



MASTER COURSE OUTLINE

Prepared By: Dana Borschowa

Date: December 2018

COURSE TITLE

Introduction to SIM

GENERAL COURSE INFORMATION

Dept.: SIM

Course Num: 110

(Formerly:)

CIP Code: 15.0401

Intent Code:

Program Code: 654

Credits: 4

Total Contact Hrs Per Qtr.: 55

Lecture Hrs: 33

Lab Hrs:22

Other Hrs:

Distribution Designation:)

COURSE DESCRIPTION (as it will appear in the catalog)

This course covers basic concepts of simulation hardware and software in order to address the impact of hardware design on applications and systems software. Additionally, this course will strengthen an understanding of basic programming and maintenance for high and low fidelity manikins while concurrently developing team dynamics, problem solving, and critical thinking skills. *Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion.*

PREREQUISITES

None

TEXTBOOK GUIDELINES

As required by the BBCC Simulation Technology program

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills.

- 1) Identify the basic components of simulation equipment & software.
- 2) Trouble shoot common connectivity and program compatibility issues
- 3) Install, replace, and configure simulation programs
- 4) Explain the application of coding language to simulation equipment
- 5) Discuss visual design principles for simulation equipment and computer software systems
- 6) Demonstrate beginning skills as a technical trainer and resources liaison in the field of simulation operations
- 7) Articulate knowledge of operation philosophies such as "on the fly", pre-programmed, and automated

INSTITUTIONAL OUTCOMES

IO3 **Human Relations/Workplace Skills:** Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

COURSE CONTENT OUTLINE

1. Safety, tools, and power supplies
2. Microsoft Windows, PC, LLEAP Lite

3. Simulation based programs (VirtualSim, Theme Editor, NLN Case-Based Scenarios)
4. Installation, replacement, and configuration
5. Troubleshooting, download

DEPARTMENTAL GUIDELINES *(optional)*

DIVISION CHAIR APPROVAL

DATE