**CSC241 – Introduction to Computing**

Instructor

***Name:*** *Ramzi A. Haraty*

***Email:*** *rharaty@lau.edu.lb*

***Office:*** *OGB403*

***Office Hours:*** *M 2:30 – 4:30 and WF 10:00 – 12:00*

**Current Catalog Description**

This course provides a breadth first coverage where students would acquire a holistic understanding of computing and an appreciation for technology’s impact on society. Topics include binary values and number systems; data representation; gates and circuits; computing components; problem solving and algorithm design; low-level and high-level programming languages; abstract data types and algorithms; operating systems; file systems and directories; information systems; artificial intelligence; simulation and other applications; computer networks; the world wide web; and limitations of computing.

Course Prerequisite/Co-requiste

None.

**Textbook and References**

J. Glenn Brookshear, Computer Science: An Overview, 11th edition, Addison-Wesley, 2012, ISBN-10: 0-273-75139-5.

**Course Type**

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| --- | --- | --- | --- | --- | --- |
| **R**equired | [ ]  | **E**lective | [ ]  | **S**elective **E**lective | [x]  |

**Course Learning Outcomes**

CLO1. How to design and write algorithms.

CLO2. What is abstraction and its role in developing large software systems.

CLO3. Data representation and the storage of data within a computer.

CLO4. Understand the computer architecture, machine language and instruction execution.

CLO5. Learn the evolution of operating systems, and operating system architecture.

CLO6. What is a process, and how to manage processes.

CLO7. Network classifications and internet architecture.

CLO8. Historical development of programming languages.

CLO9. Software Engineering discipline; Life cycle, modularity, design methodologies, testing and documentation.

CLO10. Data structuring and abstraction.

CLO11. Database systems and how abstraction is used to extract useful information from large complex data collections.

Course Grading and Performance Criteria

### Exam I 33%

Exam II 33%

Exam III 34%

**Topics Covered in the Course**

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| --- | --- | --- |
| Week | Lecture / activity | Textbook- Chapter |
| 1 | Introduction | Chapter 0 |
| 2 | Data Storage  | Chapter 1 |
| 3 | Data Manipulation | Chapter 2 |
| 4 | Operating Systems | Chapter 3 |
| 5 | Operating Systems | Chapter 3 |
|  | **Exam I (Chapters 0, 1, 2, and 3)** |  |
| 6 | Networking & the Internet  | Chapter 4 |
| 7 | Networking & the Internet  | Chapter 4 |
| 8 | Algorithms | Chapter 5 |
| 9 | Programming Languages | Chapter 6 |
|  | **Exam II (Chapters 4, 5, and 6)** |  |
| 10 | Software Engineering | Chapter 7 |
| 11 | Data abstraction | Chapter 8 |
| 12 | Database Systems | Chapter 9 |
| 13, 14 | Artificial Intelligence | Chapter 11 |
|  | **Exam III (Chapters 7, 8, 9 and 10)** |  |

#### **Policy on Cheating and Plagiarism**

Students caught cheating on an exam receive a grade of zero on the exam in their first cheating attempt and receive a warning. Students caught cheating for the second time will receive a grade of “F” in the course and another warning. Plagiarism on assignments and project work is a serious offense. If plagiarism is detected, a student will be subject to penalty, similar to the cheating case, which ranges from receiving a zero on the assignment concerned to an “F” in the course in addition to a warning.

#### **Attendance Policy**

1. Students are held responsible for all the material presented in the classroom, even during their absence.
2. Students can miss no more than the equivalent of five weeks of instruction and still receive credit for that course.
3. Instructors have the right to impose specific attendance regulations in their courses, provided that the above-stated limit of absences is not exceeded, and the minimum number of absences allowed is no fewer than the equivalent of two weeks of classroom instruction, after the Drop and Add period.
4. Instructors will inform the Departments Chairperson and the Guidance Office, of any prolonged unexplained absence.
5. Students who exceed the allowed number of absences must withdraw from the course; otherwise, the course grade will be recorded as “F” (NP).

**Withdrawal policy**

“Students wishing to withdraw from one or more courses must follow the withdrawal procedure provided by the Registrar’s Office. Students withdrawing from courses after the late registration period and before the withdrawal deadline will receive Ws for all the courses in progress.”

***Deadline for withdrawal from courses***: December 7, 2012 (It is the student’s responsibility to drop the course)

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| **Course Evaluation:** |  **Completion of the online course evaluations is required. Students will not be able to access their course grades until they have completed the course evaluations**. |