

COURSE IMPLEMENTATION DATE: []  
 COURSE REVISED IMPLEMENTATION DATE: [January 2004]  
 COURSE TO BE REVIEWED: [Nov 2007]  
 (Four years after implementation date)

**OFFICIAL COURSE OUTLINE INFORMATION**

Students are advised to keep course outlines in personal files for future use.  
 Shaded headings are subject to change at the discretion of the department and the material will vary - see course syllabus available from instructor

FACULTY/DEPARTMENT:	<b>Computer Information Systems</b>
<b>COMP 315</b>	<b>3</b>
FORMER COURSE NUMBER	UCFV CREDITS
<b>Computer Simulation and Modeling</b>	
COURSE DESCRIPTIVE TITLE	

**CALENDAR DESCRIPTION:**

This course will provide students with additional experience in problem solving within a computer environment. Problems will be drawn from the application of quantitative analysis to decision making, including linear programming, and network, inventory, queuing, and simulation models. Emphasis will be placed on the formulation and analysis of various models using the computer to implement solutions.

**PREREQUISITES:** MATH 111, MATH 113, MATH 115 or MATH 125. Acceptance to CIS degree program. (Students accepted to a CIS or Computing Science minor may register with permission of the department.)

**COREQUISITES:**

<b>SYNONYMOUS COURSE(S)</b>	<b>SERVICE COURSE TO:</b>
(a) Replaces: _____ (Course #)	_____
(b) Cannot take: _____ For further credit. (Course #)	_____

TOTAL HOURS PER TERM: <b>45</b>	TRAINING DAY-BASED INSTRUCTION
<b>STRUCTURE OF HOURS</b>	LENGTH OF COURSE: _____
Lectures: <b>45</b> Hrs	HOURS PER DAY: _____
Seminar: Hrs	
Laboratory: Hrs	
Field Experience: Hrs	
Student Directed Learning: Hrs	
Other (Specify): Hrs	

MAXIMUM ENROLLMENT:	<b>35</b>
EXPECTED FREQUENCY OF COURSE OFFERINGS:	<b>Once per year</b>
<b>WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**AUTHORIZATION SIGNATURES:**

Course Designer(s): <u> Gary Ridsdale </u>	Chairperson: _____ (Curriculum Committee)
Department Head: <u> Paul Franklin </u>	Dean: <u> Karen Evans </u>
PAC Approval in Principle Date: _____	PAC Final Approval Date: <u> December 03, 2003 </u>

**COMP 315**

COURSE NAME/NUMBER

**LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:**

Students will learn to apply simulation and modeling techniques to solve a variety of problems using the computer.

**METHODS:****PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):**

Credit can be awarded for this course through PLAR

 Yes No**METHODS OF OBTAINING PLAR:**

Course challenge with departmental approval

**TEXTBOOKS, REFERENCES, MATERIALS:**

[Textbook selection varies by instructor. An example of texts for this course might be:]

*iThink manual*

**CIS**

COURSE NAME/NUMBER

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**SUPPLIES / MATERIALS:**

**STUDENT EVALUATION:**

[An example of student evaluation for this course might be:]

Assignments  
Midterm Exam  
Final Exam

**COURSE CONTENT:**

[Course content varies by instructor. An example of course content might be:]

- I. Introduction - models
- II. Analysis of models, I/O, sensitivity
- III. Tools for modeling
- IV. Stocks as buffers, resources, reservoirs, conveyors, queues and ovens.
- V. Uni- and bi-directional flows, submodels
- VI. Convertors and connectors, feedback loops
- VII. Basic flow process
- VIII. Main chain infrastructures
- IX. Support infrastructures
- X. Six step modeling process
- XI. Building non-quantifiable variables into a model
- XII. Authoring a model  
Restricting user input