

Syllabus

Course Number: CIS 325

Course Title: Systems Analysis and Design

Course Description:

Studies the analysis and design of computer based information systems. Considers transformation processes and comprehensive design. Includes advanced technology, emphasizing expert and knowledge-based systems. Considers human resources, communications and computers in a systems framework.

Prerequisite Courses:

None

Course Overview

Systems analysis and design is a step-by-step process for developing high-quality information systems. An information system combines information technology, people, and data to support business requirements. The objective of systems analysis is to understand the proposed project, ensure that it will support business requirements, and build a solid foundation for system development. Systems analysts use models, documentation, and other tools to visualize and describe the proposed system. The objective of systems design is to produce a physical design that will meet the specifications described in the system requirements document. System designers create user interfaces, design data, and define the system architecture.

This course introduces the concepts that comprise systems analysis and design (SAD), which is an important aspect of successful businesses and organizations. Systems analysis and design is an essential field of study in computer information systems. Whether or not you desire to become a systems analyst or designer, it is important for you to possess a basic understanding of SAD to enable yourself to excel in the business environment.

Course Outcomes:

Upon completion of this course, learners should be able to:

1. Evaluate online group collaboration tools.
2. Demonstrate the steps, methods, techniques, and applications of the systems approach to planning, analysis, design, and implementation of a computer-based system.

3. Use a team format to demonstrate the ability to evaluate an existing system or new system in a professional and objective manner.
4. Successfully complete and present a feasibility study in written format.
5. Demonstrate competency in tools and methods of systems analysis and design.
6. Successfully develop and present a team-designed system in a report format.
7. Reflect on how the tools learned in the course will assist the student in the workplace.

Course Materials:

Required Texts:

Dennis, A., Wixom, B. Roth, R. (2015), *Systems Analysis and Design*, 6th Edition, United States: Wiley.

Softcover textbook: ISBN-13: 978-1-118-89784-3

eTextbook: ISBN-13: 978-1-118-89786-7

Required Resources:

American Psychological Association (current edition). APA Publication Manual. Retrieved from <http://www.apastyle.org/>.

Library Tutorials:

Research Tutorials (n.d.). Regis University Library: see <http://libguides.regis.edu/tutorials>.

Computer and Information Science Research Tutorial,

see [https://mediaspace.regis.edu/media/Regis+Library+-](https://mediaspace.regis.edu/media/Regis+Library+-+Resources+for+computer+and+information+science+/0_blk905nh/10579702)

[+Resources+for+computer+and+information+science+/0_blk905nh/10579702](https://mediaspace.regis.edu/media/Regis+Library+-+Resources+for+computer+and+information+science+/0_blk905nh/10579702)

Technology Tools:

Microsoft Project 2013 and Visio 2013:

- You will need both Microsoft Project and Visio for the class. You have two choices for obtaining these software applications:
 - You can use the CC&IS Virtual Lab (under Citrix). Instructions are in the Week 1 To-Do List of the course. No software installation required.
 - You can obtain free copies of Microsoft Project and Visio 2013 through our academic alliance with Microsoft (MSDNAA). Please email the MSDNAA Administrator (msdnaa@regis.edu) with your name and course number. You will receive an email from the Administrator that provides you with a link to the Microsoft DreamSpark website and instructions. These copies are valid for one year. Make sure you are using your RegisNet email to request/receive communications about the software.

Adobe Acrobat Reader

RealPlayer (to watch the video presentations)

Optional Materials:

Purdue Online Writing Lab (OWL). Retrieved from <https://owl.english.purdue.edu/owl/section/2/10/>.

Pre-Assignment:

Online Format: Sign on to D2L (Home Page) and become familiar with the course navigation of the Web Curriculum. Read Chapters 1, 2 & 3 of the textbook.

Classroom-based Format: Read Chapters 1, 2 & 3 of the textbook.

Pre-Assignment Due Dates:

Classroom-based Format: This assignment is due the first night of class.

Online Format: The facilitator will specify the due date for this assignment.

Course Assignments and Activities:

	Topics	Readings	Activities & Assignments
1	Systems Analysis and Design, Planning, and Requirements	Chapters 1, 2 & 3 Online Course: From the Experts section	<ul style="list-style-type: none">• Class Introductions/Discussions• Team Project: Review Team Project Description and Develop an <u>Individual</u> System Request Form.
2	Use Case Analysis and Process Modeling	Chapters 4 & 5 Online Course: From the Experts section	<ul style="list-style-type: none">• Class Discussions• Written Assignment: The Role of the Systems Analyst (750 Words)• Team Project: Continue to work on project with team
3	Data Modeling and the Design Phase	Chapters 6 & 7 Online Course: From the Experts section	<ul style="list-style-type: none">• Class Discussions• Team Project: Continue to work on project with team for Week 3 deliverable
4	Architecture Design and User Interface Design	Chapters 8 & 9 Online Course: From the Experts section	<ul style="list-style-type: none">• Class Discussions• Written Assignment: The Importance of Modeling in Systems Analysis & Design (750 Words)• Team Project: Continue to work on project with team

5	Program Design and Data Storage Design	Chapters 10 & 11 Online Course: From the Experts section	<ul style="list-style-type: none"> • Class Discussions • Team Project: Continue to work on project with team for Week 5 deliverable
6	Implementation Phase and Transition to the New System	Chapters 12 & 13 Online Course: From the Experts section	<ul style="list-style-type: none"> • Class Discussions • Team Project: Continue to work on project with team
7	Basic Characteristics of Object-Oriented Systems	Chapter 14 Online Course: From the Experts section	<ul style="list-style-type: none"> • Class Discussions • Team Project: Final delivery due Sunday at midnight
8	Project Reflection and Course Conclusion	No readings this week Online Course/Faculty Evaluation (emailed)	<ul style="list-style-type: none"> • Class Discussions • Written Assignment: Individual Project Reflection (500 words)

Student Evaluation Grid:

Assignment	Value (percent of overall course grade)
Discussions/Participation	23%
System Request	2%
Written Assignments (2)	20%
Individual Project Reflection	10%
Team Project	45%

CC&IS Grading Scale:

Letter Grade	Percentage	Grade Point
A	93 to 100	4.00
A-	90 to less than 93	3.67
B+	87 to less than 90	3.33
B	83 to less than 87	3.00
B-	80 to less than 83	2.67
C+	77 to less than 80	2.33
C	73 to less than 77	2.00
C-	70 to less than 73	1.67
D+	67 to less than 70	1.33

D	63 to less than 67	1.00
D-	60 to less than 63	.67
F	Less than 60	0

Additional information about grading can be found in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx>.

CC&IS Policies and Procedures

Each of the following CC&IS Policies & Procedures is incorporated here by reference. Students are expected to review this information each term, and agree to the policies and procedures as identified here and specified in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx> or at the link provided.

- The CC&IS Academic Integrity Policy.
- The Student Honor Code and Student Standards of Conduct.
- Incomplete Grade Policy, Pass / No Pass Grades, Grade Reports.
- The Information Privacy policy and FERPA. For more information regarding FERPA, visit the [U.S. Department of Education](http://www.ed.gov).
- The HIPAA policies for protected health information. The complete Regis University HIPAA Privacy & Security policy can be found here: <http://www.regis.edu/About-Regis-University/University-Offices-and-Services/Auxiliary-Business/HIPAA.aspx>.
- The Human Subjects Institutional Review Board (IRB) procedures. More information about the IRB and its processes can be found here: <http://regis.edu/Academics/Academic-Grants/Proposals/Regis-Information/IRB.aspx>.

The CC&IS Policies & Procedures Syllabus Addendum summarizes additional important policies including, Diversity, Equal Access, Disability Services, and Attendance & Participation that apply to every course offered by the College of Computer & Information Sciences at Regis University. A copy of the CC&IS Policies & Procedures Syllabus Addendum can be found here: <https://in2.regis.edu/sites/ccis/policies/Repository/CCIS%20Syllabus%20Addendum.docx>.