

ISM 253

Information Technology Architecture

Instructor: Steven Millet
Autumn Term 2017

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Course Time: Wednesdays, 6:00 – 10:30 PM

This course provides the hardware and software technology background necessary to enable students to understand computer architecture for effective use in the business environment. Students learn the various hardware designs, how to choose and organize hardware, fundamental operating systems concepts, and basic networking components. *Prerequisite: Information Systems Management 102 or competence - Or currently enrolled in ISM102. (3 Credits)*

Learning Goals and Objectives: At the end of this course, the student should

1. Be familiar with the computer hardware and networking components.
2. Have a basic understanding of the different kinds of operating systems software options available in business (i.e. Windows 95/98/2000/Vista/XP/8/10, Novell, Unix/Linux).
3. Understand the basic design logic behind how a computer operates.
4. Understand the variety of programming languages available to the business Software Developer (including Assembly Language).
5. Understand the programming fundamentals behind the internal operation of a computer systems Central Processing Unit (CPU) and Arithmetic and Logic Unit (ALU).
6. Have basic overview of computer programming fundamentals.

Required Course Text

Introduction to Computing Systems: From Bits & Gates to C & Beyond. By, Patt and Patel, 2004, McGraw-Hill , ISBN-10: 0072467509.

<u>Week</u>	<u>General Topics To Be Covered</u>
1	Course Overview
2	Computer Fundamentals
3	Welcome Aboard
4	Bits, Data Types and Operations Digital Logic Structures
5	Midterm Exam
6	The Von Neumann Model
7	Assembly Language Programming Concepts
8	Project Presentations FINAL EXAM

Methods for Assessment of Student Performance:

The student's final grade will be determined as follows:

20%	Weekly homework assignments
35%	Exams (2 scheduled)
15%	Project Presentation
10%	Attendance and Participation

The following Grading Scale will be used:

100 – 97	A+
96 – 94	A
93 – 90	A-
89 – 87	B+
86 – 84	B
83 – 80	B-
79 – 77	C+
76 – 74	C
73 – 70	C-
69 – 67	D+
66 – 64	D
63 – 60	D-
Below 60	F

Classroom Procedure:

The first 2 ½ to 3 hours of class will always be devoted to lecture. The remaining class time may be reserved for students to work on course assignments. Students are encouraged to make optimum use of this time, as your instructor will be readily available to answer any questions you might have. The only exceptions to this schedule may be on exam or quiz nights. Only students with excused absences will be allowed to take make-up exams and quizzes. Make-ups should be taken no later than one week after the exam (or quiz) date.

Academic Integrity:

The Doane Academic Integrity Policy will be adhered to in this class. All assignments and exams/quizzes will represent your own work. Any use of others' ideas and words without proper citation of sources is plagiarism and could result in the loss of all points for that particular assignment or exam.

Use of Personal Technology During Class:

Please restrict your use of cell phones to outside of class time. The use of PDAs, Laptop Computers and any personal audio/visual devices are generally prohibited during class time unless approved by your instructor.

Students with Disabilities/Reasonable Accommodations:

Doane seeks to maintain a supportive academic environment for students with disabilities. To ensure your equal access to all educational programs, activities and services, federal law requires students with disabilities notify the college, provide documentation, and request reasonable accommodations. If you need accommodations in this course, please notify your instructor immediately so that the required documentation is filed, and that your accommodation plan is in place.

Note: The schedule outlined in this syllabus is tentative. All efforts will be made to adhere to it as closely as possible. However, your instructor reserves the right to make any changes to the schedule as needed.