



**I. COURSE DESCRIPTION:**

This course provides an opportunity for the student to consolidate the skills developed in the first two years of the program, and to apply those skills to an individualized network or computer systems-related research project of greater complexity than normal lab activities require. In addition to applying analysis, research, project management and presentation skills, the course will challenge the student's technical knowledge to apply what has been learned to real-world problems.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon successful completion of this course, the student will demonstrate the ability to:

**1. Perform independent research in a timely manner using available resources.**Potential Elements of the Performance:

- Prepare a written proposal outlining the goals and scope of the research project.
- Utilize available resources, including Internet-based information sources to research the topic area extensively.
- Maintain a logbook of project-related activities and project documentation.
- Schedule project activities and milestones to ensure completion on time.
- Acquire necessary resources including software to implement the project solution.

*This learning outcome constitutes approximately 20% of the course.*

**2. Participate in peer roundtable discussions and reviews.**Potential Elements of the Performance:

- Participate in scheduled roundtable discussions to review project progress with peers and faculty to help overcome difficulties and share experiences.

*This learning outcome constitutes approximately 5% of the course.*

**3. Implement and test solutions when given task specifications.**Potential Elements of the Performance:

- Test or compare alternative approaches to the problem.

- Implement a preferred solution (when appropriate) and summarize results.
- Recommend a preferred course of action stating advantages and disadvantages, costs and required resources.

*This learning outcome constitutes approximately 40% of the course.*

**4. Present technical research results effectively in both written and oral forms.**

Potential Elements of the Performance:

- Prepare a formal technical report summarizing the research project and discussing its results and recommendations.
- Present a summary of your research project to a group using appropriate presentation methods to enhance your effectiveness.

*This learning outcome constitutes approximately 35% of the course.*

**III. TOPICS:**

1. Research Techniques and Sources
2. Research Report and Presentation

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

- List of suggested research projects. (supplied by instructor)
- Project Logbook

**V. EVALUATION PROCESS/GRADING SYSTEM:**

|                                      |            |
|--------------------------------------|------------|
| Project Proposal                     | 5%         |
| Interim Report                       | 15%        |
| Project Presentation                 | 25%        |
| Technical Report and Technical Merit | <u>55%</u> |
|                                      | 100%       |

The following semester grades will be assigned to students:

| <b>Grade</b> | <b><u>Definition</u></b> | <i>Grade Point Equivalent</i> |
|--------------|--------------------------|-------------------------------|
| A+           | 90 – 100%                | 4.00                          |
| A            | 80 – 89%                 | 3.00                          |
| B            | 70 - 79%                 | 3.00                          |

|             |  |      |
|-------------|--|------|
| C           | 60 - 69%   | 2.00 |
| D           | 50 – 59%   | 1.00 |
| F (Fail)    | 49% and below  | 0.00 |
| CR (Credit) | Credit for diploma requirements has been awarded.  |      |
| S           | Satisfactory achievement in field /clinical placement or non-graded subject area.  |      |
| U           | Unsatisfactory achievement in field/clinical placement or non-graded subject area.   |      |
| X           | A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course. |      |
| NR          | Grade not reported to Registrar's office.  |      |
| W           | Student has withdrawn from the course without academic penalty.  |      |

## VI. SPECIAL NOTES:

### Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

### Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

### Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

**VIII. ADVANCE CREDIT TRANSFER:**

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.