CIS 411: Systems Analysis and Design

Class Schedule:

Tuesdays and Thursdays, 1:20 p.m. – 2:35 p.m.; Frey 345

Instructor: Dr. Scott Weaver

Office: Frey 127  Office Hours: See my website (Prof Schedule) or by appointment
Phone: Ext 3785
Email: sweaver<AT>messiah.edu
Course Home Page:  home.messiah.edu/~sweaver/CIS411

Date Prepared: August 2011

Course Description

This course introduces students to the discipline of proposing, defining, creating, supporting, evolving and retiring business information systems (BISs). Holistic systems approaches for life cycle development are emphasized throughout the course. Front-end requirements analysis techniques, traditional structured methods and object oriented methods are surveyed, with an emphasis on a UML-based life cycle model. The sequel to this course, BIS 412, gives students field experience in applying these concepts to a real-world BIS project.

PREREQUISITE: BIS 381 Information Systems and Managers

Course Objectives

Upon completion of this course, successful students will have a significant appreciation for the important role of the systems analyst. The course will employ a hands-on approach where students are expected to learn by applying systems analysis and design principles in a case study setting. This course will allow students to:

• understand the role and responsibilities of the system analyst in an organization;
• understand the concepts of the systems development life cycle;
• understand traditional and object-oriented systems analysis and design methods;
• develop skills in performing systems analysis and design tasks such as:
  o defining system requirements,
  o modeling system data and processes,
  o software systems architecture,
  o designing databases,
  o designing system inputs and outputs,
  o designing user interfaces for usability;
• understand the concepts of effective project management;
• learn and demonstrate knowledge of system development tools; prepare for BIS 412 in terms of being able to define, design, implement and deploy a significant business information system.

Text & References

Text and materials are available in the College Bookstore.

Required Text:

• Articles and URLs referenced and sited throughout lecture notes with links to articles when available
• Software – MS Office, Visio
Attendance
On-time attendance is required for this course and is a factor in the class preparation/participation grade. Notify the instructor before class if you are unable to attend or will be late. For missed classes (unless pre-arranged with the instructor) it is the student's responsibility to obtain material distributed or discussed during the missed class from other students (not the instructor).

Course Model
The course will consist of a series of classroom lectures and discussions with student participation highly encouraged. Students will be expected to come prepared to discuss materials assigned for reading. Students should take careful class notes as they are responsible for materials covered in class regardless of whether or not they are covered in the textbook, articles, etc. Copies of any prepared PowerPoint slides may be made available for download via Sakai, but will still require additional note taking by the student. In addition to the reading assignments in the Course Outline, homework and lab assignments will be assigned throughout the semester. There will be a mid-term, closed book examination and a comprehensive final, closed book examination.

Expectations
- All students are required to check their Messiah College email, Sakai and the course home page every day except Sunday.
- Any email sent to me should have “[CIS411]” starting the subject line with a succinct and appropriate subject text following.
- All assignments are due by the beginning of the class period as specified in the Course Outline or as announced in class. No credit will be given for late submissions.
- All homework assignments must be typed or word-processed, using correct grammar and spelling and printed.
- Students are expected to read the assigned chapters, articles and any other materials in advance of class and actively participate in class discussions.
- Any files turned in for an assignment will be virus-free (at a minimum this means no viruses that manual use of the anti-virus software in the computer labs would catch). Penalty for infected files is a 0% for that assignment.
- When assignments are turned in they must be completely printed and placed in Yellow folders. Folders and assignments should be labeled clearly with your name and course number in the upper right hand corner.
- In addition to the reading assignments in the Outline, homework problems will be assigned throughout the semester.
- Disclaimer: The course calendar with assignments is subject to change at the discretion of the instructor. You are responsible for ensuring you have the latest assignments by regularly checking the course calendar on the course website.

Americans with Disabilities Act
Any student whose disability falls within ADA guidelines should inform the instructor within the first two weeks of any special accommodations or equipment needs necessary to complete the requirements for this course. Students must register documentation with the Office of Disability Services (Hoffman 101). If you have questions, call extension 5387.
Grading Policy and Course Requirements

Class participation and preparation (15%)
Coming prepared for and participating in class discussions is an important part of the learning process. Be sure to read the pre-requisite materials prior to class so you can actively participate in class discussion.

Assignments (20%)
- Periodically throughout the semester, students will be assigned homework, labs and projects. These assignments may be individual or in small groups.
- All homework assignments must be done electronically and printed.
- When assignments are turned in they must be completely printed and placed in yellow folders. Folders should be labeled clearly and neatly with your name and course number in the upper right hand corner (when held in portrait view). The first page of every assignment should have your name, course number and section, Lab or Lesson #, clearly and neatly printed in the upper right hand corner, when held in portrait view.
- Assignments other than book problems must also be uploaded to Sakai. See the link on my home page or go to http://sakai.messiah.edu.

Mid-Term Exam (30%)
- The first in-class, closed book exam will cover all material from lectures, readings, assignments, and team projects from Lessons 1 through 13.

Final Exams (35%)
- The final, closed book exam will be a comprehensive exam covering all lectures, readings, and assignments from the entire course. This exam will occur during the regularly scheduled final exam week.

Academic Integrity
Plagiarism representing another's work as your own will surely result in a lower grade in this course, and may result in failing the course depending on its severity. You must document any sources that you use, whether from the Internet, another person, or printed materials. This includes especially the work of other students who are currently taking this course or who have taken this course before. Academic integrity is broader than plagiarism. It includes such things as returning library materials promptly so that you are not keeping another student from completing his or her work.

All students at Messiah College must read and abide by the College's policy on academic integrity, which is found in your Student Handbook and on the Internet at: http://www.messiah.edu/academics/advising_handbook/academic_policies/integrity.pdf

Acknowledgements
I would like to thank Professor Nejmeh for the use of his materials in my instruction and communication to you.
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<td>Project Initiation (Chapters 2, 3)</td>
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<td>Systems Analysis &amp; Requirement Gathering (Chapter 5)</td>
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