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| **Course Number and Name** | CSC243 – Intro. to Object Oriented Prog. | **CSC243** |
| **Class Time and Location** | MWF 09:00 a.m. – 09:50 a.m., BB 1006 |
| **Lab Time and Location** | R 5:00 p.m. – 8:00 p.m., Sage 110/101 |  |
| **Credits and Contact Hours** | 3 |  |
| **Semester** | Fall 2014 |  |

Instructor

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***Office: Shannon Hall - 2103***

***Office Hours: MWF 10:30 a.m. – 11:30 a.m..***

**Current Catalog Description**

This course introduces the fundamental concepts and techniques, of programming and problem solving, from an object-oriented perspective. Topics include the introduction to computer systems (hardware, software, compilation, execution), fundamental programming constructs (variables, primitive data types, expressions, assignment), program readability, simple I/O, conditional constructs, iterative control structures, structured decomposition, method call and parameter passing, basic program design using algorithms, algorithm stepwise refinement, pseudo-code, introduction to the object-oriented paradigm (abstraction, objects, classes, entity and application classes, class libraries, methods, encapsulation, class interaction, aggregation), inheritance, error types, simple testing and debugging, 1-D and 2-D arrays, basic searching, and sorting algorithms.

Course Prerequisite

N/A

**Textbook**

Lewis and Loftus, Java Software Solutions: Foundations of Program Design, 7th Edition, Pearson

**Course Type**

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

**Course Learning Outcomes**

CLO1. Students will acquire the basic skills needed to write computer programs

CLO2. Students will be exposed to the fundamentals of object-oriented programming

CLO3. Students will apply the principles of problem solving and good programming habits

CLO4. Students will be able to implement, debug, and test programs

Course Grading and Performance Criteria

Exam I 25%

Exam II 25%

Final Exam 35%

Assignments/Quizzes 15%

**Topics Covered in the Course**

1. Computer model (2 hours)
2. Data and expressions (5 hours)
3. Classes; objects; API (4 hours)
4. Control statements: selection and repetition (9 hours)
5. Design: pseudocode; class notation (3 hours)
6. Simple testing and debugging (2 hours)
7. Implementing and using methods (6 hours)
8. Arrays: 1D and 2D (6 hours)
9. Searching algorithms: sequential (1 hour)
10. Sorting algorithm: selection sort or bubble sort (2 hours)
11. Encapsulation and class composition (2 hours)
12. Inheritance (2 hours)

#### **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.

#### **Deadlines**

Students who fail to submit their assigned work on time will receive a zero grade. Students are given one week after the grades are announced to request review of the correction of their exam paper or assigned work.

#### **Attendance Policy**

1. Students are held responsible for all the material presented in the classroom, even during their absence.
2. Students who miss an exam are not automatically entitled to makeups. A grade of zero will be given on the missed exam until valid reasons (in writing) are presented and approved by the course instructor. Students should present their written reason within three days after the exam date; otherwise, it will not be accepted.
3. Students can miss no more than the equivalent of five weeks of instruction and still receive credit for that course.
4. 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.
5. Instructors will inform the Departments’ Chairperson and the Office of the Dean of Students, of any prolonged unexplained absence.
6. 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**

1. A student who withdraws after the Drop/Add period and by the end of the 5th week of classes (10th day of classes for Summer Modules) will obtain a “WI” on that particular course. The student may process such request directly through the Registrar’s Office.

2. A student who withdraws from a course between the 6th week and the end of the 10th week of classes (18th day of classes for Summer Modules) will receive either a “WP” or a “WF”. “WP” or “WF” will be determined by the instructor based on the achieved academic performance in that course till the time of withdrawal.

3. The “WI” and the “WP” will not count as a repeat; whereas the “WF” will count as a repeat.

4. “WI”, “WP” and “WF” will not count towards the GPA calculation.

5. The deadlines for “WI” or “WP”/”WF” are clearly stated on the revised academic calendar on the LAU website: <http://www.lau.edu.lb/academics/calendar/20122013/#spring_2014>

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| WI is equivalent to Early withdrawalWP is equivalent to Withdrawal/PassWF is equivalent to Withdrawal/Fail |

***Deadline for withdrawal from courses***: November 25, 2014 (It is the student’s responsibility to drop the course)

**Course Evaluations**

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.