

## CSC-100.001: COMPUTERS and INFORMATION

<b>Semester:</b>	Spring 2011
<b>Section:</b>	001
<b>Meeting Time(s):</b>	Tuesday, Friday, 11:20 AM -12:35 PM
<b>Location:</b>	McKinley Building, Room 205
<b>Instructor:</b>	Dr. Mehdi Owrang, Computer Science Professor – Computer Science Department
<b>Office Location:</b>	McKinley 104A
<b>Office Hours:</b>	Tuesday, Friday, 1:00– 3:00 PM Wednesday, 11:00 AM - 1:00 PM  Any other time with appointment
<b>Telephone:</b>	(202) 885-3159
<b>email:</b>	<a href="mailto:owrang@american.edu">owrang@american.edu</a>

### Course Description:

CSC-100: Introduction to Computer Information Systems is a basic course in computer hardware, software, and computer technology. The course focuses on (1) how computers work, (2) the hardware, software, and network components of a computer, (3) the role of the Internet, (4) basic computer usage skills (word processing, spreadsheets, and databases), and (5) a very broad overview of computer and information systems. Additionally the course examines the common uses (and abuses) that computers have enabled, including (1) personal communications (Email & IM), (2) research and research tools, and (3) user ethics and behavior. The course will try, where possible, to target many of the topics toward the use of computers in the student's daily life, student activities, and practical uses for academic success.

### Required Textbook(s)/Reading:

**Fluency 4 with Information Technology, Fourth Edition, Lawrence Snyder, 2011 Pearson Education, Inc.**

**ISBN- 13: 978-0-136-09182-0**

**ISBN- 10: 0-136-09182-0**

Both the required text book and the optional workbook are available at the bookstore as a single package. The package is the same price as the required textbook by itself.

### Course Objectives:

Students successfully completing this course should be able to:

1. Understand the principle hardware and software components of a computer.
2. Understand how these components work together to make the computer a functional tool.
3. Develop a broad and basic understanding of the primary user applications (word processing, and spreadsheets).

4. Demonstrate a basic competence in these primary user applications.
5. Understand the role and functions of networking and the fundamental concepts related to the Internet.
6. Understand some of the fundamental ethical, legal, and user “netiquette” associate with computer usage.
7. Broadly understand some of the activities and technologies used to link computers into Information Systems.
8. Be cognizant of developing trends and issues related to information systems.

### **Methods of Instruction:**

The format of the course will be lecture, class discussion, projects/assignments, on-line activities, and workshop sessions where students will gain hands-on experience. Students are EXPECTED to take advantage of training courses for specific computer software applications offered by the AU Library or available on CBT (Computer Based Training) in Anderson lab or similar experience.

### **Class Preparation:**

Each student is responsible for carefully and thoroughly reading all assigned material before the next class in preparation for thoughtful participation in each class. The majority of the readings will be from the assigned textbook. Additional readings may be assigned and class handouts may be distributed to supplement textbook assignments. The students are encouraged to answer the Review questions and the Exercises at the end of each chapter.

### **Attendance and Class Participation:**

Attendance in a class such as this is requisite for success. Active involvement in discussion is an integral part of this course. Lack of preparation to engage in discussion on the assigned material will be noted. 10% of the total grade is based on attendance and participation.

If classes must be missed, students should inform the instructor, arrange with classmates for notes and take responsibility for assignments missed. It is the responsibility of the student to download any missed handouts or assignments from the Blackboard site and/or send an E-mail to the instructor to request for the handouts/assignments.

### **Submitting Work:**

Note: Major written work should be prepared with a word processor and run through a spell-checker (the AU laboratories have word processing software available). Students are advised to use one of the many grammar checkers that are available (the AU laboratories have several).

### **Late Assignments:**

**Assignments are due on the due date/time. Late assignments will not be accepted unless in emergency cases.**

**Grading Criteria/Course Requirements:**

Grades for this course will be based on the following elements and deliverables;

Attendance and participation	10%
Assignments	30%
Mid Term Exam	30%
Final Exam	30%

Grades will be assigned according to the following standards:

A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D	60-69
F	0-59

“A” indicates achievement of distinction. It involves conspicuous excellence and an outstanding performance in all or nearly all aspects of the course. The “B” grade indicates performance that exceeds expectations. These grades are achieved by excellence in some part of the course requirements. A grade of “C” indicates that the basic requirements of the course have been met. A grade of “D” is given for work that falls below acceptable standards. Please note that there is no rounding when grades are calculated.

There will be three examinations: two midterms and one final. These will cover material presented in the textbook and class sessions. Class participation, attendance and writing skills will be considered in the evaluation of the student performance.

**Incomplete (I) Policy:**

The policy of the College of Arts and Sciences and the University is that the grade of Incomplete (I) is rarely given. Department approval for a grade of I is only granted in unusual, documented circumstances. In such rare instances, the student must make arrangements with the instructor before the final exam. A grade of I is not approved in instances where students were unable to complete the course work.

**Academic Integrity:**

The *Academic Integrity Code* for the American University describes standards for academic conduct, rights and responsibilities of members of the academic community, and procedures for handling allegations of academic dishonesty. Academic dishonesty as defined by the *Code* includes, but is not limited to: plagiarism, inappropriate collaboration, dishonesty in examinations (in-class or take-home), dishonesty in papers, work done for one course and submitted to another, deliberate falsification of data, interference with other students' work, and copyright violations (including both document and software copyrights). Copies of the *Academic Integrity Code* are available from the Office of the University Registrar.

Plagiarism is defined as taking the language, ideas, or thoughts of another, and representing them as your own. If you use someone's ideas, cite them; if you use someone's words; clearly mark them as a quotation. Plagiarism includes using another's computer programs or pieces of a program. Consult one of the many "writer's guides" that are available in the library and bookstores for citation practices. All instances of plagiarism will be reported to the Dean of the College of Arts and Sciences for appropriate action.

### **Student Services:**

If you experience difficulty in this course for any reason please don't hesitate to contact me. In addition to the resources of the department there exists a wide range of services available to support you in your efforts to successfully complete this course.

- Learning Services (x3360, MGC 201) LS offers study skills workshops, individual instruction, tutor referrals, and services for students with learning disabilities.
- Psychological Services (x3360, MGC 201) offers counseling and consultations regarding personal concerns, self-help information, and connections to off-campus mental health services.
- Disability Support Services (x3315, MGC 120) DSS offers technical and practical support and assistance with accommodations for students with physical or psychological disabilities.
- Assistance is available on campus for students who wish to improve their writing skills ([Writing center](#) 202.885.2991).

If you have a disability and might require accommodations for this course please notify me with a letter from DSS or LS as early as is convenient, so that we may make appropriate arrangements to address your needs.

**Mid Exam: Tuesday, March 1, 2011**

**Final Exam: Tuesday, May 3, 2011, 11:20 AM – 1:50 PM.**

## **Course Contents:**

**Chapter 1: Terms of Endearment, Defining Information Technology**

**Chapter 2: What the Digerati Know: Exploring the Human-Computer Interface**

- Our experience using (related) devices, including software, shows us what to expect
- Designers who create devices, including software, know about this experience and design products to match what we already know

**Chapter 3: Making the Connection: The Basics of Networking**

**Chapter 4: Marking Up With HTML: A Hypertext Markup Language Primer**

- Tags describe how a web page should look
  - `<title> </title>`

**Chapter 5: Searching for Truth: Locating Information on the WWW**

**Chapter 6: Searching for Guinea Pig B: Case Study in Online Research**

**Chapter 7: To Err Is Human: An Introduction to Debugging**

**Chapter 8: Bits and the "Why" of Bytes: Representing Information Digitally**

**Chapter 9: Following Instructions: Principles of Computer Operation**

- What computers can do
  - Deterministically perform or execute instructions to process information
  - The computer must have instructions to follow

**Chapter 10: What's The Plan? : Algorithmic Thinking**

- A precise, systematic method for producing a specified result

**Chapter 11: Light, Sound, Magic: Representing Multimedia Digitally**

**Chapter 12: Computers In Polite Society: Social Implications of IT**

**Improving the Effectiveness of Email**

**Chapter 13: Shhh, It's a Secret: Privacy and Digital Security**

**Chapter 14: Fill-in-the-blank Computing: The Basics of Spreadsheets**

**Chapter 15: "What if" Thinking Helps: Advanced Spreadsheets for Planning**

**Chapter 16: A Table with a View: Introduction to Database Concepts**

**Chapter 17: The iDiary Database: A Case Study in Database Organization**

**Chapter 18: Get With the Program: Fundamental Concepts Expressed in JavaScript**

**Chapter 19: The Bean Counter: A JavaScript Program**

**Chapter 20: Thinking Big: Programming Functions**

**Current Advances in Computing**

## **EMERGENCY PREPAREDNESS**

In the event of a declared pandemic (influenza or other communicable disease), American University will implement a plan for meeting the needs of all members of the university community. Should the university be required to close for a period of time, we are committed to ensuring that all aspects of our educational programs will be delivered to our students. These may include altering and extending the duration of the traditional term schedule to complete essential instruction in the traditional format and/or use of distance instructional methods. Specific strategies will vary from class to class, depending on the format of the course and the timing of the emergency. Faculty will communicate class-specific information to students via AU e-mail and Blackboard, while students must inform their faculty immediately of any absence due to illness. Students are responsible for checking their AU e-mail regularly and keeping themselves informed of emergencies. In the event of a declared pandemic or other emergency, students should refer to the AU Web site ([www.prepared.american.edu](http://www.prepared.american.edu)) and the AU information line at (202) 885-1100 for general university-wide information, as well as contact their faculty and/or respective dean's office for course and school/ college-specific information.