- 1. COURSE TITLE\*: Systems Analysis
- 2. CATALOG PREFIX/COURSE NUMBER/COURSE SECTION\*: CSCI 2240
- 3. PREREQUISITE(S)\*: CSCI 1150 COREQUISITE(S)\*: None
- 4. COURSE TIME/LOCATION: (*Course Syllabus Individual Instructor Specific*)
- 5. CREDIT HOURS\*: 3 LABORATORY HOURS\*: (contact hours) LECTURE HOURS\*: 3 OBSERVATION HOURS\*:
- 6. FACULTY CONTACT INFORMATION: <u>(Course Syllabus Individual Instructor</u> <u>Specific)</u>

# 7. COURSE DESCRIPTION\*:

This course introduces the student to the study of Systems Analysis. The course covers information systems, equipment requirements, and modeling of new systems. The cases, projects and exercises give the student a wide variety of experiences and options to explore and apply the concepts of system analysis.

# 8. LEARNING OBJECTIVES\*:

- 1. Define an information system and describe its components.
- 2. Describe the SDLC, and explain how it serves as a framework for systems development and business modeling.
- 3. Explain the initial review of systems requests and the role of the systems review committee.
- 4. Describe the steps in a preliminary investigation and the end product of an investigation.
- 5. Describe systems analysis phase activities and the end product of the systems analysis phase.
- 6. Describe data and process modeling concepts and tools, including data flow diagrams, a data dictionary, and process descriptions.
- 7. Explain software acquisition alternatives, including traditional and Web-based software development strategies.
- 8. Explain the transition from systems analysis to systems design.
- 9. Describe data relationships, draw an entity-relationship diagram, define cardinality, and use cardinality notation.
- 10. Describe the application development process for structured, object-oriented, and agile methods.
- 11. List the main steps in system installation and evaluation.

Southern State Community College Curriculum Committee – Approved: February 2019 CSCI 2240 – Systems Analysis Page 2 of 3

- 12. Describe data conversion and changeover methods.
- 13. Explain post-implementation evaluation and the final report to management.
- 14. Explain the systems support and security phase.
- 15. List factors indicating that a system has reached the end of its useful life.

## 9. ADOPTED TEXT(S)\*:

Systems Analysis and Design w/mindTap edition 11<sup>th</sup> by, Rosenblatt Publisher Cengage ISBN 978-1-337-19294-1

## 9a: SUPPLEMENTAL TEXTS APPROVED BY FULL TIME DEPARTMENTAL FACULTY (INSTRUCTOR MUST NOTIFY THE BOOKSTORE BEFORE THE TEXTBOOK ORDERING DEADLINE DATE PRIOR TO ADOPTION) \*\*\*.

# 10. OTHER REQUIRED MATERIALS: (SEE APPENDIX C FOR TECHNOLOGY REQUEST FORM.)\*\*

#### 11. GRADING SCALE\*\*\*:

Grading will follow the policy in the catalog. The scale is as follows:

A: 90 - 100B: 80 - 89C: 70 - 79D: 60 - 69F: 0 - 59

### 12. GRADING PROCEDURES OR ASSESSMENTS:

Category	<b>EXAMPLE ONLY</b> Total Points	% of Grade
Chapter Assignments (10x30)	300	30%
Quizzes (10x20)	200	20%
Unit Exams (3x100)	300	30%
Assignments (5x10)	50	5%

Southern State Community College Curriculum Committee – Approved: February 2019 CSCI 2240 – Systems Analysis Page 3 of 3

Annual Report Project (100)	100	10%
Attendance	50	5%
Total	1000	100%

# 13. COURSE METHODOLOGY OR COURSE FORMAT:

May include but not limited to: Lectures, independent and group projects, in-class and home assignments, tests, quizzes and lab exercises. This course must be offered on campus. Attendance is required.

Week	Topics	Chapters	Learning Objectives
1	Introduction to Systems Development and Design	Chapter 1	1, 2, 3
2	Analyzing the Business Case	Chapter 2	4, 5
3	Requirements Modeling	Chapter 4	5
4 & 5	Data and Process Modeling	Chapter 5	6
6 & 7	Development Strategies	Chapter 7	7
8 & 9	Output and User Interface Design	Chapter 8	8
10 & 11	Data Design	Chapter 9	9
12	System Architecture	Chapter 10	10
13 &14	Managing Systems Implementation	Chapter 11	11, 12
15	Managing Systems Support and Security	Chapter 12	13, 14,15
16	Final Exam		

#### *14.* COURSE OUTLINE:

# **15. SPECIFIC MANAGEMENT REQUIREMENTS\*\*\*:**

# **16. OTHER INFORMATION**\*\*\*:

**FERPA:** Students need to understand that your work may be seen by others. Others may see your work when being distributed, during group project work, or if it is chosen for demonstration purposes. Students also need to know that there is a strong possibility that your work may be submitted to other entities for the purpose of plagiarism checks.

**DISABILITIES:** Students with disabilities may contact the Disabilities Service Office, Central Campus, at 800-628-7722 or 937-393-3431.