NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
ITP 260 – APPLICATIONS OF MODELING AND SIMULATION (4 CR.)

Course Description.
Expands understanding of modeling and simulation via the implementation of a capstone project. Continues to develop object oriented programming skills. Expands three dimensional visualization skills. Examines all aspects of the project lifecycle. Develops workplace readiness for the modeling and simulation industry. Lecture 4 hours. Total 4 hours per week.

General Course Purpose
This is a major course in the A.A. S. in Technical Studies: Modeling and Simulation.

Course Prerequisites/Co-requisites
Prerequisite is ITP 193.

Course Objectives
Upon completion of the course, the student will be able to:

- Develop advanced distributed simulation programming skills.
- Use object oriented programming in an advanced simulation project.
- Apply mathematical skills to develop three dimensional visualizations.
- Acquire requirements for a simulation project.
- Develop and update a project plan.
- Create a budget for a simulation project.
- Develop a simulation in a team environment.

Major Topics to be Included
a. Advanced distributed protocols.
b. Advanced Object Oriented Design
c. Project Development Lifecycle
d. Use of Multicast and TCP/IP in Simulation
e. Distributed Simulation Protocol Engine Analysis and Comparison
f. Mathematics and Visualization
g. Capstone project implementation.