

CIS330 SYSTEMS ANALYSIS & DESIGN – SYLLABUS

SYLLABUS Semester I – 2009-2010 S1-10	COLLEGE OF MOUNT ST. JOSEPH DIVISION OF BUSINESS DEPARTMENT OF COMPUTER INFORMATION SYSTEMS
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COURSE TITLE:	CIS330-06 System Analysis & Design
PREREQUISITES	CIS 230 Structured Programming
INSTRUCTOR	Inst. Mike Due
CLASS MEETS:	Thursdays, 6:30pm-9:20pm
ROOM:	CL 117
OFFICE:	N/A
OFFICE HOURS:	N/A
TELEPHONE	335-4236 (cell)
E-MAIL ADDRESS	Mike@MikeDue.com
WEB ADDRESS	http://www.MikeDue.com (note: WebCT is not currently going to be used.)
REQUIRED TEXT:	Systems Analysis & Design Methods, 7 th Edition Whitten, Bentley, and Dittman

COURSE DESCRIPTION AND LEARNING OUTCOMES:

COURSE DESCRIPTION: The theory and methods of analysis, design, and implementation of batch and interactive computer systems. Students will analyze and design information systems and/or evaluate commercial packages.

LEARNING OUTCOMES

- Identify and describe all phases of the system development life cycle.
- Analyze and design a business information system.
- Discuss the role of project management in the system development process.
- Apply effective fact-finding techniques for problem definition and requirements discovery.
- Develop accurate and effective data and process models to document, analyze, and design a business information system.
- Perform object-oriented analysis and modeling using UML.
- Design thorough and professional input, output, and user interfaces for a business computer information system.
- Working within a group, prepare and present an effective and professional analysis and design project summary.

TEACHING METHODOLOGY (LEARNING STRATEGIES)

Lectures, class discussions and activities	75%
Self-paced individual work and group activities	25%

METHOD OF EVALUATION ACHIEVEMENT OF OUTCOMES:

Grading Scale:

A	= 90 - 100	Assignments	20%
B	= 80 - 89	Class Discussion & Participation	15%
C	= 70 - 79	Group Analysis & Design Project	15%
D	= 60 - 69	16 Quizzes, 4 Exams	50%
F	0 - 59		

RELATIONSHIP OF COURSE OBJECTIVES TO MSJ BACCALAURATE LEARNING OUTCOMES and BASIS FOR STUDENT EVALUATION OF EXPECTED OUTCOMES

LEARNING OBJECTIVES	CORE LEARNING OUTCOMES AND PERFORMANCE INDICATORS	DEMONSTRATION METHOD
Identify and describe all phases of the system development life cycle.	<p>Critical/Creative Thinking Demonstrate an ability to apply a creative process using imagination and intuition to solve a problem</p>	Assignments Discussions Group Project Quizzes and Exams
Analyze and design a business information system.	<p>Interdependence/Interdisciplinarity Compare and contrast viewpoints from different disciplines and perspectives (multidisciplinarity).</p> <p>Integrate knowledge and concepts across disciplines.</p> <p>Communication Control surface features (syntax, grammar, punctuation, spelling), presentation and documentation.</p> <p>Critical/Creative Thinking Distinguish among categories of information (e.g. fact, opinion; relevant, irrelevant; biased, unbiased).</p> <p>Interpret quantitative and qualitative information.</p> <p>Support a position with appropriate evidence.</p> <p>Integrate one’s own ideas with those of others to address an issue.</p> <p>Demonstrate an ability to apply a creative process using imagination and intuition to solve a problem.</p>	Assignments Group Project Quizzes and Exams
Discuss the role of project management in the system development process.	<p>Critical/Creative Thinking Interpret quantitative and qualitative information.</p>	Discussions Quizzes and Exams
Apply effective fact-finding techniques for problem definition and requirements discovery.	<p>Communication Control surface features (syntax, grammar, punctuation, spelling), presentation and documentation.</p> <p>Adapt messages (form and structure) to meet the needs of the audience and context.</p> <p>Critical/Creative Thinking Distinguish among categories of information (e.g. fact, opinion; relevant, irrelevant; biased, unbiased).</p> <p>Interpret quantitative and qualitative information.</p> <p>Demonstrate an ability to apply a creative process using imagination and intuition to solve a problem.</p>	Assignments Discussions Group Project Quizzes and Exams

<p>Develop accurate and effective data and process models to document, analyze, and design a business information system.</p>	<p>Communication Control surface features (syntax, grammar, punctuation, spelling), presentation and documentation.</p> <p>Adapt messages (form and structure) to meet the needs of the audience and context.</p> <p>Use communication media effectively and creatively.</p> <p>Critical/Creative Thinking Distinguish among categories of information (e.g. fact, opinion; relevant, irrelevant; biased, unbiased).</p> <p>Interpret quantitative and qualitative information.</p> <p>Support a position with appropriate evidence.</p> <p>Demonstrate an ability to apply a creative process using imagination and intuition to solve a problem.</p>	<p>Assignments Group Project Quizzes and Exams</p>
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**RELATIONSHIP OF COURSE OBJECTIVES TO MSJ BACCALAURATE LEARNING OUTCOMES and
BASIS FOR STUDENT EVALUATION OF EXPECTED OUTCOMES CONTINUED**

<p>Perform object-oriented analysis and modeling using UML.</p>	<p>Interdependence/Interdisciplinarity Compare and contrast viewpoints from different disciplines and perspectives (multidisciplinarity).</p> <p>Integrate knowledge and concepts across disciplines.</p> <p>Communication Control surface features (syntax, grammar, punctuation, spelling), presentation and documentation.</p> <p>Use communication media effectively and creatively.</p> <p>Critical/Creative Thinking Distinguish among categories of information (e.g. fact, opinion; relevant, irrelevant; biased, unbiased).</p> <p>Demonstrate an ability to apply a creative process using imagination and intuition to solve a problem.</p>	<p>Assignments Quizzes and Exams</p>
<p>Design thorough and professional input, output, and user interfaces for a business computer information system.</p>	<p>Interdependence/Interdisciplinarity Compare and contrast viewpoints from different disciplines and perspectives (multidisciplinarity).</p> <p>Integrate knowledge and concepts across disciplines.</p> <p>Communication Control surface features (syntax, grammar, punctuation, spelling), presentation and documentation.</p> <p>Adapt messages (form and structure) to meet the needs of the audience and context.</p> <p>Use communication media effectively and creatively.</p> <p>Critical/Creative Thinking Distinguish among categories of information (e.g. fact, opinion; relevant, irrelevant; biased, unbiased).</p> <p>Integrate one's own ideas with those of others to address an issue.</p> <p>Demonstrate an ability to apply a creative process using imagination and intuition to solve a problem.</p>	<p>Assignments Group Project Quizzes and Exams</p>
<p>Working within a group, prepare and present an effective and professional analysis and design project summary.</p>	<p>Communication Control surface features (syntax, grammar, punctuation, spelling), presentation and documentation.</p> <p>Adapt messages (form and structure) to meet the needs of the audience and context.</p> <p>Use communication media effectively and creatively.</p> <p>Critical/Creative Thinking Distinguish among categories of information (e.g. fact, opinion;</p>	<p>Group Project</p>

	<p>relevant, irrelevant; biased, unbiased).</p> <p>Interpret quantitative and qualitative information.</p> <p>Support a position with appropriate evidence.</p> <p>Integrate one's own ideas with those of others to address an issue.</p> <p>Demonstrate an ability to apply a creative process using imagination and intuition to solve a problem.</p>	
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TEACHING METHODS/ COURSE PHILOSOPHY

As technology continues to evolve, methodologies for system development analysis and design have needed to adapt. However, much of the theory behind the development of information systems (i.e. the phases of the system development lifecycle), have not *drastically* changed – more just evolved along with the technology. Yet, the tools we use to perform these tasks have changed. We can learn the foundation and structure of the system develop lifecycle and various techniques for:

- problem definition
- gathering requirements / objectives
- feasibility analysis and testing
- data and process modeling
- database, input/output, and user interface design

Then, as technology continues to advance, we can apply our knowledge and experiences with existing analysis and design tools to new development tools and methodologies as they are introduced.

During this course, you will learn the basic concepts and terminology of systems analysis and design as well as various tools to perform the tasks necessary to analyze and design an information system. You will use technology to support your productivity throughout the term. We will be using Microsoft Visio or other modeling and documentation tools and various manual modeling techniques. The objective of the course is not to teach specific software packages, but to expose you to the various techniques to aid in the organization and documentation of the system analysis and system design processes.

During the class meetings you will be introduced to new concepts and ideas and have the opportunity to apply these in small group and individual exercises in order to apply and develop your problem-solving, decision-making and technology skills.

You will submit all assignment files to the instructor through email attachments or hard copy form per instructions per lesson. The assignments will be reviewed and returned to you at the next class meeting.

During class meetings please remain focused on the class. Please refrain from using instant messaging, checking email, or browsing the Internet. Please do not allow your cell phone to ring during class (vibrate is fine, but check messages at a break).

You may ask another student to help you solve a problem with your assignments. However, unless an assignment is explicitly designated as a group assignment, you are not allowed to work together and turn in the same assignment for credit. If students submit the same assignment, each student will receive zero credit. If the same student is involved in a second incident during the term, the student will automatically fail the course. You should review the college's policies on academic honesty as presented in the 2003-2005 Undergraduate Catalog, pp. 36-38.

OTHER COURSE INFORMATION

Course Communication

<http://www.MikeDue.com>

Late Assignments

Assignments will be collected at the beginning of class. Any assignment not turned in at that time will be considered late. Late assignments will be penalized 10 points and will only be accepted one class meeting after the assignment due date.

Attendance Policy

Attendance is extremely critical to successfully complete this course. Attendance at all class sessions is required. If you have extenuating circumstances and will need to miss class, the student is responsible for

- a. informing the instructor BEFORE the absence will occur;
- b. acquiring and understanding all material covered in class; performing and turning in all in-class assignments, and tuning in any and all assignments due that class period.

Two unexcused absences will result in an automatic drop from the class by the department chair. Students are expected to arrive on time and remain the entire class session.

Other Course Administration

If necessary, it is the **student's responsibility** to initiate the request for a grade of "Incomplete". Please refer to p.39 of the 2003-2005 College Catalog for the current policy.

Instructor availability

Please contact the instructor **any time** you have questions or problems during the semester. Email is the easiest way to get quick answers to your questions, and the instructor is online daily. If your email isn't answered right away, the instructor is not ignoring you. However, the goal is to reply to messages within 24-48 hours.

Academic Integrity:

When we use the information and language of others to enrich our reflection and research papers we must:

- tell the reader when we are quoting and indicate the source (person, book, article, etc.) of the quotation.
- tell the reader when we are paraphrasing and indicate the source (person, book, article, etc.) of that information

Quoting or paraphrasing the information and/or language of a source without naming the source is plagiarism. Plagiarism is unacceptable in an academic institution and is subject to penalty. Please consult the College Catalog and the Student Handbook for additional information and policies regarding academic honesty. Another way to define plagiarism is that involves using someone else's ideas without acknowledging the ideas were someone else's. In writing papers we often use and synthesize others' ideas. One key to avoiding plagiarism is to acknowledge the author(s). Footnoting is a formal way to do this -- but not the only way. There are several different styles. Acknowledging author(s) in the text of a paper or essay and then listing references at the end of the paper is usually sufficient. Format or style in referencing can vary -- the important thing is to acknowledge the ideas of others and thus not mislead.

Plagiarism also involves using someone else's words without acknowledging the words were written by someone else. It is very important not to represent another's words as your own. **For courses in the Department of Business Administration, if you use three or more words in sequence taken directly from another source (other than proper nouns, e.g., the name of a company), those words must be in quotation marks.** The 2003-2005 MSJ Catalog states that those who value integrity "will not substitute words/images/symbols from another's work as one's own and will not rearrange syntax of another's written document as one's own sentence structure" (p. 37).