

Montgomery County Community College
MAT 140
Finite Mathematics for Business
3-3-0

COURSE DESCRIPTION:

A course in finite mathematics with special emphasis on applications to business and related fields. Topics include linear and quadratic equations with applications involving supply, demand, revenue, cost, profit and break-even points; matrices and systems of

| LEARNING OUTCOMES | LEARNING ACTIVITIES | EVALUATION METHODS |
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| 3. Find break-even points for linear and quadratic function applications. | Lectures Small Group Discussions and/or Projects The Use of TI 84 Graphics Calculator Homework Quizzes Projects | Exams Quizzes Homework Projects |
| 4. Find market equilibrium, given linear or quadratic supply and demand functions. | Lectures Small Group Discussions and/or Projects The Use of TI 84 Graphics Calculator Homework Quizzes Projects | Exams Quizzes Homework Projects |

5. Graph linear and quadratic supply, demand, cost, revenue

| LEARNING OUTCOMES | LEARNING ACTIVITIES | EVALUATION METHODS |
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| 8. | | |

| LEARNING OUTCOMES | LEARNING ACTIVITIES | EVALUATION METHODS |
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| 13. Solve maximization linear programming problems using the simplex method with the calculator. | Lectures Small Group Discussions and/or Projects The Use of TI 84 Graphics Calculator Homework Quizzes Projects | Exams Quizzes Homework Projects |
| 14. Solve minimization linear programming problems using the dual maximization problem. | Lectures Small Group Discussions and/or Projects The Use of TI 84 Graphics Calculator Homework Quizzes Projects | Exams Quizzes Homework Projects |
| 15. Compute simple and compound interest using the appropriate formulae. | Lectures Small Group Discussions and/or Projects The Use of TI 84 Graphics Calculator Homework Quizzes Projects | Exams Quizzes Homework Projects |
| 16. Find the present and future value of ordinary annuities using the calculator. | Lectures Small Group Discussions and/or Projects The Use of TI 84 Graphics Calculator Homework Quizzes Projects | Exams Quizzes Homework Projects |
| 17. Find the future value of annuities due using the calculator. | Lectures Small Group Discussions and/or Projects The Use of TI 84 Graphics Calculator Homework Quizzes Projects | Exams Quizzes Homework Projects |

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|--|--|--------------------|
| 18. Compute mortgage payments and make a mortgage amortization table using the calculator. | Lectures Small Group Discussions and/or Projects The Use of TI 84 Graphics | |

