MASTER SYLLABI

4/1/03

MINNESOTA SCHOOL OF BUSINESS
GLOBE COLLEGE
TECHNICAL COURSE SYLLABUS

COURSE NUMBER:	**SD205**	COURSE TITLE:	SYSTEMS ANALYSIS & DESIGN
COURSE LENGTH:	12 WEEKS	CREDIT HOURS:	4
PREREQUISITES:	SD110	CONTACT HOURS:	50 (LECTURE 30 / LAB 20)

TEXT: SYSTEMS ANALYSIS & DESIGN METHODS, Witten and Bentley, USA: Irwin/McGraw-Hill. Current Edition, **ISBN: 007-231539-3**

COURSE DESCRIPTION: This course presents the information systems development situation and environment.

The areas of study will include front-end and back-end lifecycle tools and techniques for analyzing business requirements. The course will also cover the systems design and construction methods (middle lifecycle, tools & techniques). Back-end lifecycle activities will also be surveyed in this course.

OBJECTIVES: Upon completion of this course, the student will be able to:

1. Organize an information systems development project.
2. Analyze the business processes involved in an application.
3. Develop and use a feasibility study / cost benefit analysis.
4. Explain how process models and data models apply to the information system.
5. Evaluate basic process and data representation.
6. Document information system requirements.
7. Perform the transformation of data and process models into file and database designs.
8. Design and evaluate inputs, outputs and user interfaces.

COURSE OUTLINE:

Topics & Class Activities	Required Reading
Week 1 **Systems Analysis & Design Methods** The Modern Systems Analyst Information Systems building blocks Information Systems development	Witten & Bentley, Chapters 2 & 3
Week 2 **Systems Analysis Methods 1** Systems Analysis Data modeling	Witten & Bentley, Chapters 4&5
Week 3 **Systems Analysis Methods 2** Process modeling Network modeling	Witten & Bentley, Chapters 6 & 7

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Topics & Class Activities	Required Reading
Week 4 **Systems Analysis Methods 3** Object modeling	Witten & Bentley, Chapter 8
Week 5 **Systems Design & Construction Methods 1** Systems Design & Construction Application architecture & Process design.	Witten & Bentley, Chapters 9 & 10
Week 6 **Systems Design & Construction Methods 2** Database Design	Witten & Bentley, Chapter 11
Week 7 **Systems Design & Construction Methods 3** Input/output design User interface design and prototyping	Witten & Bentley, Chapters 12 13, &14
Week 8 **Systems Design & Construction Methods 4** Software design Object–oriented design	Witten & Bentley, Chapters 15 & 16
Week 9 **Beyond Systems Analysis and Design 1** Systems Implementation tools and techniques Testing & debugging	Witten & Bentley, Chapter 17
Week 10 **Beyond Systems Analysis and Design 2** Systems Support Maintenance	Witten & Bentley, Chapter 18
Week 11 **Cross Life Cycle Activities and Skills** Project & Process Management Cost–benefit analysis, Joint Application Development Interpersonal skills and communications.	Witten & Bentley, Appendices A to E
Week 12 **Final Projects**	

INSTRUCTIONAL METHODS: Class sessions will consist mainly of instructor lectures, demonstrations, and projects. Students will be encouraged to utilize information on the Internet that is referenced throughout the textbook.

Students must have a satisfactory attendance record, in accordance with the school's attendance policies. All required assignments must be completed to obtain a passing grade in the class. All projects and assignments are due on the date specified.

EVALUATION METHODS:

Grades are an indicator of overall performance, achievement and participation. Students are responsible for completing all course requirements on time to receive credit. Final projects will be presented during finals week.

Written projects / reports	300
Classroom exercises	200
Final Project	300
Participation	200

The final grade for the course is based on an accumulation of points in each of the above areas and weighted accordingly. A total of 1000 points are possible. These points are based on the following percentages:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
59% and lower	N/C