



**SYLLABUS**

**Course Information**

**Description:** An in-depth focus on the five phases of the Systems Development Lifecycle. Topics include: preliminary investigation, physical and logical documentation, detail investigation into requirements and alternative specifications, analysis and design techniques, implementation considerations, development of logical and physical data flow diagrams, data modeling, prototyping, CASE tools, and the use of GANTT and PERT charts. A sample project is introduced and integrated using the SDLC Methodology.

**Credits:** 4 credits

**Web Access:** <http://www.css.edu> – under Tools-Blackboard - use your CSS login and password.

**Instructor Information**

**Instructor:** Dr. Thomas Buck

**Office:** Tower 3602

**Phone:** 218.723.6117

**E-mail:** [tbuck2@css.edu](mailto:tbuck2@css.edu)

**Web page :** <http://www.tbuck.us>

**Office Hours:** Tuesdays & Thursdays 9:00 to 10:30

**Required Materials**

**Required Text:**

Buck, T. L. (2016). *Computer information systems: Select case studies*. New York, NY: McGraw-Hill. ISBN: 9780984377923. (Hardcopy available on Amazon.com, ebook copy included in course)

Rosenblatt, H. & Tilley, S. (2016). *Systems Analysis and Design* 11<sup>th</sup> ed. Boston, MA; Cengage Learning. ISBN: 9781305494602.

**Required Software:**

Microsoft Word (or similar program).

Blackboard supported browser.

Internet access—high speed – and a backup plan for uninterrupted Internet access.

Register with Lucidchart for diagrams, charts, and graphs (<https://www.lucidchart.com/>).

**Assessment**

This course attempts to apply the following definitions to the letter grades assigned at the end of the course:

- A = Excellent (superior mastery)
- B = Very Good (thorough mastery)
- C = Average (acceptable mastery)
- D = Below Average (incomplete mastery)
- F = Fail (non-mastery)

<b>Points:</b>	
Exams/Quizzes – 14 @ 15 pts.	210
Discussions – 17 @ 10 pts.	170
Case Studies – 11 @ 10 pts.	110
Final Projects	100
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Total Pts	<b>590</b>

<b>Grades in %s:</b>			
93-100	A	73-77	C
90-92	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	D-
77-80	C+	0-59	F

## Course Outline (by Unit)

Unit 1 – Introduction  
Unit 2 – Systems Analysis and Design  
Unit 3 – Analyzing Business Case Studies  
Unit 4 – Managing Systems Projects  
Unit 5 – CASE Tools  
Unit 6 – Requirements Modeling  
Unit 7 – Data and Process Modeling  
Unit 8 – Object Modeling  
Unit 9 – Developing Strategies  
Unit 10 – User Interface Design  
Unit 11 – System Architecture  
Unit 12 – Systems Implementation  
Unit 13 – Managing Systems Support and Security  
Unit 14 – Internet Resource Tools  
Unit 15 – Communication Tools  
Unit 16 –Final Project

## Course Outcomes

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

1. Explain the importance of information systems and the roles that they play in organizations.
2. Explain the interdisciplinary nature of information systems analysis and design, in terms of both technical and behavioral disciplines.
3. Describe the traditional 'life cycle' method of building systems and the role of modeling and simulation in systems analysis and design.
4. Apply contemporary analysis methodologies and describe the strengths and weaknesses of these approaches.
5. Use a range of analysis and design tools and techniques.
6. Construct technically and logically correct functional models of information systems.
7. Evaluate design tools and techniques and select the appropriate tool to use.
8. Identify the Ten Commandments of Computer Ethics (from the Computer Ethics Institute) and their relevance to the information technology field.

## College Learning Outcomes

### **College Outcome: Intellectual and Foundational Skills**

St. Scholastica students need intellectual and foundational skills that prepare them for responsible living and meaningful work.

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

- Think critically and analytically
- Demonstrate scientific, mathematical and technological abilities
- Evaluate uses and sources of information

A system analyst is a problem-solver in an organization. Students will use a system analysis methodology to analyze, document, research solutions, and make recommendations for information systems. Course Outcomes: 4, 5, 6, 7.

## The "Legal" Section

### Online Participation

- ❖ Your interaction with both your instructor and other students during class is critical to both your learning and to your growth as a professional. You are expected to actively participate in the course discussions and activities.
- ❖ Students will be responsible for all material covered in the class (including syllabus changes) as presented online.

### LATE and MAKE-UP WORK

- ❖ All assignments are due as announced and exams are given on the days announced. Assignments are due at 11:59pm Central Time on the due date.
- ❖ No late assignments will be accepted and no make-up exams will be given.
- ❖ Personal emergencies will be handled on an individual basis. If absent for a verifiable emergency, you must contact the instructor.

### INCOMPLETES

- ❖ Incompletes will be granted only in rare circumstances where a student can demonstrate an extreme situation which necessitates it.
- ❖ A low class average is not in itself an adequate reason to grant an incomplete.

### ACADEMIC HONESTY POLICY

- ❖ Academic honesty and integrity are highly valued in our campus community. Academic honesty directly concerns ethical behaviors which affect both the academic environment and the civic community. Academic dishonesty seriously violates the integrity of the academic enterprise and will not be tolerated at St. Scholastica. *The full text of the CSS Academic Honesty Policy is found in the Student Handbook or online at <http://www.css.edu/Academics/Office-of-Academic-Affairs/Academic-Honesty-Policy.html>*

### EQUAL ACCESS STATEMENT

- ❖ Students with disabilities, students who sustained injury in active military service, and students with chronic medical conditions are entitled to appropriate and reasonable auxiliary aids and accommodations through The Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. It is the student's responsibility to notify the Disability Resource Center as soon as possible to ensure that such accommodations are implemented in a timely fashion. For more information or to request academic accommodations, please contact The Disability Resource Center in Tower Hall 2126; by phone at (218) 723-6747, 218-625-4891; or via e-mail at [disabilityresourcecenter@css.edu](mailto:disabilityresourcecenter@css.edu)

*Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid. — Albert Einstein*