MNGT 7660/7666 COURSE SYLLABUS Course Title: Information Systems Analysis and Design

Instructor: Dr. Charles A. Snyder, Woodruff Professor Office: Lowder 411;Tel. :(334) 844-6515; Fax: (334) 844-5159 E-mail: snyder@business.auburn.edu Office Hours: T-Th, By Appointment Credit Hours: 3 Prerequisites: MBAC 7220 Corequisites: None

I. Course Content / Objectives:

1. To provide students with the essential principles and a working knowledge of systems analysis and design. The course involves intense study and hands-on experience in performing analysis and building prototypes for real organizational systems. General systems theory background, the traditional systems development life cycle and approaches are contrasted with modern structured analysis and object-oriented analysis methodologies. Students learn and use a Computer Aided Systems Engineering tool in performing a professional analysis project. Presentation of the project is required to both client and class. Total documentation is also required.

2. Tentative schedule and outline of course content

Week 1: Introduction and general systems theory, Chapter 1

Week 2: Chapters 2, 3, CASE tool tutorial

Week 3: Chapters 4, 5, Reading, Quiz

Week 4: Chapters 6, 7, 8

Week 5: Chapters 8, 9, Reading

Week 6: Chapters 10, 11, Case Problem

Week 7: Chapters 12, 13

Week 8: Chapters 14, 15, Mid Term Exam

Week 9: Chapters 16, 17, Readings

Week 10: Case problem, Modules A & B

Week 11: Reading, **Quiz**

Week 12: Case Problem, Presentations

Week 13: Presentations

Week 14: Presentations

Week 15: Presentations

Week 16: Project review and finals

3. Textbook or assigned readings

Whitten, Bentley, & Dittman. Systems Analysis and Design Methods, 5Th Ed. Irwin-McGraw-Hill, 2000.

Readings and Cases

Visible Analyst Workbench software and Tutorial

II. Grading and Evaluation Procedures:

Mid-Term Exam	20%
Project	60%
Repository and documentation	(40%)
Presentations	(20%)
Prototype	(20%)
Formal Report	(20%)
Quizzes	10%
Final	10%

Project grade will include **Peer evaluations** (for on-campus students) and **Instructor's subjective grade**.

III. Statement related to policies on unannounced quizzes and class attendance and participation.

Students can expect unannounced quizzes and students are expected to attend all classes.

IV. Graduate Credit

Graduate students are expected to thoroughly understand relevant theory, concepts, and methodologies so that they can analyze systems, design and implement solutions as a team. The project requirements build on knowledge and skills developed in class and are applied in real organizations. The level of analysis and conceptual integration required is at the same standards required in a professional organization. This course requires an *intense involvement* and rapid assimilation of a many-faceted group of concepts. Professional written and oral presentation is an integral requirement.

V. Special Accommodations for Students with Disabilities:

Special Accommodations: Students who need special accommodations should make an appointment to discuss the Accommodation Memo during my office hours as soon as possible. If scheduled office hours conflict with classes, please arrange an alternate appointment time. If you do not have an Accommodation Memo but need special accommodations, contact The Program for Students with Disabilities, 1244 Haley Center, 334-844-5943 (Voice T/O).

VI. Academic Honesty

ALL PORTIONS OF THE AUBURN UNIVERSITY HONESTY CODE (TITLE XII) FOUND IN THE TIGER CUB WILL APPLY IN THIS CLASS.

Systems Analysis & Design Project Guideline

Project Milestones: These may only be modified/changed by the instructor.

1. Project Proposal

Team demographics Firm, its history Organizational chart Focal system--define and describe the project application Gantt Chart

The Proposal is to include the team members' thumbnail descriptions, followed by resumes. A digitized picture of each team member is helpful.

A brief history of the organization and organizational chart should be included. The team may need to draw the organizational chart.

The focal system should be defined. The definition/description should include the business/logical reason for the system. This is where the team establishes the scope of the system and the project. The Context Diagram (see 4., DFDs) should follow from the establishment of the focal system boundary and identification of the External Entities. The Gantt chart must start by determining the conclusion date and working backwards to include all significant activities required to complete the project. Microsoft's Project software is one source for the chart. The current version may be downloaded from the Microsoft web site.

2. System Profile

Description of the current system Problems/opportunities with present system Objectives of firm, system project, and users Users involved with or affected by system

3. A Systems Development Life Cycle Define for the project Phases of SDLC performed by team

Explanation of methodology employed

The team must decide on a version of the SDLC, depict it, and state just what phases will be performed. The particular SDLC is at the discretion of the team. The methodology explanation is simply to inform the client on the methodology adopted. For example, you will be using Structured SA&D and you may employ the FAST methodology, using the Gane & Sarson convention for symbols in the DFD, etc.

4. Data Flow Diagrams

The Context diagram should be first

Include VTOC/Functional Decomposition Diagram Print all DFDs with appropriate Data Dictionary ID Consistent documentation is required

5. Data Modeling

The team will decide on the ERD convention and explain the notations used.

6. Network Modeling

For the network modeling task, a program such as NetViz (quyen.com) (1-800-827-1856) is useful. The team should note distances, bandwidth(speed), equipment, etc.

- 7. Prototype
 - A. File/Database Design
 - B. Input/Output Design
 - C. User Interface Design
 - D. Program design

The components of prototype design need to be briefly addressed so that the client can gain ready understanding of team purpose and methodology. Software language/package selection should be provided. Screens should be included in the proper sequence. A User Manual is also to be provided.

8. Technical/Professional Report

As the team proceeds, the report should take form. A preface must be included that summarizes the project. The body of the report should be the project repository. A log of team meetings needs to be provided to the instructor along with the report.

All milestones must be re-worked until signed-off. They should be signed-off in sequence.

Separate milestones by Tab dividers

All milestones must be of Professional quality. Proof your work.

Anticipate at least a TWO DAY turnaround for any reviews not completed in class.

Late submissions will cause invoking of penalty points. Partial submissions are not acceptable.

STAY ON SCHEDULE ! BACK-UP-expect the worst case data loss!