



# INTRODUCTION TO COMPUTER SCIENCE



## Course Syllabus

<b>Course No:</b>	CS 10	<b>Instructor:</b>	Prof. Leonid Romanyuk
<b>Semester:</b>	Spring 2010	<b>Phone:</b>	(510) 628-8024
<b>Units:</b>	3	<b>E-mail:</b>	lromanyuk@lincolnuca.edu
<b>Class hours:</b>	Wednesday 12:30 pm – 3:15 pm	<b>Office Hours:</b>	MW 11:50 am -12:25 pm
<b>Class Room:</b>	TBA	<b>Office Room:</b>	402

### COURSE DESCRIPTION:

An introduction to the principles and concepts of computer science and its applications. Discussions focus on the use of computers in business and personal lives, computer system basics, computer architecture, hardware, systems and applications software, programming languages, software engineering, data communications, information systems, the history of computing and computer's impact on society. Introduction to the Internet and online information sources. Laboratory on use of computer hardware and software (3 units).

### LEARNING OBJECTIVES:

Students will learn about the latest available computer and the Internet technologies, practice the use of the Microsoft Windows operating systems, business applications in the Microsoft Office 2003/2007 package, and the use of open source software and the Internet applications and resources.

### INSTRUCTIONAL METHODS:

Lecture method is used in combination with the practical use of business software and the Internet. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Reading, writing, and computer assignments will be made throughout the course.

### REQUIRED MATERIALS:

- TEXTBOOK:** **Discovering Computers 2010: Living in a Digital World, Introductory**, by [Gary Shelly](#), [Misty Vermaat](#), Course Technology, 2009, ISBN 10: 0324786468
- SOFTWARE MANUAL:** **Microsoft Office 2003: Introductory Concepts and Techniques**, by [Gary Shelly](#), [Thomas Cashman](#), [Misty Vermaat](#), Thomson Course Technology, 2006, ISBN 10: 1-4188-5932-X
- OR:** **Microsoft Office 2007: Introductory Concepts and Techniques, Windows XP Edition**, by [Gary B. Shelly](#); [Thomas J. Cashman](#); [Misty E. Vermaat](#), Course Technology; 1st edition, 2007, ISBN-10: 141884327X
- OPTIONAL:** Publisher's Web site student resources at <http://www.course.com/>

## REQUIREMENTS:

All students are required to attend the class. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Students must complete all assignments and take all quizzes, mid-term exam and final exam **ON THE DATES DUE**. Talking in class, using cell phones, coming late, leaving the room at times other than at break time is not allowed. Plagiarism/cheating will result in the grade "F" and a report to the administration.

## TESTING:

Classroom activities	every week	10%
Quizzes	every week	10%
Assignments	every week	30%
Mid-term exam	3/10/2010	20%
Final exam	as scheduled	30%

There will be no make-up for a missed quiz or participation in a classroom activity. No make-up exams will be given unless you have the instructor's **prior** approval obtained in person **before** the exam date, with the exception of an extreme emergency. Late assignments will get no credit or reduced credit. *Students will not be allowed to use computers or cellular phones during tests.*

## GRADING:

Less than 50% total is an "F"; 75% total is "C+". Other grades will be calculated "on the curve" from the scores above.

## COURSE SCHEDULE:

Weekly schedule of topics is attached. Students should read every chapter of the textbook on the topic to be discussed in class before they come to class. Be ready to answer in writing all review questions at the end of the chapter.

## LABORATORY ASSIGNMENTS:

Weekly schedule of laboratory assignments is attached. Each laboratory assignment is due on the Monday of the next week after it is assigned. Additional assignments based on the Internet and library resources can be given during the semester. Take a folder and create a Project Notebook. You will put in this folder printouts of the results of all your assignments and storage media (floppy disk / CD disc / DVD disc / USB flash drive) with your assignments stored on it. The instructor can ask you to turn in this folder and grade your laboratory work at any time during the semester.

## MODIFICATION OF THE SYLLABUS:

**This syllabus was updated on January 12, 2010.** The instructor reserves the right to modify this syllabus at any time during the semester. An announcement of any changes will be made in the classroom.

# SPRING 2010 SCHEDULE OF TOPICS AND REQUIRED READING

*Textbook: Discovering Computers 2010: Living in a Digital World, Introductory*

Read every chapter on the topic to be discussed in class before you come to class.  
Be ready to answer in writing all review questions at the end of the chapter.

Date	Topics	Chapter
1/20/10	Introduction to Computers.	1
1/27/10	Coding Schemes and Number Systems.	Appendix C
2/03/10	The Internet and World Wide Web.	2
2/10/10	Application Software.	3
2/17/10	The Components of the System Unit.	4
2/24/10	Input.	5
3/03/10	Output	6
3/10/10	<b>Review</b> <b>MIDTERM EXAM</b>	<b>1 – 6</b> <b>Appendix A</b>
3/17/10	<b>Spring recess</b>	
3/24/10	Storage.	7
3/31/10	Operating Systems and Utility Programs.	8
4/7/10	Communications and Networks.	9
4/14/10	Database Management.	10
4/21/10	Computer Security, Ethics, and Privacy.	11
4/28/10	Small Business and Enterprise Information Systems.	n/a
5/05/09	<b>Review</b>	1 - 11
5/12/09	<b>COMPREHENSIVE FINAL EXAM</b>	1 - 11

## SPRING 2010 SCHEDULE OF LAB WORK

*Lab manual: Microsoft Office 2003: Introductory Concepts and Techniques*

**Each Lab assignment is due on the Monday of the next week**

Date	Topics	Chapter
1/20/10	Essential Introduction to Computers.	Introduction
1/27/10	Introduction to Microsoft Windows XP and Office 2003.	Microsoft Windows XP and Office 2003
2/03/10	Creating and Editing a Word Document.	Word 2003
2/10/10	Creating a Research Paper.	Word 2003
2/17/10	Creating a Resume Using a Wizard and a Cover Letter with a Table. Web Feature: Creating Web Pages Using Word.	Word 2003
2/24/10	Creating a Worksheet and an Embedded Chart.	Excel 2003
3/03/10	Formulas, Functions, Formatting, and Web Queries.	Excel 2003
3/10/10	What-If Analysis, Charting, and Working with Large Worksheets. Web Feature: Creating Static and Dynamic Web Pages Using Excel.	Excel 2003
3/17/10	<b>Spring recess</b>	
3/24/10	Creating and Using a Database.	Access 2003
3/31/10	Querying a Database Using the Select Query Window.	Access 2003
4/7/10	Maintaining a Database Using the Design and Update Features of Access. Integration Feature: Sharing Data among Applications.	Access 2003
4/14/10	Using a Design Template and Text Slide Layout to Create a Presentation.	PowerPoint 2003
4/21/10	Using the Outline Tab and Clip Art to Create a Slide Show Web Feature: Creating a Presentation on the Web Using PowerPoint.	PowerPoint 2003
4/28/10	E-Mail and Contact Management with Outlook Integrating Office 2003 Applications and the World Wide Web.	Outlook 2003 Office 2003 Integration
5/05/10	<b>Hand-in all your laboratory work before 12:25 pm.</b>	