

## 1. Schedule

| Lecture | Sections   | Time    | Room      | Instructor      |
|---------|------------|---------|-----------|-----------------|
| 1       | 1, 2, 3    | 8:00 MW | Bliss 105 | Mrs. H. Bohsali |
| 2       | 4, 5, 6    | 9:00 MW | Bliss 105 | Mrs. H. Bohsali |
| 3       | 7, 8, 9    | 8:00 TR | Bliss 105 | Mrs. H. Bohsali |
| 4       | 10, 11, 12 | 9:30 TR | Bliss 205 | Mrs. L. Aoude   |

## 2. Instructors

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| <p><b><u>Hayat Sidani Bohsali</u></b><br/> <b>E-mail:</b> hs09@aub.edu.lb<br/> <b>Room:</b> Bliss 113<br/> <b>O.H.:</b> MW 10:00-11:00 , T 9:00-10:00<br/>           or by appointment</p> | <p><b><u>Loa Aoude</u></b><br/> <b>E-mail:</b> la52@aub.edu.lb<br/> <b>Room:</b> Bliss 113<br/> <b>O.H.:</b> TR 10:30 – 12:00<br/>           or by appointment</p> |
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## 3. Course Description

CMPS 209 is a computer science course designed to cover the essential computer skills needed by students in sciences and business majors. The course introduces how computers and Internet technologies work by emphasizing conceptual understanding as well as practical operational proficiency.

The student will be able to use a personal computer, to effectively access the Web, understand hardware and software functions as well as the role of operating systems. Moreover, this course covers the essential concepts needed in designing spreadsheet applications, building personal relational databases, as well as basic programming skills using VBA. Students are not required to have any previous programming knowledge, and the level of instruction will be based on this assumption.

The course offers students an opportunity to apply skills in a laboratory environment. Assignments reflect a wide variety of applications. Students will learn and demonstrate proficiency in topics covered in the course or in the reading assignments.

## 4. Course Structure

Class sessions will be conducted in the form of two lectures and one supervised lab session per week. Each lecture is 50 minutes long while each lab session is 120 minutes long. The lab sessions will comprise hands on assignments under the supervision of a lab instructor. The assignments will require prior preparation of the material covered in the lectures

## 5. Course Learning Outcomes

By the end of this course, the student will be able to:

- gain fluency in IT Concepts related to software, hardware, networking, the Internet and the web, privacy, crime, and security over the web
- design workbooks, construct lists to which formatting, sorting and filtering can be applied, work with formulas and functions, manipulate cells references, and plot charts
- design, and write a solution to simple programming problems using VBA functions or macros that include sequence, selection, or repetition logic
- identify the elements of a database, basic relational terminology, and functional dependencies, create personal databases consisting of a few tables, with relations, forms, and reports using Access, and write basic SQL statements and queries

## 6. Textbook

📖 “IT Concepts and Applications”, e-book, Pearson, First Edition, International Edition.

## 7. References

📖 Online tutorials: “[www.gcflearnfree.org/excel2013](http://www.gcflearnfree.org/excel2013)”

## 8. Grading Criteria

|                                |      |
|--------------------------------|------|
| Lab Assignments and Attendance | 15 % |
| Lab Quiz                       | 12%  |
| Midterm                        | 30 % |
| Final Exam                     | 43 % |

*These percentages are tentative.*

## 9. Course Policies

📖 General Policies:

- ✓ The use of communication devices such as mobiles, hand held PCs, laptops, or blackberries, is strictly forbidden during lectures and exams. The appropriate action will be taken for those who violate of this rule.

📖 Missed Exams:

- ✓ Makeup exams will only be given to students who present a documented valid excuse within one week from the exam date. Students who fail to do so will get a zero on the missed exam. The University policy regarding incomplete work will be followed. Check university catalogue for details.

📖 Grading Policies:

- ✓ **Percentages are not shifted in lieu of missing any grading component.**
- ✓ **Passing the course requires achieving a passing exam average (average of midterm and final exam).**
- ✓ **Remaining without a grade in any of the above mentioned grading components and/or attaining a grade of zero on any of them might result in failing the course regardless of your scores in all of the other components.**

📖 Academic Dishonesty:

- ✓ Any violation of the University policies regarding individual academic integrity (cheating, plagiarism, class disruption, dishonesty...) will be reported and the appropriate action will be taken.

- ✓ The course includes several homework and programming assignments. You are free to discuss these assignments with others. However, the programs and homework solutions you submit are to be developed by you. Cheating is a very serious offense and will not be tolerated. Supplying others with material is also against this rule. **The policy is that both the supplier and receiver of information will be punished. As a minimum both will get a zero** on the assignment in question. The case will also be referred to the Dean's office and could result in a failing grade for the course and suspension or expulsion from the University.

#### 📖 Course Learning Tools:

- ✓ All the course material will be provided through Moodle.
- ✓ **It is the responsibility of the student to login regularly to Moodle and check for all course updates and requirements.**
- ✓ In case a student has any learning disability, the student should provide the course instructor with medical proof at the beginning of the semester so that necessary facilities and/or arrangements can be made.

#### 📖 Lab Work:

- ✓ Lab assignments will be posted on the course website every Friday.
- ✓ Students are expected to **download, read, and prepare the material** needed to solve the assignment **before** going to the lab session.
- ✓ Students should solve the assignment during the lab session. Due dates are non-negotiable; **assignments are due by the end of the corresponding lab session.**
- ✓ As a general rule, assignments finished outside the lab session are not accepted. In exceptional cases, **justified** late submission of assignments will be allowed **with penalty.**
- ✓ It is the responsibility of the student to ensure that the activity due (assignment, lab quiz ...) is submitted correctly on Moodle.
- ✓ Regular lab sessions will start as of **Monday, February 1, 2016.**

#### 📖 Attendance:

- ✓ Attendance will be regularly attended in both classes and labs.
- ✓ Coming in late is disruptive to the class. The instructor reserves the right of not allowing late students to attend the lecture. Students are advised to be in class on time.
- ✓ Students are responsible for all class work, lab work, programming assignments, and announcements made in class even when absent.
- ✓ Course withdrawal is the responsibility of the student.
- ✓ Students should do the lab work with the section in which they are registered. Attending with a different lab section is equivalent to missing the lab session unless a written permission is granted from the course instructor.

#### 📖 Need for Assistance:

- ✓ Students are encouraged to communicate with their instructors through emails.
- ✓ Lab instructors can provide help only during the lab sessions.
- ✓ **Private tutoring with cmps 209 lab instructors is strictly forbidden.**

## 10. Tentative Schedule

| Unit  | Topic                    | Week  | Material  | Pages            |  |
|---|--------------------------|---|---|------------------|--|
| Reading Assignment 1                                |                          |   | Privacy, Crime, and Security                            |                  |  |
| 1   | Spreadsheet Applications | 25/01-29/01   | Introduction  |                  |  |
|   |                          |   | Spreadsheets 1: Introduction and Conditional Formatting | 222-228          |  |
|   |                          | 01/02-05/02   | Spreadsheets 2: Lists & Data Validation                 | 204-209          |  |
|   |                          |   | Spreadsheets 3: Charts                                  | 133-168          |  |
|   |                          | 8/02-12/02  | Spreadsheets 4: Formulas & Functions                    | 12-16            |  |
|   |                          | 15/02-19/02   | Spreadsheets 5: References in Formulas                  | 75-78            |  |
|   |                          |   | Spreadsheets 6: Mathematical and Statistical Functions  | 84-92<br>339-342 |  |
|   |                          | 22/02-26/02   | Spreadsheets 7: Statistical cont. and Logical Functions | 99-101           |  |
|   |                          |   | Spreadsheets 8: Logical Functions                       | 296-300          |  |
|   |                          | 29/02-04/03   | Spreadsheets 9: Lookup & Reference Functions            | 102-104          |  |
| Spreadsheets 10: Lookup & Reference Functions       | 300-302                  |   |   |                  |  |
| 2   | IT Concepts              | 07/03-11/03   | Software  |                  |  |
|   |                          |   | Hardware  |                  |  |
| 3   | Programming              | 14/03-18/03   | VBA1: Introduction to Macros & Subroutines              |                  |  |
|   |                          |   | VBA2: Using Constants and Variables                     |                  |  |
|   |                          | <b>Midterm and lab quiz date:<br/>Friday, March 18<sup>th</sup>, 2016 from 5:00 to 7:30</b> |   |                  |  |
|   |                          | 21/03-25/03   | VBA 3: Writing Custom Functions                         |                  |  |
|   |                          |   | VBA 4: Selection Structures                             |                  |  |
|   |                          | 28/03-01/04   | VBA 5: Repetition Structures                            |                  |  |
|   |                          | 04/04-08/04   | VBA 6: Repetition Structures                            |                  |  |
|   |                          |   | VBA 7: Repetition Structures                            |                  |  |
| Reading Assignment 2                                |                          |   | Networking: pages: 973-997                              |                  |  |
| 4   | Databases                | 11/04-15/04   | Database 1: Database Concepts                           | 501-522          |  |
|   |                          |   | Database 2: The Relational Model                        | 560-573          |  |
|   |                          | 18/04-22/04   | Database 3: Normalization                               | 574-585          |  |
|   |                          |   | Database 4: SQL   | 638-677          |  |
|   |                          | 25/04-28/04   | Database 5: SQL   | 638-677          |  |
|   |                          |   | Database 6: Database Reports & Forms                    | 545-551          |  |
| Reading Assignment 3                                |                          |   | Spotlight: Web 2.0 pages: 892-905                       |                  |  |
| <b>Final Exam: As set by the registrar's office</b> |                          |   |   |                  |  |