IST 412 – 001
Information Systems: Analysis, Design, and Implementation
Spring 2015

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Office Hours: T H 10:00-11:00, T H 1:00-2:00, & T H 5:30-6:30; or by appointment
Final Exam: Tuesday, May 12th from 5:00 p.m. - 7:00 p.m.
Required Textbook: None.

Prerequisites: IST 232, 301, 334, ISAT 365, 366; IST major.
Course Description: This course examines analysis, design, and implementation of information systems. Topics will detail information systems from the perspective of end-users through various methods, including studying the development and implementation processes, designing strategies to meet end-user needs, and implementing a field-based product. Grade of C or better is required. Not for graduate credit.

Objectives: The student who successfully completes this course:

1. Understands the full systems development life cycle (SDLC) of information systems using structured methodologies and their importance to enterprise success.
2. Explains how the structured (classical, traditional) and the object-oriented approach differ when modeling the details of a use case.
3. Applies an economic analysis of information systems for selecting between alternative information system and technology projects.
4. Demonstrates knowledge of systems analyst techniques, tools, and methods such as:
   - Requirements gathering of information systems.
   - Structured (classical, traditional) systems analysis and design methodologies and processes.
   - Structured methodology notations and symbols used in process and information modeling.
   - Tools and techniques of systems analysis and design, such as:
     - Data flow diagramming
     - Entity relationship diagramming
     - Table instance charts
     - Conceptual diagramming techniques
     - Logical diagramming techniques
     - Data dictionaries (data elements and process definitions)
     - Interviewing and requirements modeling
4. Explain the key role of systems analysts in business.
5. Learns why ethical behavior is crucial for a systems' analyst career.
6. Uses computer-aided software engineering (CASE) tools such as Microsoft Visio 2013 and Visual Paradigm to help document, plan, and manage an information system project.

**Approach:** Lecture, homework, collaborative learning techniques (CoLTs) in-class exercises, group discussion and presentations, and course projects will be used to aid in understanding and application of information systems implementation.

**Desire 2 Learn (D2L):** Teaching materials, assignment postings, and communications will be made available on a D2L course site. Registration will take place prior to the start of the course.

**Evaluation:**
1. Course projects 30%
2. CoLTs 20%
3. Homework 20%
4. Exam 1, Economic Analysis of IS 10%
5. Exam 2, Process Modeling 10%
6. Exam 3, Information Modeling 10%

The final grading scale is based on overall percentages with about 90% required for an A, 80% for a B, 70% for a C, 60% for a D, etc.

**Policies**

**Homework Assignments:** Late homework and CoLTs will not be accepted. If you have a special circumstance, let me know in advance. I prefer hard copies of homework, but you can email your homework to me if you have to miss class for a legitimate reason.

**Participation:** Students are expected to actively participate in class by asking questions, working on in-class exercises, giving presentations as individuals or as part of their team projects, and sharing personal experiences and opinions related to the topics discussed. **Students who do not participate in class or miss more than 4 in-class hours without a pre-approved excuse will have their final grades reduced by one letter grade.** Be sure to contact me BEFORE you miss a class, if possible. Let me know about last minute emergencies via email or phone as soon as you can.

**Course Projects:** The project(s) instructions will be distributed and discussed in class.

**Course Policies and Requirements**

1. Students must have an active SIU email account. Instructor will only use SIU email. You may set up your SIU mail to forward to other accounts.
2. Students must have an active D2L account linked to this course.
3. Exam dates, assignments, and points assigned are subject to change by the instructor. Any changes will be announced in advance in class.
4. In the event of a missed class period or late arrival to class, it is the student's responsibility to retrieve information, instructions and lecture notes given in
class from other students and to send assignments with a classmate for submission.

5. **Cheating will not be tolerated on any assignment or test given for this course. CONSEQUENCES – There will be no second chances. If you are caught cheating, you will receive an "F" for the course.**

6. **INCOMPLETE GRADES will not be given unless there are extraordinary circumstances as deemed by the instructor.**

7. **Students should complete all reading and assignments on time and as directed. Assignments must be submitted in class on the due date, late assignments will lose 10% for each day they are late. DO NOT ASK TO EMAIL AN ASSIGNMENT OR DISCUSS THE REASON IT’S LATE. If you must turn in late assignments, simply submit the hard copy to me with your name, date of submission, and assignment number.**

8. **Exams:** Exams are open book and take home. Each exam will be discussed at length in class and ample time is given for the completion of the exam. Because of this approach, each student is responsible for submitting an individual exam. Group exam submissions are not acceptable. There may also be quizzes, announced or unannounced, over the course of the semester.

9. **Technology Update:** Each student will present a brief technology news summary and analysis to the class during the course of the semester.
Special Note Regarding Syllabus Attachment:

Please find a hard copy of the campus-based Syllabus Attachment provided at the end of this document. This document comes from the University's Provost office.

In addition, the Syllabus Attachment may be downloaded at the following URL:

http://pvcaa.siu.edu/index1/Syllabus%20Attachment_Fall2014-12.pdf

The Syllabus Attachment will be provided on the D2L course page as well.