DETAILED COURSE PLAN

INTRODUCTION TO INFORMATION AND COMMUNICATION TECHNOLOGY

Department of Public Administration, CoU

Course Code: 0613PA125, Credit: 4.00

1. Course Profile

Item	Details	Item	Details
Course code	0613PA125	Course title	Introduction to Information & Communication Technology
Department	Public Administration	Course type	GED
Level/semester	1st Year, 2nd Semester	Credit value	4
Total direct hours	56 hours	Total classes	42 classes
CIE / SEE	40 / 60 marks	Total marks	100

2. Course Summary

Information technology-based systems in mainstream social sciences have redefined workplace practices, operational metrics, and policy-making levels. Managers and policymakers use computer-based systems and productivity software to improve administrative operations, employee productivity, and organizational performance. This course introduces the use of computers and information systems, IT infrastructure, Internet resources, information systems development and management, and applications of IT in public administration.

3. Course Objective

To prepare students to identify and analyze policy-making and administrative opportunities, effectively utilize information technology in administrative processes, and understand operational and strategic IT solutions needed by organizations.

4. Course Learning Outcomes (CLOs)

After successful completion of the course, students will be able to:

CLO	Course learning outcome
CLO1	Use computer-based information systems and use computers more effectively as tools for business operation, entertainment, or study.
CLO2	Demonstrate a more complete and detailed understanding of the roles computers play in their daily lives.
CLO3	Use the Internet and World Wide Web (WWW) as a research and information-sharing resource.
CLO4	Identify and describe legal, social, ethical, and communication issues related to increased Internet use in the home, workplace, and society.

CLO5	Discuss team-based completion of a computer-based systems project, from request through project management, analysis, design, development, documentation, testing, and implementation.

5. Course Content Allocation: 42 Classes

Unit	Content area	Source hours	Classes	CLO mapping
1	Fundamentals of Management Information Systems	6	4	CLO1
2	Fundamentals of Computer	8	6	CLO1, CLO2
3	Information Technology Infrastructure	8	6	CLO1, CLO2
4	Development, Implementation and Management of Information Systems	10	7	CLO2, CLO3
5	Management Information Systems – Bangladesh Perspective	8	6	CLO3
6	Applications of Information Technology in Public Administration	6	5	CLO4, CLO5
7	Practical / Project	10	8	CLO5
	TOTAL	56	42	CLO1–CLO5

6. Detailed 42-Class OBE Teaching Plan

Class	Topic / session	Content focus	Teaching–learning activity	Expected outcome for the class	CLO	Assessment / evidence
1	MIS fundamentals	Introduction to Management Information Systems (MIS).	Lecture, brainstorming on information use in administration.	Define MIS and state its basic purpose.	CLO1	Entry/exit question
2	MIS in organizations	Role of MIS in organizations; information support for management and administrative functions.	Lecture and organizational case discussion.	Explain how MIS supports organizational activities.	CLO1	Short quiz
3	MIS applications	Examples of MIS use in business and public/administrative settings.	Case-based group discussion.	Identify practical uses of computer-based information systems.	CLO1	Class participation / worksheet
4	Unit 1 review	Review key concepts; formative assessment.	Question-answer session and concept mapping.	Summarize the role of MIS in organizations.	CLO1	Unit quiz
5	Computer fundamentals I	Introduction to computer systems; basic concepts and characteristics.	Lecture and demonstration.	Describe a computer system and its basic functions.	CLO1, CLO2	Concept check
6	Computer fundamentals II	Computer hardware: input, processing, output, and storage components.	Hardware demonstration / labeled diagrams.	Identify major hardware components and their functions.	CLO1, CLO2	Component identification
7	Computer fundamentals III	Computer software; system software and application software.	Lecture and software examples.	Differentiate system software from application software.	CLO1, CLO2	Short quiz
8	Computer use in daily life	Roles of computers in study, work, business operation, and everyday activities.	Think-pair-share and practical examples.	Explain how computers support everyday activities.	CLO2	Short written response

9	Computer skills consolidation	Integrated review of computer systems, hardware, and software.	Guided activity and question clinic.	Relate hardware and software components to computer use.	CLO1, CLO2	Mid-Term -1
10	Unit 2 review	Review and formative assessment of computer fundamentals.	Quiz and feedback.	Demonstrate understanding of basic computer systems.	CLO1, CLO2	Unit assessment
11	IT infrastructure I	Introduction to IT infrastructure and telecommunications.	Lecture with infrastructure examples.	Describe the role of telecommunications in IT infrastructure.	CLO1, CLO2	Questioning
12	IT infrastructure II	Telecommunication concepts and information transmission.	Diagram-based explanation and discussion.	Explain basic telecommunications functions.	CLO1, CLO2	Worksheet
13	Computer networks I	Introduction to computer networks; purposes and basic types.	Lecture and network diagram activity.	Explain why computers are networked.	CLO1, CLO2	Short quiz
14	Computer networks II	Network use and organizational information sharing.	Case discussion and diagram interpretation.	Describe how networks support information exchange.	CLO1, CLO2	Diagram task
15	Internet and WWW I	Introduction to the Internet and World Wide Web.	Demonstration and guided exploration.	Distinguish the Internet from the WWW.	CLO3	Practical questioning
16	Internet and WWW II	Using online resources to locate information.	Guided search and source-identification activity.	Use the Internet/WWW to locate relevant information.	CLO3	Search task
17	Unit 3 review	Review telecommunications, networks, Internet, and WWW.	Group recap and formative quiz.	Summarize the components of IT infrastructure.	CLO1, CLO2, CLO3	Unit quiz
18	Information systems development I	Introduction to information systems development and implementation.	Lecture and process overview.	Describe the broad stages of information systems development.	CLO2, CLO3	Short questions
19	Systems analysis I	Information systems analysis; identifying problems and information needs.	Case-based problem identification.	Identify a problem or user need that an information system may address.	CLO2, CLO3	Problem statement
20	Systems analysis II	Requirements and analysis of information systems.	Group exercise using a simple administrative case.	Describe basic system requirements.	CLO2, CLO3	Requirements worksheet
21	Systems design	Information systems design; translating requirements into a system plan.	Lecture and simple workflow/design activity.	Explain the purpose of systems design.	CLO2, CLO3	Design exercise
22	Systems implementation	Implementation concepts and organizational considerations.	Case discussion.	Describe key considerations when implementing an information system.	CLO2	Case questions
23	Decision Support Systems	Introduction to Decision Support Systems (DSS) and decision support in organizations.	Lecture and decision scenario.	Explain how DSS can support organizational decisions.	CLO2, CLO3	Scenario response
24	Control and ethics of MIS	Control and ethics of Management Information Systems.	Guided discussion and case analysis.	Recognize control and ethical considerations in MIS.	CLO2, CLO4	Case-based worksheet
25	Unit 4 review	Review systems analysis, design, DSS, control, and ethics.	Problem clinic and formative assessment.	Connect information systems processes with organizational needs.	CLO2, CLO3, CLO4	Unit test
26	MIS in Bangladesh I	Present scenario of MIS in Bangladesh.	Lecture and Bangladesh-focused examples.	Describe the context of MIS in Bangladesh.	CLO3	Short response
27	MIS in Bangladesh II	Opportunities for MIS in Bangladesh.	Group discussion and guided research.	Identify opportunities for MIS in the Bangladesh context.	CLO3	Group worksheet
28	MIS in Bangladesh III	Challenges of MIS in Bangladesh.	Case-based discussion.	Discuss challenges associated with MIS adoption and use.	CLO3	Case response

29	Research using online sources	Use Internet/WWW sources to explore an MIS issue in Bangladesh.	Guided research and source evaluation.	Use online resources to support a short research task.	CLO3	Research brief
30	Unit 5 review	Synthesis of Bangladesh MIS scenario, opportunities, and challenges.	Student summaries and feedback.	Present an evidence-based summary of an MIS issue.	CLO3	Short presentation
31	IT in Public Administration I	Applications of IT in public administration; introduction to e-Governance.	Lecture and public-service case discussion.	Describe examples of IT use in public administration.	CLO4, CLO5	Case questions
32	IT in Public Administration II	Scope of e-Commerce and models of e-Commerce.	Lecture and model comparison.	Explain the scope and basic models of e-Commerce.	CLO4	Comparison task
33	IT in Public Administration III	e-Commerce strategy and Electronic Data Interchange (EDI).	Lecture and process illustration.	Describe e-Commerce strategy and the purpose of EDI.	CLO4	Short quiz
34	IT in Public Administration IV	Electronic payment systems; status of e-Commerce in Bangladesh.	Case discussion and guided research.	Explain electronic payment systems and discuss e-Commerce in Bangladesh.	CLO4	Assignment / case response
35	IT in Public Administration V	Opportunities and challenges; legal, social, ethical, and communication issues related to Internet use.	Scenario-based discussion and review.	Identify and describe relevant Internet-use issues in society and administration.	CLO4, CLO5	Mid-Term -2
36	Project orientation	Practical/project: project request, problem selection, and team formation.	Project briefing and team planning.	Explain the project request and define a team project problem.	CLO5	Project topic and request
37	Project planning and analysis	Project management, roles, planning, and systems analysis.	Team-based project workshop.	Prepare a basic project plan and identify user needs.	CLO5	Project plan / requirements
38	Project design and development	Project design and development of a simple computer-based solution/prototype.	Supervised team work.	Describe the design and development approach.	CLO5	Design/prototype checkpoint
39	Project documentation	Project documentation and preparation of user/project records.	Workshop and peer review.	Prepare clear project documentation.	CLO5	Documentation review
40	Project testing	Testing the project against its stated requirements.	Team testing and instructor feedback.	Describe testing activities and record results.	CLO5	Test record
41	Project implementation	Implementation considerations and final project refinement.	Team presentation rehearsal and consultation.	Explain how the proposed system/project would be implemented.	CLO5	Implementation outline
42	Project presentation and course review	Final team project presentation; course-wide review and feedback.	Presentation, peer questions, instructor feedback.	Discuss the complete project lifecycle from request through implementation.	CLO5	Final report / presentation

7. CLO–Assessment Alignment

CLO	Quiz / class test	Assignment / case	Project / practical	Presentation	Final exam
CLO1	✓	✓	✓		✓
CLO2	✓	✓		✓	✓
CLO3	✓	✓	✓	✓	✓
CLO4	✓	✓		✓	✓
CLO5			✓	✓	✓

8. Assessment Distribution

The source course document specifies CIE = 40 marks and SEE = 60 marks, but does not state the component-wise distribution of the 40 CIE marks. The following CIE breakdown is a proposed option for departmental approval.

Assessment component	Weight	Suggested evidence / purpose
Attendance	5%	Regular participation and engagement.
Class test	5%	Short tests on foundational concepts and circuit interpretation.
Assignment	5%	Analytical or numerical problem set, with clear working and interpretation.
Presentation	5%	Short technical presentation on a device, circuit, or application relevant to the syllabus.
Mid-Semester Exam	20%	Assessment of the first part of the course, consistent with the department examination schedule.
Final Semester Exam	60%	Comprehensive assessment of course concepts, device operation, circuit analysis, and applications.
Total	100%	

9. CLO Attainment Evidence

CLO	What students should demonstrate	Possible evidence
CLO1	Appropriate use of computer-based information systems and computer tools for a task.	Practical task, quiz, assignment.
CLO2	Clear understanding of the roles computers play in daily life.	Class test, written explanation, presentation.
CLO3	Effective use of the Internet/WWW for research and information sharing.	Guided search, research brief, source list, project.
CLO4	Recognition and description of legal, social, ethical, and communication issues.	Case analysis, assignment, presentation.
CLO5	Understanding and contribution to stages of a team-based computer systems project.	Project plan, analysis, design, documentation, test record, final presentation.

10. References

1. Sinha, P. K., & Sinha, P. (2020). Computer Fundamentals (8th ed.). BPB Publications.
2. Gordon, B. D., & Margrethe, O. (1985). Management Information Systems—Conceptual Foundations, Structure and Development. McGraw-Hill.
3. Kenneth, C. L., & Jane, P. L. (2019, 16th ed.). Management Information Systems: Managing the Digital Firm. Pearson.