

**Nova Southeastern University**  
**Graduate School of Computer and Information Sciences**

**Course Syllabus**

**MMIS 660 - Systems Analysis & Design - 3 credits - Online format-  
REVISED**

**Fall 2003, September 22 - December 12, 2003**

**Instructor:**

**Frank W. Nasuti, Ph.D., CPA, CFE**  
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Note: The preferred method of communication to me is through email. I am listing my NJ home office number and fax for emergencies only, or if you cannot contact me by email for some reason. You SHOULD NOT call me to tell me that you cannot send an assignment in on time or for discussions that can be handled by email.

**Office hours:** Since this is an online course, there are no office hours. However, you may email me at any time to discuss anything that you like. I check my email daily, so I should respond to your email within 24 hours.

**Instructor / Class Web Site:** <http://www.scis.nova.edu/~nasutif>

**Class Location and Format:**

This class is an online course and will be conducted through the Internet, the World Wide Web (WWW) and through the NSU/GSCIS website.

Email and the course forum(s) must be consulted by students a minimum of three times each week. Weekly access and weekly written participation in the course forum is a course requirement. No online synchronous classes or activities are scheduled for this course. The course forum will be available throughout the term for peer to peer and student/ professor communications.

**Course Description:**

Analysis of requirements for information systems. Elicitation/fact-finding, problem analysis, decomposition, and the requirements document. Concepts, methods, techniques, and tools for systems analysis, modeling and simulation, and prototyping. Structured and object oriented analysis. Role of the systems analyst in the organization. Gaining user commitment and fulfilling user needs. Concepts, tools, and techniques for systems design. Design principles, quality factors, decomposition of complex systems, and modularization techniques. Design methods such as object oriented and function oriented design. Comparison of analysis and design techniques.

**Required Textbook(s):**

<b>Title:</b>	Systems Analysis & Design W/Proj Cases CD & System Architect 8.0 - <b>Required</b>
<b>Author:</b>	Jeffrey L Whitten, Lonnie D. Bentley, Kevin Dittman
<b>ISBN:</b>	0073881260
<b>Edition:</b>	6th
<b>Publisher:</b>	McGraw Hill
<b>Notes:</b>	Make sure you order using the ISBN above to get both the TEXT & CD-ROM containing the case studies for the project AND Systems Architect Software (Student Version)

**Required Software:**

- Internet access using any ISP for access to the GSCIS and class website.
- I prefer that all assignments be written in a **Microsoft Office product**, including Word, Excel, and Powerpoint. You may also submit assignments in pdf format. If you do not have access to these products, send me a sample of the file for the product you have to see if I can open it and read it at least two weeks before the first assignment is due.
- The system design project based on the case study must be completed using the **Systems Architect Software** bundled with the textbook.

**Exit Competencies:**

Upon completion of this course, the student will comprehend the following objectives:

- The role and responsibilities of the systems analyst
- The business trends that are affecting the systems analyst
- The systems development life cycle and methodology
- Strategies, tools, and techniques for project management
- Fact-finding and information gathering techniques
- The process of systems analysis
- Data modeling as a systems analysis tool
- Requirements discovery tools and techniques
- The process of systems design, application architecture and process design
- Data, processes, and interfaces – the building blocks of all information systems
- Computer outputs, inputs, and user interfaces
- System Implementation phases to construct and deliver the final system
- Identify system conversion strategies
- Object modeling during systems analysis

## Course Outline:

1. The Context of Systems Analysis & Design
  - Context of Systems Analysis & Design Methods
  - Information system building blocks
  - Information systems development
  - Project management
  
2. Systems Analysis Methods
  - Systems analysis
  - Fact-finding techniques for requirements discovery
  - Modeling system requirements with use cases
  - Data modeling and analysis
  - Process modeling
  - Feasibility analysis and the system proposal
  - Object-oriented analysis and modeling using the UML
  
3. System Design Methods
  - Systems design
  - Application architecture & modeling
  - Database design
  - Output design & prototyping
  - Input design and prototyping
  - User interface design
  - Object-oriented design and modeling using the UML

## Instruction Methods and Tools:

### Tools:

- Internet (Required for online courses)
- Graduate Student Forum for instruction, discussions, participation, etc
- ESET for submitting assignments

Assignments are to be handed in through the ESET web-based utility. Please type each question first, and then the answer. Every submission must have a header that contains your name, usercode, and the assignment number. Each assignment must be handed in as one submission through ESET. They must be submitted through ESET by midnight of the date due (EST). Directions for submitting work through the Web-based Electronic Student (ESET) and directions for correct use of Forums can be found on the CD-ROM given to all students or at the Online Orientation at:

<http://scis.nova.edu/Orientation/index.html>

- Nova Southeastern University Online Library (for research, if needed).

## **Instruction Methods:**

There are several requirements for this course. The requirements involve:

1. Readings in the textbook,
2. Analysis of case studies,
3. Completion of a Systems Analysis & Design Project Case, and
4. Mid-term and final examinations.
5. In addition, participation in course forums is required.

## **Readings**

Each week, chapter readings are assigned as noted in the class schedule. To ensure that you understand what you are reading, it is highly recommended that you answer the review questions at the end of each chapter. NOTE: this does not have to be turned in. However, the midterm and final exam will be based on the knowledge gained from this exercise.

### **Analysis of Soundstage Textbook Case Study**

To ensure your understanding of the design process, you will be required to read the Soundstage Entertainment Club (Soundstage) case study for all chapters. Each week one or two students will be assigned to answer the Discussion Questions at the end of each Soundstage Section using the forum. The remaining students will be allowed the opportunity to comment on the authoring students answers. The Instructor will assign Chapters to students during the second week of the semester.

## **Systems Analysis & Design Project**

The CD-ROM included with the text includes two case studies. Each case requires the completion of 11 milestones. This will be a team project, with each team assigned one of the case studies. Based on the number of students in the class, the Instructor will assign five or six students to each team. The team should select a team captain. The team captain will be responsible for coordinating all activities within the team and will be the conduit between the team and instructor. I will set up team forums for use by the teams. Only one submission will be made for each team.

At the end of the semester, the Instructor will ask each member of the team to issue a report on how the other team members participated in the project. It will include the roles of each individual on each team, that is, what they did and how they performed (described in detail). I expect more than, Frank worked hard, or Anna was a great help to the team. The exact tasks completed by each individual must be explained in detail. As long as a member of the team completes his or her assigned tasks on time, he or she will get the score that the team got for the assignment. Team members that do not respond to messages from their team leader, the professor, or do not complete their tasks on time will not receive credit for any given team assignment. The purpose of this exercise is to ensure fairness to the team members. Members who do not participate and contribute to the project assignments will have the grade assignment for the team reduced appropriately.

There will be one team score and all members of the team will have that score posted in their record. The Captain is responsible for coordinating the team efforts, and submitting the assignments. I strongly suggest that all team members review the assignment before its final submission

## Examinations

There will be two written examinations given, a midterm and a final exam. Examinations will be emailed to the students approximately three days before the date due.

## Grading

The course grade is based on the criteria shown in the Grading Criteria below. Check each assignment as listed on the Assignments Sheets at the end of this syllabus to find out the exact tasks. A student may neither do additional work nor repeat an assignment to raise a final grade.

## Class Forums

A class/course forum will be set up for interaction between the Instructor and the students as well as for use for communication and discussion among students. Participation is a requirement and failure to participate adequately can result in a point deduction from the final grade.

## Mid-term & Final Exam (30% each, 60% total)

The Midterm and Final Exams will consist of questions that will test your knowledge of the theory learned from reading the chapters. They will be emailed to each class member approximately three days before the due date, and be returned via ESET.

	<b>Chapters included</b>	<b>Weight</b>	<b>Date</b>
Mid-term exam	1-9	30%	11/2
Final exam	10-18	30%	12/12

## CD-ROM Project (5% each, 20% total)

Case Assignment	Task	Weight	Due Date
1	Milestone 1: Activities 1,2 Milestone 2: Activities 1	5%	10/19
2	Milestone 3: Activities 1,2,3 Milestone 4: Activities 1 Milestone 5: Activities 1,2,3,4 Milestone 6: Activities 1	5%	11/9
3	Milestone 7: Activities 1 Milestone 8: Activities 1 Milestone 9: Activities 1,2,3	5%	11/23
4	Milestone A: Activities 1,2,3 Milestone B: Activities 1	5%	12/7

**Soundstage Forum Assignments (20% per below)**

<b>Tasks</b>	<b>Weight</b>
Primary Posting by Assigned Student	10%
Secondary Postings to Other Students' Posting	10%

Schedule for Soundstage assignment will be announced by Instructor during second week of the semester.

**Course Schedule:** (See below for details on assignments, project and examinations.)

	<b>Readings</b>	<b>Assignments Project Exams</b>	<b>Due Date</b>
<b>Week 1</b>	Chapters 1,2		9/28
<b>Week 2</b>	Chapters 3,4		10/5
<b>Week 3</b>	Chapters 5,6		10/12
<b>Week 4</b>	Chapters 7,8	Project 1	10/19
<b>Week 5</b>	Chapters 9,10		10/26
<b>Week 6</b>	Chapters 11,12	Mid-term	11/2
<b>Week 7</b>		Project 2	11/9
<b>Week 8</b>	Chapters 13,14		11/16
<b>Week 9</b>	Chapters 15,16	Project 3	11/23
<b>Week 10</b>	Chapters 17,18		11/30
<b>Week 11</b>		Project 4	12/7
<b>Week 12</b>		Final exam	12/12*

\* Last day of class (note this is a Friday)

**Grading Criteria:**

Student grades will be determined based upon performance in meeting the following course requirements:

- Deliverable submitted reflects the required content and knowledge.
- Compliance with specified course assignment requirements.
- Organization of deliverables.
- Scholarship (citations and references list where appropriate).
- Scholarly writing style.
- Timely submissions- Assignments submitted after the due date deadline will be subject to a late penalty. The late penalty will be applied to submission beginning on the first day following the due date deadline. See Late Submission policy below.
- A student may not do additional work or repeat an assignment or examination to raise a final grade.

### Late Submission:

- **No extensions for assignment submission will be granted.** All late submissions of assignments, regardless of the reason, will be penalized as noted below.
- **Late submission of any assignment will be penalized by 2% of the total course grade for each week of delay, up to a maximum of 4% for each assignment. Note- this is from the final course grade and can greatly affect your final grade for the course.**
- No assignment will not be accepted if submitted in excess of two weeks past the scheduled due date. What this means is that you get a zero for the assignment as well as the 4% penalty mentioned above.
- The last assignment is due as scheduled and will not be accepted after the cutoff date. Examinations are due as stated and will not be accepted after the deadlines posted when the exam is distributed.

### Grading Scale:

A	A -	B+	B	B-	C+	C	C-	F
100-94	93-90	89-87	86-83	82-80	79-77	76-73	72-70	69-BELOW

Note that this grading scale does not contain a grade of "D". This reflects compliance with the SCIS grading scale that appears in the 2001 - 2002 SCIS Graduate School Catalog.

### Class/Course Rules:

- Course postings and assignment product may be submitted only one time; multiple postings and assignment submissions are not permitted.
- Course requirements must be completed and posted or submitted on or before specified due date and delivery time deadline.
- Due dates and delivery time deadlines are defined as 11:59 PM in Fort Lauderdale, Florida on the date the course requirement is due.
- No course requirement products will be accepted after the last day of the semester, unless an incomplete contract has been accepted.
- Students living in distance time zones or overseas must comply with this course time and time and due date deadline policy.
- Civility is required in public and private course communications.
- Work products submitted previously or developed for the workplace prior to this course may not be submitted for credit.
- Intellectual property referenced or directly cited in course products must be documented using the guidelines of the APA and GSCIS dissertation guide.

- The Professor reserves the right to make changes as may be required to the online version of the course syllabus. The online syllabus defines the requirements for this course. Student will be notified of changes by electronic mail.

*In addition students should refer to the school's catalog for all other academic policies. See [http://www.scis.nova.edu/NSS/pdf\\_documents/Catalog\\_2002\\_2003.pdf](http://www.scis.nova.edu/NSS/pdf_documents/Catalog_2002_2003.pdf)*

### **SCIS Policy:**

- 1. Standards of Academic Integrity** (For complete policy, see Code of Student Conduct and Academic Responsibility, p. 45. Also see the sections on student misconduct, p. 10, and the NSU Student Handbook.)

Each student is responsible for maintaining academic integrity and intellectual honesty in his or her academic work. It is the policy of the school that each student must:

- Submit his or her own work, not that of another person
- Not falsify data or records (including admissions materials)
- Not engage in cheating (e.g., giving or receiving help during examinations, acquiring and/or transmitting test questions prior to an examination)
- Not receive or give aid on assigned work that requires independent effort
- Properly credit the words or ideas of others according to accepted standards for professional publications.\*
- Not use term paper writing services or consult such services for the purpose of obtaining assistance in the preparation of materials to be submitted in courses or for theses or dissertations
- Not commit plagiarism (*Webster's* defines plagiarism as “stealing or passing off ideas or words of another as one’s own” and “the use of a created production without crediting the source.”)\*

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\*When using the exact words of another, quotation marks must be used for short quotations (fewer than 40 words), and block quotation style must be used for longer quotations. In either case, a proper citation must also be provided. When paraphrasing (summarizing, rewriting, or rearranging) the words or ideas of another, a proper citation must be provided. *The Publication Manual of the American Psychological Association, Fifth Edition*, contains standards and examples on quotation methods (pages 117 and 292) and on citation methods (pp. 207–214).

Extreme caution must be exercised by students involved in collaborative work to avoid violation of this policy.

See Catalog for *Policy on Acceptable Use of Computing Resources*, and *Policy on the Use of Material in Web Pages*.

## 2. Writing Skills

Each student must demonstrate proficiency in the use of the English language in all work submitted for this course. Grammatical errors, spelling errors, and writing that does not express ideas clearly will affect your grade. The professor will not provide remedial help concerning writing problems that you might have. Students who are unable to write correctly and clearly are urged to contact their program office for sources of remedial help.

## 3. Communication by Email

Students must use their NSU email accounts when sending email to faculty and staff and must clearly identify their names and other appropriate information, e.g., course or program. When communicating with students via email, faculty and staff members will send mail only to NSU email accounts using NSU-recognized usernames. Students who forward their NSU-generated email to other email accounts do so at their own risk. SCIS uses various course management tools that use private internal email systems. Students enrolled in courses using these tools should check both the private internal email system and NSU's regular email system. NSU offers students Web-based email access. Students are encouraged to check their NSU email account daily.

## 4. The Temporary Grade of Incomplete (I)

The temporary grade of Incomplete (I) will be granted only in cases of extreme hardship. Students do not have a right to an incomplete, which may be granted only when there is evidence of just cause. A student desiring an incomplete must submit a written appeal to the course professor at least two weeks prior to the end of the term. In the appeal, the student must: (1) provide a rationale; (2) demonstrate that he/she has been making a sincere effort to complete the assignments during the term; and (3) explain how all the possibilities to complete the assignments on time have been exhausted. Should the course professor agree, an *incomplete contract* will be prepared by the student and signed by both student and professor. The *incomplete contract* must contain a description of the work to be completed and a timetable. The completion period should be the shortest possible. In no case may the completion date extend beyond 30 days from the last day of the term for master's courses or beyond 60 days from the last day of the term for doctoral courses. The *incomplete contract* will accompany the submission of the professor's final grade roster to the program office. The program office will monitor each *incomplete contract*. If a change-of-grade form is not submitted by the scheduled completion date, the grade will be changed automatically from I to F. No student may graduate with an I on his or her record. The grade of I does not apply to master's thesis or doctoral dissertation registrations.

## 5. Grade Policy Regarding Withdrawals

Course withdrawal requests must be submitted to the student's program office in writing (via postal mail or email) by the student. Requests for withdrawal must be received by the program office at least three weeks prior to the last day of the term. Program offices will publish specific withdrawal deadline dates for each term (see

Academic Calendar on page ii of the catalog). Withdrawals sent by email must be sent from the student's assigned NSU email account. Requests for withdrawal received after 11:59 p.m. est on the withdrawal deadline date will not be accepted. Failure to attend classes or participate in course activities will not automatically drop or withdraw a student from the class or the university. Students who have not withdrawn by the withdrawal deadline will receive letter grades that reflect their performance in the course(s). When a withdrawal request is approved, the transcript will show a grade of W (*Withdrawn*) for the course. Students with a history of withdrawals risk dismissal. Depending on the date of withdrawal, the student may be eligible for a partial refund. For a complete list of withdrawal deadline dates, please see the academic calendars located at:

[http://www.scis.nova.edu/NSS/pdf\\_documents/AcadCal.pdf](http://www.scis.nova.edu/NSS/pdf_documents/AcadCal.pdf)