

**STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK**



MASTER SYLLABUS

CITA204 – SYSTEM ANALYSIS AND DESIGN

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**Canino School of Engineering Technology
Department of Decision & Graphic Media Systems
Fall/2018**

A. **TITLE:** SYSTEMS ANALYSIS AND DESIGN

B. **COURSE NUMBER:** CITA 204

C. **CREDIT HOURS:** (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)

Credit Hours: 3

Lecture Hours: 3 per week

Lab Hours: per week

Other: per week

Course Length: 15 Weeks

D. **WRITING INTENSIVE COURSE:** Yes

E. **GER CATEGORY:** No

F. **SEMESTER(S) OFFERED:** Spring

G. **COURSE DESCRIPTION:** A course designed to guide the student through the evolution of a system, an analysis of the present flow of information and the specifications, selection and implementation of information processing systems. The scope of a system development study will transcend mere knowledge of specific systems to include a study of the total management system.

H. % **PRE-REQUISITES/CO-REQUISITES:**

a. Pre-requisite(s): Database Applications and Concepts (CITA 215), or Introduction to Programming (CITA 180)

b. Co-requisite(s): None

I. % **STUDENT LEARNING OUTCOMES:**

<u>Course Student Learning Outcome [SLO]</u>	<u>PSLO</u>	<u>GER</u>	<u>ISLO</u>
a. Identify the role of information technology in supporting operational and business requirements, and management decision-making	2. Identify issues and collaborate on solutions concerning IT in an effective and professional manner		2 [CA]
b. Apply the systems development life cycle model to a computer-based information system	3. Demonstrate a solid understanding of the methodologies and foundations of IT		2 [IA, PS] 5
c. Use the tools and techniques of systems analysis and design professionals	3. Demonstrate a solid understanding of the methodologies and foundations of IT		2 [CA] 5
d. Understand and use the terminology associated with information systems development	3. Demonstrate a solid understanding of the methodologies and foundations of IT		5
e. Demonstrate the ability to interact with clients, users, and	1. Communicate effectively both		1 [O, W] 4 [T, GL]

management, as well as with team members in promoting a successful project outcome	verbally and in writing		
f. Employ project management and/or team leadership skills in planning, coordinating, and ensuring quality of the assigned tasks.	1. Communicate effectively both verbally and in writing 3. Demonstrate a solid understanding of the methodologies and foundations of IT 4. Apply problem solving and troubleshooting skills		1 [O] 4 [T] 5

KEY	<u>Institutional Student Learning Outcomes [ISLO 1 – 5]</u>
ISLO #	ISLO & Subsets
1	Communication Skills Oral [O], Written [W]
2	Critical Thinking <i>Critical Analysis [CA], Inquiry & Analysis [IA], Problem Solving [PS]</i>
3	Foundational Skills <i>Information Management [IM], Quantitative Lit./Reasoning [QTR]</i>
4	Social Responsibility <i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i>
5	Industry, Professional, Discipline Specific Knowledge and Skills

J. **APPLIED LEARNING COMPONENT:** Yes x No

- Classroom/Lab
- Creative Works/Project

K. **TEXTS:**

Systems Analysis and Design, by Scott Tilley and Harry J. Rosenblatt, Course Technology; 11 edition, 2016

L. **REFERENCES:** None

M. **EQUIPMENT:** Computer classroom

N. **GRADING METHOD:** A-F

O. **SUGGESTED MEASUREMENT CRITERIA/METHODS:**

- Assignments
- Examinations
- Project

P. DETAILED COURSE OUTLINE:

- I. The Role of System Analysis and Design at the Enterprise Level
- II. Systems Planning – Analyzing the Business Case
- III. Requirements Gathering and Modeling
- IV. Enterprise Modeling and Development Strategies
- V. Systems Architecture and Design
- VI. Systems Implementation
- VII. Systems Operation and Support
- VIII. Tools of the Trade
- IX. Advanced Topics

Q. LABORATORY OUTLINE: Not applicable