory III will have all the necessary software (SPSS) and full access to the digital library and internet.

EVALUATION METHODS AND ASSIGNMENTS:

- Quizzes will be given in every class based upon the lesson taught in the previous session. The teacher will mark and return them to the students in the same/next class.
- Students who maintain 100% attendance in a minimum course load of five will be awarded a certificate and his/her name/picture will be placed on the notice board
- Class Assignments will be given regularly.
- Class participation
- Portfolios should be maintained by students of all their assignments, quizzes, /presentation, etc. The portfolios must be submitted to the instructor in the 14th class. The portfolios will be returned to the students prior to the final examination.
- Mid-Term and Final Examination
- Final exams will comprise questions based on the entire syllabus, including the teaching done before the Mid-Term Exam.
- **Report:** The students will be assigned, individually, or in groups to write term paper / report based on visit to the corporate entities / markets and discussions with professionals and practitioners. All such visits will be undertaken through official transmittal letters to be issued by the University on the request of students and / or faculty.

GRADING:

*	Report & Article Presentation	10%
*	Quizzes.....	10%
*	Assignment.....	05%
*	Class Participation.....	05%
*	Mid-term Examination.....	30%
*	Final Examination	40%

- Portfolios should be maintained by students of all their assignments, quizzes, /presentation, etc. The portfolios must be submitted to the instructor in the 12th class. The portfolios will returned to the students prior to the final examination.

COURSE CONTENTS:

- SESSION - I. **Introduction to Information Technology**
Application of Computer and types of data processing
- SESSION - II. **Understanding of Computer Systems**
Computer Hardware
Processor
Primary and secondary storage
Peripheral devices
- SESSION - III. **Computer Software**
Operating Systems, their types and their functions
Application Software
Computer Graphics
- SESSION – IV. **Handling of Data in as Information System**
Manual Recording
Automatic Data Capturing
- SESSION - V. **Files and Data Basics**
Handling of data in distinct information system
Forms of output
- SESSION - VI. **Systems development life Cycle.6 Systems development life cycle**
Identification of problem
Feasibility study
Information collection
Analysis of a problem, based upon information collected, including producing a requirements specification
- SESSION - VII

Design of system of fit requirements
Development and testing of system
Installation of system
Maintenance of system
Evaluation

SESSION - VIII

MID-TERM EXAMINATION

SESSION - IX.

Data Communication and Networking Basics

Data Transmission Techniques
Circuit switching and packet switching
Networking
Topologies

SESSION - X.

Number Systems

Different Conversion Methods

SESSION - XI.

Internet Basics

E-Commerce

Examples studied should include:

Importance of Information system in Business which includes:

- Banking systems (e.g. cheque processing, updating of accounts, stages the occur when purchases are made using a bank account)
- Hospitals (e.g. patient) records, need to update records regularly, hospital administration)
- Personnel records (e.g. what would be stored, use of databases, need to keep up-to-date, how these link into other areas such as payroll)
- Automatic stock control and order processing (e.g. sue of barcodes in supermarket stock control)

SESSION - XII

Computer Security and Controls

Implication of Computer Use

SESSION - XIII.

Introduction to Database

SESSION - XIV.

Revision / Project Report Submission (Completion time: Week 6 to 11)

Final project requires students to identify a well-defined user-driven problem, involving a third-party user, and to generate a solution.

This is done using software tools chosen by the candidate and may include an appropriate applications packages or other software. Work on the project should begin in parallel with the chapter of System Analysis and Designing.

The selection of the problem for which a computerized system is to be designed and implemented is extremely important. It should be chosen by the candidate in consultation with the teacher, and

should always involve a client, who requires the solution to the problem, and user(s), the person who is going to use the computerized system. The client and the user may be the same person e.g. if a sole-trader's business requires a computerized system.

It is important to stress that the candidate should endeavor to produce a system which will solve a given problem sensibly, within the constraints of resources available to the candidate.

SESSION - XV

Practical Course

Introduction to Word Processing. Inserting, deleting text, save and exit file, open and close file, copy and paste text. Find and replace contents, bold, underline, italic, font size, paragraph settings, bullets and numbering, border and shading columns, table setting, change case, header and footer, print preview and print, insert page, page break, date and time, spelling and grammar, mail merge, tables, insert / delete column and rows, insert pictures, insert chart, insert smart art and Document statistics.

Microsoft Excel:

Introduction to Spreadsheets, inserting data in a worksheet, save and exit file, open and close, cut, copy, paste the data, formatting, cell, column bold, underline, italic, font size, borders, Formula writing, print preview and print, insert, cell, row, column, pictures, full and filter data, generating charts, spell checker, find and replace.

Microsoft Power Point

Creating a basic presentation, building presentation, modifying visual elements, formatting and checking text, inserting objects, applying transitions, preparing handouts and slides for display.

Microsoft Access:

Introduction to database, Forms, Reports and Queries

Windows 7 with desktop fundamentals

- ❖ The desktop (overview)
- ❖ The start menu (overview)
- ❖ The taskbar (overview)
- ❖ Desktop gadgets (overview)
- ❖ Working with windows (overview)
- ❖ Using menus, buttons, bars, and boxes (overview)
- ❖ File/folder management (overview)
- ❖ Security using password protection / rights (overview)

Windows Live Movie Maker

Introduction to Windows Live Movie Maker to create and share your own movies which is a part of Windows Live Essentials. This course also covers video editing, merging of photos, audio, theme, transitions and effects etc.

SESSION - XVI

FINAL EXAMINATION

-----*For Office Use Only*-----

Dean: : _____ Date: ____ / ____ / 2019

Head of Department: : _____ Date: ____ / ____ / 2019

Faculty Member: : _____ Date: ____ / ____ / 2019

Uploaded on the website by: _____ Date: ____ / ____ / 2019