ISM 315 Systems Analysis and Design

Instructor: Steven Millet **Email:** steven.millet@doane.edu
Autumn Term 2017 Thursday Evenings, 6 – 10:30 PM

This course applies a student's understanding of the systems development and modification process as outlined by the systems development life cycle. It enables students to evaluate and choose a system development methodology. Students demonstrate their mastery of the analysis and design process acquired in this course and earlier courses by analyzing, designing, and constructing a physical system (implemented via a DBMS or programming language) from a logical design. ***Prerequisite: Information Systems Management 102 or competence***. (3 Credits)

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

1. Be familiar with several systems development methodologies.
2. Be familiar with the phases that comprise the Systems Development Life Cycle (SDLC).
3. Understand the popular systems diagramming techniques available (i.e. DFD, ERD).
4. Be familiar with the documented deliverables generated in each phase of the SDLC.
5. Understand factors that are evaluated in the systems selection process.
6. Understand considerations that are made in the software selection process.
7. Be familiar with the proper use of CASE tools in the systems design process.
8. Understand the factors involved in the design and implementation of a corporate DBMS.
9. Be able to construct an IS proposal for a corporate system from a logical systems design.
10. Understand the critical factors involved in successful project management.

Required Course Text

Systems Analysis and Design, 9th Ed. By, Kendall and Kendall, Pearson Prentice Hall, 2013, **ISBN** 0133023443.

Week	General Topics To Be Covered
1	Course Overview Introduction to Systems Analysis and Design The Systems Design Environment Systems for Coordination
2	Project Management Some Business Information Systems
3	Concept Formation Requirements Analysis Interviewing The Development Process Data Flow Diagrams Describing Data
4	Preparing the Systems Proposal Writing and Presenting the Systems Proposal Midterm Exam Review **MIDTERM EXAM**
5	Designing the New System Designing Effective Output Designing Effective Input Designing System Controls User Interface Design
6	Database Design Relational Analysis Program Design
7	Productivity Tools Software Engineering Strategic Planning Successfully Implementing the Information System
8	Final Exam Review **FINAL EXAM** **Class Project Presentations**

Methods for Assessment of Student Performance:

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

10% Class attendance and participation
25% Course assignments and activities
40% Exams (2 scheduled)
25% Class Project

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 1- 1 ½ 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 nights. Only students with excused absences will be allowed to take make-up exams. Make-ups should be taken no later than one week after the exam date. Students will also complete an information systems design project. Details about the requirements for this class project will be discussed the first night of class.

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.