DEPT. Computer Science                        COURSE NO.  2140

COURSE TITLE  *Electronic Spreadsheets and Graphics*

CATALOG DESCRIPTION: Explores topics of statistical applications, managing database systems, and various graphical capabilities using integrated business simulations. Internal and external program utilities to aid in scanning, importing graphics and combining files will be introduced. Competency in statistical and logical formulas, charting techniques, database manipulation and macro design is expected

AUDIENCE  Business students as well as any one wishing a greater understanding of the capabilities of a spreadsheet

FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:  CSCI 1102 Introduction to Microcomputers

LENGTH OF COURSE:  One Semester

THIS COURSE IS USUALLY OFFERED:  
Every other year [ ] fall [x] spring [ ] summer [ ] undetermined [ ]

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT:
   a. To understand the concept of designing electronic spreadsheets, manipulating data, and retrieving data for statistical analysis
   b. To learn the concepts of entering data, formatting calculations with functions, graphing, sorting and creating macros.
   c. To provide data simulations and use a systematic approach to solving the problem
   d. To work interactively over the Internet

2) THINKING SKILLS:
   a. Gain an understanding of the kinds of problems that this type of application software is best suited to solve.

3) COMMUNICATIONS SKILLS:
4) HUMAN DIVERSITY:

TOPICS TO BE COVERED:

<table>
<thead>
<tr>
<th>Working with Windows</th>
<th>Building and editing worksheets</th>
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<tbody>
<tr>
<td>Formatting a Worksheet</td>
<td>Working with Charts</td>
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<tr>
<td>Formulas and Functions</td>
<td>Managing Workbooks</td>
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<td>Automating Tasks</td>
<td>Using Lists</td>
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<td>Analyzing List Data</td>
<td>Enhancing Chars and Worksheets</td>
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<td>What if Analysis</td>
<td>Pivot Tables</td>
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<td>Exchanging Data</td>
<td>Shared Data</td>
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<tr>
<td>Customizing Excel</td>
<td>Programming with Excel (optional)</td>
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</table>

LIST OF EXPECTED COURSE OUTCOMES: see under above goals

LEARNING/TEACHING TECHNIQUES used in the course are:

- [ ] Collaborative Learning
- [ ] Problem Solving
- [ ] Student Presentations
- [ ] Interactive Lectures
- [x] Creative Projects
- [ ] Individual Coaching
- [ ] Lecture
- [ ] Films/Videos/Slides
- [ ] Demonstrations
- [ ] Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:

- [x] Reading
- [x] Tests
- [x] Individual Projects
- [ ] Oral Presentations
- [ ] Worksheets
- [ ] Collaborative Projects
- [x] Textbook Problems
- [ ] Papers
- [ ] Portfolio
- [ ] Group Problems
- [ ] Term Paper
- [ ] Other (describe below)

EXPECTED STUDENT LEARNING OUTCOMES:

1. to learn how to create and format worksheets
2. to learn how to add formulas, functions and charts
3. to learn how to prepare documents for and use documents on the Web
4. to learn how to write macros, use lists and PivotTables
5. learn how exchange data with other programs

The information in this course outline is subject to revision

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.
To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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