

**SPRINGFIELD COLLEGE IN ILLINOIS**  
**MATH 105 (3 semester hours)**  
**FINITE MATHEMATICS I**

**Session: Begins June 13, 2007**  
**Ends August 15, 2007**

**Instructor: Molly Finley**  
**Email: [molly.finley@gmail.com](mailto:molly.finley@gmail.com)**

**Place/Time: Richland CC Campus – Room E162**  
**Wednesdays 6:00-10:00p.m.**

### **Course Description**

From the Benedictine University/Springfield College in Illinois Academic catalog: a survey of algebra, functions, graphs and linear equations as applied to problems in economics and business. Topics include mathematics of finance, linear, polynomial, exponential and logarithmic functions.

### **Textbook and Materials**

**Required text:** *FINITE MATHEMATICS*, S. T. TAN, 8TH EDITION, Thompson Publishing

**Required materials:** TI-83 scientific calculator, graph paper, folder for assignments, **homework notebook**

### **Teaching Methods**

Teaching methods will vary depending on the material presented. Possible methods used include: collaborative classroom problem solving, classroom discussion of topics, small group problem solving, computer laboratory assignments where applicable and as time permits, in class problem solving with discussion, writing assignments, homework assignments, individual presentation of work, applications reflective of the real world and short assessment papers.

### **Course Requirements**

**Attendance policy:** An attendance sheet will be provided for you to sign in when attending class. This is a method to know who is present on a given day. These sheets will be used to provide the administrative offices with attendance records.

**MAKE SURE YOU SIGN IN each session.**

**Homework:** Homework will be given on Wednesday and you will have one week to complete the assignment and turn it in to the instructor. There will be five graded homework assignments to do and submit. An assignment sheet will be distributed in class listing the chapter problems to do in your notebook as practice. Also, the problems to do and turn in for a grade will be listed.

**Tests:** There will be five TESTS-one on each chapter covered. If you anticipate a conflict with a test day, please discuss an alternate testing date with the instructor.

**FINAL EXAM:** The final exam will be comprehensive. The final exam will be given on the date provided by Springfield College on the final exam schedule. Finals will be given in the room used for class (D 105).

**Student Outcome Statements:** Upon successful completion of this course, the student will be able to:

1. Graph a straight line in the xy-plane
2. Find the equation of a line
3. Solve application problems involving linear equations in two variables
4. Find the intersection of two lines
5. Find a least-squares line
6. Solve a system of linear equations using substitution
7. Solve a system of linear equations using Gauss-Jordan elimination
8. Solve a system of linear equations using augmented matrices
9. Perform operations with matrices
10. Graph a system of linear inequalities in two variables

**Student Outcome Statements: (continued)**

11. Solve a linear programming problem by graphing
12. Solve a linear programming problem by substitution
13. Solve a linear programming problem by Gauss-Jordan elimination
14. Solve a linear programming problem by using augmented matrices
15. Know and be able to use the formulas for simple interest and compound interest
16. Use the formula for present value
17. Be able to determine the future value of an annuity
18. Be able to determine the present value of an annuity
19. Use the amortization formula
20. Use the sinking fund payment formula.

**Plagiarism:**

Plagiarism is utilizing the ideas or work of another and claiming them as your own. Give credit where credit is due. If a student is caught plagiarizing another student's work, the student will be given the opportunity to resubmit the assignment. If this happens again with the same student, the student will receive a zero on that assignment and no recourse will be available.

**American with Disabilities Act (ADA)**

Benedictine University at Springfield College in Illinois provides individuals with disabilities reasonable accommodations to participate in educational programs, activities and services. Students with disabilities requiring accommodations to participate in college-sponsored programs, activities and services or to meet course requirements should contact the Dean of Student Affairs as early as possible.

**First Class Session:**

Students should prepare for the first class session by reading in the textbook Chapter 1 Sections 1.1, 1.2 and 1.3. At the first session, the instructor will pass out the assignment sheet for Chapter 1. The sheet will include a list of problems from each section to do as practice problems in their notebook. Also, the sheet will include a list of problems to do, showing all work, and to turn in on the date given by the instructor.

**Grade Determination:**

**Grading Scale:**

100% to 90%	A
89% to 80%	B
79% to 70%	C
69% to 60%	D
Below 60%	E

**Grades based on:**

Attendance & Participation	5%
Tests	45%
Homework	25%
<u>Final Exam</u>	<u>25%</u>
<b>TOTAL = 100%</b>	