



COURSE OUTLINE

SPRING 2025

I. Basic Information:

| | | | |
|----------------------------------|---|------------------------------|------------------|
| Faculty Name: Syed Shakil Mahmud | | | |
| Class Schedule | Day | Time | Platform |
| | Tuesday | 9:00-10:30am | Room - 309 |
| | Wednesday | | Room - 303 |
| Counseling Hour | Day | Time | |
| | Wednesday | 2:30-3:30pm | |
| | Tuesday | 2:30-3:30pm | |
| Contact Details | shakil.cse@baiust.ac.bd 01863784974 | | |
| Course Pre-requisites | | | |
| Course Title | Computer and Its Application | | |
| Course Code: GED 1203 | | Credit: | Contact Details: |
| Number of Lectures: 25 | Number of Class Tests: 2 | Assignment / Presentation: 1 | Total: 28 |

II. Course Description:

- To express the basic knowledge level to understand Computer Fundamentals.
- To introduce the fundamentals of computing devices and reinforce computer vocabulary, particularly with respect to personal use of computer hardware and software, the Internet, networking and mobile computing.
- To formulate a basic theoretical and practical knowledge and experience of computer use in the legal study.
- To prepares students for life-long learning of computer concepts and skills.

III. Course Learning Outcome (CLO)/ Matrix:

| | | Level of Domain | | | | PO |
|------|--|-----------------|---|---|---|------|
| | | C | P | A | S | |
| CLO1 | Recognize and define basic concepts of computer including hardware and software also able to present them. | 2 | 2 | 2 | 4 | 2, 4 |



| | | | | | | |
|------|--|---|---|---|------|------|
| CLO2 | Recognize and identify advantages and disadvantages of modern tools like computer, internet, etc.. | 3 | 2 | 3 | 4 | 2, 6 |
| CLO3 | Use application software like word processor, spreadsheet, presentation, and database tools to manage educational and professional data, papers, presentation, etc.. | 4 | 3 | 4 | 6, 8 | 6, 8 |

C: Cognitive; P: Psychomotor; A: Affective; S: Soft-skills (CT: Critical Thinking, TW: Teamwork)

IV. Mapping of CLOs and PLOs:

| CLOs | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 | PLO9 |
|------|------|------|------|------|------|------|------|------|------|
| CLO1 | | M | | M | | | | | |
| CLO2 | | M | | | | L | | | |
| CLO3 | | | | | | M | | L | |

V. Lecture Outline:

| Sl/ Class | Topics/ Assignment | Specific Outcomes | Teaching Strategies & Suggested Activities | Teaching Aids/Tools/ Materials | Assessment Strategies | Alignment with COs/ CLOs |
|--------------|---|--|--|--------------------------------------|--------------------------|-----------------------------------|
| 1 | Introduction to computers and Computer Hardware: Major components of computer. | Define computer and identify major components | Lecture, Discussion | Whiteboard, Multimedia slides | Continuous Assessment | 1,2 |
| 2 | Introduction to computers and Computer Hardware: Basic architecture of a computer; Processor, memory, and I/O devices. | Describe basic architecture ; explain processor, | Visual explanation, Practical examples | Multimedia, Diagrams | Continuous Assessment | 1,2 |



| | | | | | | |
|---|--|--|------------------------------|---------------------------|-----------------------|-----|
| | | memory, I/O | | | | |
| 3 | Memory and Storage: Definition, Bit, Byte, Word, Storage Capacity.. | Define memory units and measure storage | Lecture, Hands-on activities | Charts, Multimedia slides | Continuous Assessment | 1,2 |
| 4 | Memory and Storage: Types of Memory, classification of memory and storage. | Differentiate memory types and storage classifications | Group activity, Examples | Multimedia, Diagrams | Continuous Assessment | 1,2 |
| 5 | Memory and Storage: Types of Main Memory, Semiconductor Memory, Read/Write in memory/storage | Understand operations of main memory | Visual demonstration | Diagrams, Multimedia | Continuous Assessment | 1,2 |
| 6 | Numbering systems and computer's internal data representation: Binary, octal number system. | Convert between binary and octal systems | Problem-solving activities | Whiteboard, Worksheets | Continuous Assessment | 1,2 |
| 7 | Numbering systems and computer's internal data representation: Hexadecimal, decimal number system. | Convert between hexadecimal and decimal | Problem-solving activities | Worksheets, Multimedia | Continuous Assessment | 1,2 |
| 8 | Numbering systems and computer's internal data representation: Data representation systems in computer. | Explain how data is represented internally | Lecture, Discussion | Whiteboard, Diagrams | Continuous Assessment | 1,2 |
| 9 | Numbering systems and computer's internal data representation: | Perform conversions between | Hands-on practice | Worksheets | Continuous Assessment | 1,2 |



| | | | | | | |
|----|--|--|---|-----------------------------|-----------------------|-----|
| | representation: Converting one number system to another. | number systems | | | | |
| 10 | Class Test | Evaluate understanding of first 9 classes | Test | Question papers | Class Test (CT-01) | - |
| 11 | Operating System: Definition, functions of operating system, types of operating systems. | Define OS, explain types and functions | Lecture, Examples | Multimedia, Whiteboard | Continuous Assessment | 1,2 |
| 12 | Operating System: Resource Management, Task Management, File Management, Security, Utilities. | Identify OS management functionalities | Case Study, Discussion | Diagrams, Multimedia | Continuous Assessment | 1,2 |
| 13 | Application software: Types of application software, acquisition of software, closed-source vs open-source software. | Recognize application software types and licensing | Group Discussion, Case examples | Internet access, Multimedia | Continuous Assessment | 1,2 |
| 14 | Word processing software: system environment, features and functions, editing, formatting, printing options, search/replace and block commands. | Demonstrate basic functions in word processing | Explain functions of word processing software | Computers, MS Word | Continuous Assessment | 3 |
| 15 | Word processing software: system environment, features and functions, editing, formatting, printing options, search/replace and block commands. | Perform editing, formatting, printing | Explain functions | Computers, MS Word | Continuous Assessment | 3 |
| 16 | Presentation software: system environment, features and functions, editing, formatting and printing options. | Create and edit presentations | Explain functions | Computers, MS PowerPoint | Continuous Assessment | 3 |



| | | | | | | |
|----|--|---|--------------------|-----------------------------|-----------------------|-----|
| 17 | Spreadsheet software: worksheet environment, entering data/formulas, editing, cell references, recalculating formulas, designing templates, "what if" analysis, graphics. | Enter and manipulate data in spreadsheets | Explain functions | Computers, MS Excel | Continuous Assessment | 3 |
| 18 | Spreadsheet software: worksheet environment, entering data/formulas, editing, cell references, recalculating formulas, designing templates, "what if" analysis, graphics. | Perform 'what-if' analysis and use graphics | Explain functions | Computers, MS Excel | Continuous Assessment | 3 |
| 19 | Class Test – 02 | Evaluate mid-course learning | Test | Question papers | Class Test (CT-02) | - |
| 20 | Database software: system environment, creating structure, displaying records. | Create databases and manage records | Explain functions | Computers, MS Access | Continuous Assessment | 3 |
| 21 | Database software: Sorting records, manipulating records, report generation, query facility. | Query and generate reports in databases | Hands-on exercise | Computers, MS Access | Continuous Assessment | 3 |
| 22 | Computer network and Internet: Computer networks, types of networks, network topologies, intranet and internet. | Explain networking basics and types | Lecture, Diagrams | Multimedia, Diagrams | Continuous Assessment | 1,2 |
| 23 | Computer network and Internet: Communication media: twisted pair, coaxial cable, optical fiber. | Identify communication media | Practical examples | Cable samples, Diagrams | Continuous Assessment | 1,2 |
| 24 | Computer network and Internet: Networking devices, internet | Use of basic networking devices, | Demonstration | Internet access, Multimedia | Continuous Assessment | 1,2 |



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|----|--|--|-----------------------------|--------------------------|-----------------------|-------|
| | terminology, use of a web browser, usage of e-mail, online business. | internet tools | | | | |
| 25 | Computer Ports: Computer Ports, Types of Ports | Identify and use different ports | Practical Demonstration | Computer hardware, Ports | Continuous Assessment | 1 |
| 26 | Review Class | Recap main concepts | Question-Answer, Discussion | Multimedia, Whiteboard | Continuous Assessment | 1,2,3 |
| 27 | Review Class | Final preparation for exam | Group Discussion | Multimedia, Whiteboard | Continuous Assessment | 1,2,3 |
| 28 | Mathematical Problem Solving | Solve number system and logic problems | Problem-solving session | Worksheets, Whiteboard | Continuous Assessment | 2 |

VI. Books/References:

Introduction to Computer - P. Norton

Computer Science- Warford

Inside the PC - P. Norton

Introduction to Computer - M. Alamgir

VII. Assessment Methods:

| Category | Marks % |
|----------------------------------|---------|
| Class Participation/ Observation | 5 |
| Class Attendance | 0 |
| Quizzes/class tests | 10 |



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|-----------------------------|------------|
| Assignment | 5 |
| Midterm | 30 |
| Final Examination (3 hours) | 50 |
| Total | 100 |

VIII. Grading System

| Numeric Grade | Letter Grade | Grade Point |
|----------------------|--------------|-------------|
| 80% and above | A+ | 4.00 |
| 75% to less than 80% | A | 3.75 |
| 70% to less than 75% | A- | 3.5 |
| 65% to less than 70% | B+ | 3.25 |
| 60% to less than 65% | B | 3.00 |
| 55% to less than 60% | B- | 2.75 |
| 50% to less than 55% | C+ | 2.50 |
| 45% to less than 50% | C | 2.25 |
| 40% to less than 45% | D | 2.00 |
| Less than 40% | F | 0.00 |

IX. Course Requirements

Class attendance: Minimum 80% of total class attendance is required to attend the final examination. Below 80% attendance, associated marks will be counted as 0. In case of sickness 70% attendance may be considered by the VC with proper medical documents provided by the students. All students are expected to attend all scheduled classes, and to read all assigned chapters / materials before coming to class

Late submission of work: If there is any assignment given to the students, they have to submit it before the deadline decided by the course teacher. Late submission will be followed by penalty, please maintain deadlines. Late submission of homework/assignment will have negative impact on marks.

Unfair means /plagiarism: Plagiarism is going to be handled by severe punishment. Original work submission is motivated because it carries marks of value. Students are strongly encouraged to interact and discuss ideas and materials for courses among themselves.

X. Students' Responsibilities

- Students are required to abide by the existing rules, regulations, code of conduct of BAIUST.
- Regular participation in class maintaining ethics and proper dress code



- Interactive discussion with course teacher
- Regular go through text books and recommended books or online resources.
- Students must maintain at least 70% class attendance. Attendance below 70% is only permitted (minimum 50%) if a valid medical report is submitted.

XI. Teaching Method

1. Formal lectures will provide the theoretical basis and cover the practical implementation of the topic. A collection of lecture notes, tutorial examples, followed by debate and explanation, along with suggested reading, will support and guide the learners in their own private research.
2. Maximum topics from the textbook will be covered. Reference books will be followed for the remaining subjects. All notes of the class will be uploaded to the internet. Most of the moment, Multimedia projector will be used for the students. White board will be used, convenience in some cases.
3. Before entering the class, students must study until the last lesson and it is recommended that they go through the appropriate section before entering the class. It's not enough just to be present in the class. Students must be involved in debates in the classroom. In order to test their class efficiency, few tasks will be provided to the learners based on that class.

XII. Course Teacher Strategy Statement (Personal Perspective) to improve Teacher-Student Interaction and Class Participation:

As a course teacher, my strategy focuses on creating an interactive, inclusive, and engaging learning environment. I will encourage students to actively participate through guided questioning, case-based discussions, and real-world examples that connect technology to the legal field. To ensure every student feels comfortable contributing, I will regularly conduct short in-class quizzes, group discussions, and debates on current technological issues affecting law (such as cybersecurity, data privacy, and digital evidence).

Additionally, to foster a two-way communication, I will adopt an open-door policy for consultations, provide timely feedback on assignments, and create a supportive atmosphere where students can freely ask questions, share insights, and apply learned concepts critically. Regular presentations and problem-solving exercises will also help students build confidence and critical thinking skills, crucial for their future legal professions.

XIII: Program Learning Outcomes (PLOs):

| PO No. | Program Learning Outcomes |
|--------|---|
| PO1 | Apply fundamental knowledge of computers and digital tools relevant to legal studies and practices. |



| PO No. | Program Learning Outcomes |
|--------|--|
| PO2 | Demonstrate critical thinking and problem-solving skills by analyzing the role of modern technology in law. |
| PO3 | Identify and evaluate ethical and legal issues related to the use of information technology. |
| PO4 | Communicate effectively using appropriate technological tools for documentation, presentation, and research. |
| PO5 | Work collaboratively and responsibly in diverse teams using digital resources. |
| PO6 | Understand professional, ethical, and social responsibilities in the use of modern tools and the internet. |
| PO7 | Recognize the need for and engage in independent and lifelong learning regarding advancements in technology related to legal practice. |
| PO8 | Use digital platforms for efficient legal research, documentation, and case management. |

XIV. Verification

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|--|---|--|
| Prepared by, ----- Course Teacher Date: | Checked and Certified by: ----- Head of Department Date: | Approved by: ----- Dean / Chair of Academic Council Date: |
| Checked by: ----- Program Coordinator Date: | Moderated by: ----- Program Coordinator Date: | Moderated by: ----- Program Coordinator Date: |