

**AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)**

Faculty of Science and Technology

Department of Computer Science

Undergraduate Program

**COURSE OUTLINE**

**I - Course Code and Title:** CSC 1101 Introduction to Computer Studies

**II - Credit:** 1 credit hour (3 hours of Lab per week)

**III - Nature:** Introductory Course for BSc. in CS

**IV - Course Description:**

This course is designed for the freshers (1st semester students). It is an introductory course on computer studies. The primary focus of this course is to teach students fundamental topics of computing such as number systems, hardware and software systems, flow chart design, aspects of the different operating systems, using Office-365 tools, etc. Also, students will achieve knowledge on very basic structural programming (how to write a simple program using ***variables***, ***printf*** and ***scanf***). This course also focuses on ***safe internet browsing*** for 21st century. Moreover, the course will highlight university and department’s rules, regulations and policies etc. Finally, students will undertake CISCO IT Essentials training during this course.

**V – Objectives:**

**At the end of the course, the students will be able to:**

1. Understand AIUB’s and CS department’s rules and regulations.
2. Develop the pre-requisite and essential knowledge for further courses (e.g. Introduction to programming, Data Structures, Algorithms).
3. Define number systems for performing basic mathematical operations.
4. Define aspects of computer programming language.
5. Demonstrate basic structural programming concept.
6. Make good use of Internet, Office 365 tools

**VI – Topics to be covered**

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| --- | --- | --- | --- | --- | --- |
| **Time Frame** | **Lecture** | **TOPICS** | **Specific Objective(s)** | **Suggested Activities** | **Teaching Strategy(s)** |
| **W 1** | *L1* | * Mission & Vision of AIUB * Rules and Regulations of the CS department * Course Outline * CISCO IT Essentials | 1. Mission & Vision of AIUB 2. To understand key difference between university education and Higher Secondary level. 3. Details discussion on department’s policies (pre-registration, registration, exam permit, Set-B exams, Adding/Dropping, Grading scale) 4. Course Evaluation procedures and dates. 5. What is CISCO IT Essential? 6. Significance of the CISCO Module | Group Discussion | Power point slides |
| **W 2** | *L2* | * Introduction to Computers * Number System * IT Essentials-Chapter 1 * Discussion about course Add/Drop procedure | 1. What is a Computer? 2. Familiarization with basic Input and Output Devices 3. How does Computer work? 4. Significance of Number system in computing 5. Chapter -1 of IT Essentials | Lecture and  Group Discussion | Power point slides  Online tutorials |
| **W 3** | *L3* | * Flow chart. * IT Essentials-Chapter 2 * Introduction to VUES and AIUB website * Introduction to Learning System Management | 1. What is Flow chart? 2. Understand the significance of Flow-chart in program writing 3. Develop programs from Flow-chart 4. Chapter-2 IT Essentials 5. Getting familiar with VUES and online resources. 6. Unitization of Learning System Management. | Lecture and Group Discussion  **Quiz -1 (L1+L2)** | Power Point slides |
| **W 4** | *L4* | * Basic computer architecture * IT Essentials Chapter 3 and Chapter 4 * Academic Honesty | 1. Discussion about Basic Computer Architecture. 2. Chapter-3,4 IT Essentials. 3. Discussion about Academic honesty, AIUB policies about disciplinary cases, and probable Impact on academic life. 4. Academic Integrity | Lecture  **CISCO Exam (1-4)** | Power point slides |
| **W 5** | *L5* | * Structural Programming * IT Essentials Chapter 5 and 6 * AIUB Grading Structure & Exam Permit Policy | 1. Develop small programs using structural concept. 2. Chapter-5,6, IT Essentials. 3. Understanding about AIUB grading structure and calculation. 4. Discussion about Exam Permit policies during and before exam. | Lecture  **Quiz – 2 (L4+L5)** | Power point slides |
| **W 6** | *L6* | * Revision Class | Chapter Exam (5-6) | **CISCO Exam** | N/A |
| **Midterm Week**  **Week 7** | | | | | |
| **W 8** | *L7* | * Introduction to Office 365. * IT Essentials Chapter 7 and 8 * Pre-registration & Pre-requisite courses. | 1. Explain tools available in Office 365 2. Microsoft Word, Excel (introduce basic features i.e. plot, row-column calculation etc.) 3. Chapter-7,8, IT Essentials 4. Discussion about pre-registration & pre-requisite courses. | Lecture | Power point slides, hands on tutorials |
| **W 9** | *L8* | * MS Power-point * IT Essentials Chapter 9,10 * Setting Life Goals & Managing Time | 1. Creating presentation using Microsoft Power Point 2. Use of different features available in power point to make presentation attractive 3. Chapter-9,10, IT Essentials 4. Strategies about setting life goals & managing time to achieve that. | * Lecture * CISCO Exam on chapter 7-10 | Power point slides, hands on tutorials |
| **W 10** | *L9* | * Introduction to Internet browsing * Email account * Logic Gate * IT Essentials Chapter 11,12 * Learning Systems | 1. What is safe browsing? 2. Browsing policy in AIUB 3. Create Email account using internet 4. Chapter 11,12, IT Essentials. 5. Understanding Logic Gate and the use of these. 6. Discussion about different Learning Systems. | Lecture | Power point slides |
| **W 11** | *L10* | * Pseudo Code & Algorithm * Digital Content Handling * IT Essentials Chapter 13,14 | 1. Describe pseudo code and algorithm. 2. What is Digital Piracy? 3. Chapter 13,14, IT Essentials. | **Quiz 3 (L7-9)**  ***\*Do not include Cisco items in the quiz. Students will be evaluated separately for that*** | Power point slides |
| **W 12** | L*11* | * CISCO Chapter Exam | 1. Exam (11-14) | N/A | N/A |
| **W 13** | L12 | * Final Exam for CISCO * Final Presentation | 1. Final Exam and Presentation 2. Student Presentation on their chosen recent topic. | N/A | N/A |
| **Final Exam Week**  **Week 14** | | | | | |

**VII- Course Policies:**

1. **Student Attendance**

All students are expected to attend all scheduled classes, and to read all assigned chapters / materials before coming to Class. Attendance will be taken at the beginning of each lab period. Students with less than **80%** attendance **will not receive any marks for attendance**. No excuses will be entertained.

1. **Lab Participation & Peer Evaluation**

You Students are expected to participate actively in the class. Your contribution towards your team will be counted too. Performance will be recorded individually and in a group during discussion.

1. **Quiz & Exam**

For mid-term, there will be two quizzes, average quiz marks will be counted for grading. For final term, only one quiz will be taken. You will also have to present a topic given by your course teacher at the end of semester.

No Make-up Quiz will be taken!!!

1. **Poor grades in Midterm Exam:**

Students with **“F”** or **“I”** in the midterm, must drop the course (as per University policy) right after the mid-term exam. If you wish to continue with **“F”** at your own risk and if you receive **“F”** in the final, you won’t be allowed to drop the course. For some reason, if your drop application is rejected then **“UW”** will remain in the mid and that will automatically convert into “**F”**

**VIII – Evaluation:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Mid** | **Theory** | **(1 credit)** | **Contribution** |
| Attendance: | 10% | **40%** |
| CISCO (Pre-test+Chapter exams+Skill Exam+Final Exam) | 30% |
| Quiz: | 20% |
| Mid-term Viva: | 40% |
|  |  |  |  |
| **Final** | Attendance: | 10% | **60%** |
| CISCO (Pre-test+Chapter exams+Skill Exam+Final Exam) | 30% |
| Quiz: | 20% |
| Final Presentation: | 40% |
|  | **Total:** |  | **100%** |

**IX- Instruction for Course Teacher (For ALL sections)**

1. This course is offered to ALL the 1st semester CS students and therefore, multiple teachers will be teaching this course.
2. Teachers must maintain the course outline strongly during the semester. If a teacher wants to add additional topic then it must be discussed with other teachers and Head of Dept.
3. The course teachers must meet with the convener fortnightly to discuss any issues regarding the course.
4. The convener must keep record of course-mate meetings and provide a summarized report to the Head of Dept.
5. The teachers must follow the mentioned evaluation procedure (section VIII) for ALL sections.
6. While preparing the quiz questions, do not include anything from Cisco module. Students will be evaluated for CISCO separately.
7. Off-Campus CISCO exams are strongly discouraged. Do not enable any exam for students while they are not in the classroom.
8. If any student tries to practice unfair means (copying, searching on google etc.), then teacher must give student 0 marks for that exam.
9. During the exam, students must leave personal belongings (bags, notes, mobile) at the front of the class room.