WILMINGTON UNIVERSITY
COLLEGE OF TECHNOLOGY
MASTERS OF SCIENCE - INFORMATION SYSTEMS TECHNOLOGIES
BASIC COURSE INFORMATION

COURSE TITLE: Analysis, Modeling and Design
COURSE NUMBER: IST 7020

I. RATIONALE

Analysis, modeling and design is a foundation course for all IS professionals. In today’s business environment, information systems are continuously being developed, updated, or reengineered and as an IS professional you can be assured you will play some role in the system analysis or design of those systems. That role may be as a customer, user, or developer; understanding requirements or expectations from the different perspectives is critical to a successful development process.

II. MAJOR INSTRUCTIONAL GOALS

GOAL A: The student will gain an understanding of the relationship of systems analysis and design to business problem solving and computer applications

Learning Outcome: The students will be able to:
A-1 identify stakeholders and their responsibilities in the systems development process
A-2 describe current business and technology drivers that influence IS development
A-3 differentiate between iterative and incremental design strategies approaches to systems development
A-4 describe the role of IS architecture in systems development
A-5 differentiate between system life cycle and system development process

GOAL B: The student will gain an understanding of project management tools and techniques as they relate to systems analysis and design

Learning Outcome: The students will be able to:
B-1 differentiate between project and process management
B-2 identify activities in the project management life cycle
B-3 describe the basic competencies and functions of a project manager

GOAL C: The student will gain an understanding of the systems analysis phases in the systems development project through preliminary investigation, problem analysis, and requirements analysis.
Learning Outcome: The student will be able to:
C-1 describe approaches (questionnaires, interviews etc.) for collecting business requirements data
C-2 compare and contrast, a variety of systems analysis approaches used for solving business system problems
C-3 describe the benefits and how to construct a use-case model diagram

GOAL D: The student will gain an understanding of systems design methodology as it relates to IS development.

Learning Outcome: The students will be able to:
D-1 describe the design phase in terms of information building blocks
D-2 identify the differentiate between several system design strategies
D-3 describe both centralized and decentralized distributed computer alternatives for IS design
D-4 distinguish between different types of computer users and design considerations for each
D-5 identify several important human engineering factors and guidelines and incorporate them into a design of a user interface

III. CLASS PARTICIPATION:

Students are expected to attend class and participate actively and in a positive way. Questions and relevant observations are encouraged and enrich the experience of the entire class.

Computers in the classrooms are intended to be used as tools to enhance the students' learning experience. Instant messaging, gaming, emailing, and surfing the web are distractions to the student, the surrounding students, and the instructor and constitute inappropriate behavior. Students are ethically obliged to avoid these and similar practices.

IV. CLASS SCHEDULE - OUTLINES – READINGS:

A “structured external assignment” will constitute the closing activity for this course. Students will be asked to submit a topic for instructor approval that integrates IT concepts discussed in class into the student’s vocational or educational interests or workaday environment. Ideally, a “planning paper” will result that is topical, and possesses significant utility within the student’s job-related responsibilities or educational/vocational interests.

Instructor will include weekly outline to reflect what has to be achieved by the student in the 5 hours Out-of-Classroom project (Structured External Assignment) including submission deadline and grading criteria.

Semester = 15 weeks with a reading week at Week 8
Blocks = 7 weeks, with a Reading Week between Blocks I and II. The syllabus must reflect which preliminary reading all students should complete during the week prior to the start of the course. 

Note: Grades are due five (5) working days after your last class session and are to be submitted directly to the registrar.

Note: A cooperative and participative learning strategy will be deployed with every expectation that the student will contribute heavily, in a self-directed action-learning mode, to this educational experience. Students should anticipate that assignments, and this syllabus, will be adjusted to match the pace of the course, the class size, and to meet the needs of individual students.