## CAPSTONE PROJECT

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#### Introduction

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## Introduction

The CAPSTONE project is a personally-designed independently conducted activity which enables you to further your knowledge/skill in one or more of the course topics which you have found or believe to be especially interesting or beneficial to you.

The project represents a significant portion of your final grade for the course and is therefore expected to represent attainment of advanced knowledge/skill levels in the selected topic.

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- 1. Review all course materials and select a topic.
  - Select a topic you find to be believe to be especially interesting or beneficial to you in your future academic/career life.
- 2. Determine and identify the learning product and means by which you will advance your knowledge/skill levels.
  - You must advance your knowledge/skill level beyond that normally expected in the course. It is expected that the project will reflect a minimum of 30 hours of concentrated effort on your behalf.

- 3. Prepare a brief (one page maximum) CAPSTONE project proposal.
  - The proposal must ...
    - clearly identify the topic you have chosen, and
    - describe the learning product, and
    - describe the means by which you will advance your knowledge/skill levels in the topic you have chosen
    - describe the deliverables products that will be submitted at the end of the semester

- 4. Submit by your CAPSTONE project proposal for consideration and approval.
  - Note, proposals requiring rework will be returned with a request for revision and resubmission.
- 5. Once your proposal has been approved, work toward the completion of your approved CAPSTONE project activity throughout the remainder of the semester.
- 6. Submit your CAPSTONE project work-in-progress reports by the specified due dates.

- 7. Develop a computer-based presentation of your CAPSTONE project experience by the specified due date.
- 8. Successfully deliver your CAPSTONE project presentation.
- 9. Submit both hard- and soft-copies of your completed CAPSTONE project for final evaluation by the specified due date.

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## CAPSTONE PROJECT Examples

- Application of computer-based tools to solve a problem or create a product relevant to your needs and/or interests:
  - Create a computer microarchitecture simulator
  - Create a web-page editor
  - Create a computer controlled Remote Integrated Launch System application
  - Create a customer record maintenance and invoicing database
  - Create a performance profile of an application and make appropriate performance enhancements
  - Create a spelling quiz program
  - Create a basic arithmetic quiz program
  - Create a record management (or DBMS) program
     Create a tutorial guide on Pascal programming concepts/tips/techniques
  - Create a "How to create web-pages" web-site
  - Create a "Wheel of Fortune" game program
  - Create a complete home budget spreadsheet
  - Create an inventory database complete with forms and reports
  - Create a "Jeopardy" Silviculture game using MS PowerPoint
  - Create a recipe database using MS Access
  - Create and maintain a personal web(WWW) server
  - Create a home budget spreadsheet using MS Excel
  - Create a WWW Home Page for yourself or a business/organization

## CAPSTONE PROJECT Examples

- Comprehensive report on the use of computers in your career field:
  - Report on Use of GIS (Geographic Information Systems) in Forest Management
  - Report on Impact of Internet on Children
  - Report on Computer Database Availability and Use in Law Enforcement
  - Report on the use of Computers to promote Natural Medicines and their use
  - Report on the use of Information Technology in the Social Services field

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## CAPSTONE PROJECT Proposal Examples

#### **Example 1**

- **Topic:** Use of Information Technology in Law Enforcement
- **Product:** A comprehensive report that identifies and describes the different types of information technology used by the Maine State Police.
- **Method:** I am planning on conducting interviews with several Maine State Police officers to learn more about the information technologies they use in day to day activities.
- **Relevance:** This project is relevant to me since I am planning on joining the Maine State Police following graduation and will benefit both myself and the Maine State Police by being better skilled with and knowledgeable of the various information technologies they utilize.
- Deliverables: A 10 page report and a 5 min PowerPoint Presentation

## CAPSTONE PROJECT Proposal Examples

#### Example 2

- Topic: The effects of computers on children
- **Product:** A comprehensive report that identifies and describes the effects of computers and computer use on children.
- Method: I am planning on conducting a library literature search to learn more about the effects of computers and computer use on children.
- Relevance: This project is relevant to me since I am a parent and have a particular concern about what I should and should not be doing to help my children grow. I have heard of the effects of television on children and am concerned there may be negative effects corresponding to my children being exposed to computers.
- **Deliverables:** A 10 page report and a 5 min PowerPoint Presentation

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### **CAPSTONE PROJECT Presentation Guidelines**

#### Title/Topic slide

• Identifies the Title/Topic of your project and the course title and your name.

#### Project Description

Identifies the Product, Method and Relevance as you proposed.

#### Outcomes

Identifies all significant outcomes (i.e., what was and was not accomplished).

#### Lessons Learned

 Identifies the lessons you learned in completing the project as well as any recommendations you have to others who might attempt to complete a similar project.

#### Demonstration

 This is NOT optional and should not exceed to time allotted for your presentation. Remember, your slides should contain only an outline and you should elaborate on each point as you present.

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**CAPSTONE PROJECT - Evaluation Criteria and Schedule of Deliverables** 

## CAPSTONE PROJECT - Evaluation Criteria and Schedule of Deliverables

| Capstone Proposal                  | 10% |
|------------------------------------|-----|
| Perceived Difficulty of Project    | 20% |
| Originality of Solution            | 10% |
| Thoroughness of Project            | 10% |
| Clarity of Presentation            | 10% |
| Adherence to Proposed Deliverables | 10% |
| Adherence to Project Schedule      | 10% |
| Overall Quality of Project         | 20% |

## References

 http://perleybrook.umfk.maine.edu/slides/spring%202004/co s125/CAPSTONE-Project-Description-S04-TF.htm