Master Course Syllabus

Course Discipline and Number: CIS 214   **Year: 2021-2022**
Course Title: Systems Analysis and Design   **Credit Hours: 3**

Attendance Policy: *To maintain good grades, regular attendance in class is necessary. Absence from class is considered a serious matter and absence never excuses a student from class work. It is the responsibility of all instructors to distribute reasonable attendance policies in writing during the first week of class. Students are required to comply with the attendance policy set by each of their instructors. Students are not penalized if they are unable to attend classes or participate in exams on particular days because of religious beliefs, in accordance with Chapter 161, Section 224-a of the Education Law of the State of New York. Students who plan to be absent from classroom activity for religious reasons should discuss the absence in advance with their instructors. See college catalog for more information.*

Services for Students with Disabilities: *It is the College's policy to provide, on an individual basis, appropriate academic adjustments for students with disabilities, which may affect their ability to fully participate in program or course activities or to meet course requirements. Students with disabilities should contact the Coordinator of Access and Equity Services, to discuss their particular need for accommodations. All course materials are available in alternate formats upon request.*

Course Description

An introduction to the concepts of systems development. Emphasis is placed on taking a structured approach to analyzing existing business-oriented systems, and designing solutions to problems with those systems. Students work in a team environment to solve specific problems and present solutions to the class. Prerequisites: CIS 108 or CSCI 160; MATH 095 and RDNG 099 if required by placement testing; ENGL 099 or prior completion or concurrent enrollment in ESL 120, 121, and 122 (or prior completion of ESL 103) if required by placement testing. 3 Cr. (3 Lec.) Spring semester.

Course Context/Audience

This is a required course for the Computer Information Systems major.

Basic Skills/Entry Level Expectations

Writing: W2 Student should have completed ENGL 099 (if needed). The course requires short written responses and/or short papers without documentation, particularly personal reflection or narrative.

Math: M4 Completed MATH 095(if needed) - Course requires the use of basic mathematical skills plus basic algebra skills.

Reading: R2 Before taking this course, students must have a C or better in RDNG 099 or assessment indicating that RDNG 099 was not required.

Course Goals

This course has two primary goals:

1. To introduce the student to the systems analysis and design process, and

2. To give students experience with problem solving and team building in a group project environment.

Course Objectives/Topics

Objective/Topic	# Hours
The student will recognize the importance of group dynamics when working in a team environment.	3 Hours
The student will list and describe a minimum of 3-structured analysis tools used in the industry.	5 Hours

The student will prepare data flow diagrams that represent actual business situations.	8 Hours
The student will create I-O lists, external entity lists, and query lists.	9 Hours
The student will create a formal data definition document.	5 Hours
The student will apply the systems analysis and design process to a specific business situation.	15 Hours

General Education Goals - Critical Thinking & Social/Global Awareness

CRITICAL THINKING OUTCOMES	HOW DOES THE COURSE ADDRESS THE OUTCOMES (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
Students will be able to ➤ develop meaningful questions to address problems or issues. ➤ gather, interpret, and evaluate relevant sources of information. ➤ reach informed conclusions and solutions. ➤ consider analytically the viewpoints of self and others.	The student will work with a "real" business client to determine system needs, evaluate existing problems, and determine an appropriate solution. The student will solve problems for a "real" client using the tools and techniques discussed in class. Students are required to use industry software for developing data flow diagrams, preparing and summarizing data, and presenting results in a formal business presentation.
SOCIAL/GLOBAL AWARENESS OUTCOMES	HOW DOES THE COURSE ADDRESS THE OUTCOMES (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
➤ Students will begin to understand how their lives are shaped by the complex world in which they live. ➤ Students will understand that their actions have social, economic and environmental consequences.	The student must work with a client and a group of students on the project team. Understanding the client's needs, as well as the opinions of other students will be a critical aspect of the course.

Instructional Methods

Much of the course content should be presented through the analysis and discussion of case problems. Students should be required to research and present a variety of case problems. The case problems should typically be assigned to groups of students to work on.

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Methods of Assessment/Evaluation

Method	% Course Grade
Group Projects/Presentations	40%
Individual Case Studies/Projects	30%
Review Questions/Homework Assignments	30%

Text(s)

Online resources.
Optional: Systems Analysis and Design, 10th Edition, Rosenblatt, Harry J. ©2014: Cengage. ISBN: 978-1-285-17134-0

Bibliography

Cashman, J., Shelly, Gary B. and Rosenblatt, Harry. Systems Analysis and Design, 7th edition, © 2007: Course Technology.

Systems Analysis and Design, Kenneth E. Kendall and Julie E. Kendall, 7th edition, © 2007: Prentice Hall.

Whitten, Jeffrey and Bentley, Lonnie. Systems Analysis and Design Methods, © 2005: McGraw-Hill.

Other Learning Resources

Audiovisual Online Videos
Electronic Students are required to download, install, and configure various software tools like Visio, Project, PowerPoint, and/or Eclipse UML Designer.
Other Online Resources