



SYLLABUS

Course Title	Information Technology Architecture
Course Number	ISM 253
Number of Credits	3 semester credits
Course Dates	8/13/18 – 10/13/18 Monday Evenings, 6:00 PM - 10:30 PM
Instructor	Steven Millet
Email Address	steven.millet@doane.edu
Office Hours/Availability	Email response immediate 10 am - 12 am. M - F, Outside of these hours, and Weekends variable / Available For Office Hours Before and After Class
Textbook Information: (e.g. title, edition, publisher, ISBN)	Required Text: <u>Introduction to Computing Systems: From Bits & Gates to C & Beyond</u> . By, Patt and Patel, 2004, McGraw-Hill , ISBN-10: 0072467509.
Additional Course Materials	Flash Drive recommended for backing up class material
Course Description	<p>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.</p> <p>Prerequisite: ISM 102 or competence.</p>

Program Outcomes	<p>a. Develop analytical and critical thinking skills to gather and analyze information, to identify and solve problems, to determine potential outcome alternatives, and to make appropriate decisions</p> <p>b. Recognize ethical issues involved in information technology and its management</p> <p>c. Understand information science and technology concepts and processes, their relationships to each other, and their relationships to existing and emerging computing technologies</p> <p>d. Develop the confidence and the skill to learn independently and apply existing and emerging computing technologies and processes</p> <p>e. Develop the confidence and the skill to solve an unknown problem and to efficiently research, learn, and apply a previously unknown topic or skill to a novel problem- solving situation</p>
Course Learning Outcomes/Objectives	<p>At the end of this course, the student should:</p> <ol style="list-style-type: none"> 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.
Technology Requirements	<p>https://www.doane.edu/faq/minimum-computer-requirements</p>

Course Schedule

Week or Module	Topic	Content	Assessments Matched to Learning Outcomes	Due Date & Time
1	Intro to Computer Architecture	Course Overview	Lab Assignment #1	Week 2 by 6 p.m.
2	Computer fundamentals	Chapter 1	Lab Assignment #2 (LO 1-3)	Week 3 by 6 p.m.
3	Bits, Data Types and Operations / Data Logic Structures	Chapters 2 - 3	Lab Assignment #3 (LO 1-3) Exam #1	Week 5 by 6 p.m.
4	NO CLASS 09 - 03 - 2018	Labor Day Holiday		
5	The Von Neumann Model	Chapter 4	Lab Assignment #4 (LO 3)	Week 6 by 6 p.m.
6	Assembly Language	Chapters 6 - 7	Lab Assignment #5 (LO 1-3)	Week 7 by 6 p.m.
7	Programming Concepts	Chapter 8	Exam #2	Week 8 by 6 p.m.
8	Project Presentations	In Class		

Grading Assessments

Type of Assessment	Assignments	Grade Percentage
Weekly homework assignments (Labs)	5	20%
Exams	2	35%
Project Presentation	1	15%
Class Participation	weekly	10%

Grade Scale

A+=95%-100% A= 90%-94% B+= 85%-89% B= 80%-84% C+=75%-79%
C=70%-74% D+=65%-69% D=60%-64% F= 59% or below

Participation Policy	A student is expected to be prompt and regularly attend on-ground classes in their entirety. Regular engagement is expected for on-line courses. Participation in class discussions is an integral part of your grade.
Study Time	Expectation of the amount of time the course requires students to spend preparing and completing assignments. Typically, students could expect to spend approximately 12 hours a week preparing for and actively participating in this 8-week 3 credit hour course. This actual time for study varies depending on students' backgrounds.
Late Work	Late work will be accepted, if for an excused reason with no reduction in grade.
Submitting Assignments	Assignments submitted during class time.
Communication Policy including Assignment Feedback	Emails will be responded to by the end of the day M - F. Assignments will be returned the week following their due date.

Academic Integrity Policy	New Academic Integrity Policy to be released AUTM 2018
Academic Support	Please contact academicsupport@doane.edu https://www.doane.edu/graduate-and-adult/academic-support
Disability Services	https://www.doane.edu/disability-services Doane University supports reasonable accommodations to allow participation by individuals with disabilities. Any request for accommodation must be initiated by the student as soon as possible. Each student receiving accommodations is responsible for his or her educational and personal needs while enrolled at Doane University. Please contact Chris Brady at chris.brady@doane.edu or 402-467-9031 for assistance.
Military Services	https://www.doane.edu/graduate-and-adult/military
Anti-Harassment Policy	http://catalog.doane.edu/content.php?catoid=5&navoid=452
Grade Appeal Process	http://catalog.doane.edu/content.php?catoid=5&navoid=238
Credit Hour Definition	Doane University follows the federal guideline defining a credit hour as one hour (50 minutes) of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks (one semester), or the equivalent amount of work over a different time period (e.g., an 8-week term). This definition applies to courses regardless of delivery format, and thus includes in-person, online, and hybrid courses (combination of in-person and online). It also applies to internship, laboratory, performance, practicum, research, student teaching, and studio courses, among other contexts.
Syllabus Changes	Circumstances may occur which require adjustments to the syllabus. Changes will be made public at the earliest possible time.