Math 115 – Finite Math - 3 credits
(Subject to Change)

Instructor: Susan Hertzler
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Course Description – This course introduces students to the uses of mathematics in business and the social and biological sciences. This will be presented through the use of matrices, systems of linear equations, linear programming using various methods, set theory, probability, and game theory.

Prerequisites – Student registering for this course need to have a working knowledge of College Algebra. Completion of Math 105 is required before registering for this course.

Who should take this course – MTH 115 is required for all accounting majors. Anyone who would like to see mathematics applied to realistic applications would be welcome to take this course.


**It is strongly recommended that you bring a calculator to class that will accommodate fraction, factorial, combination, and permutation operations.

Course Goals & Objectives

1. To master lines on the Cartesian Coordinate System, linear functions and mathematical models, and solving systems of equations.

2. To introduce and develop alternative methods of solving systems of equations, operations with matrices, linear programming, the Simplex Method, the mathematics of finance, and elementary probability.

3. To see mathematics at work in business applications.

4. To develop critical thinking and problem solving skills.

Class Agenda

1. New material will be discussed.
2. Group Help Time
Course Lecture Schedule

Session #1 Introductions
Discussion of course objectives and requirements
Discussion of sections 1.1, 1.2, and 1.3
Group Help Time

Session #2 Discussion of sections 1.4, 2.1, and 2.2
Group Help Time

Session #3 Discussion of sections 2.3, 2.4, and 2.5
Group Help Time
Take Home TEST #1 – Hand Out

Session #4 TEST & Homework Due
Discussion of sections 3.1,3.2, and 3.3
Group Help Time

Session #5 Discussion of sections 4.1 and 4.2
Group Help Time

Session #6 Discussion of sections 5.1, 5.2, and 5.3
Group Help Time
Take Home TEST #2 – Hand Out

Session #7 TEST & Homework Due
Discussion of sections 6.1, 6.2, 6.3, and 6.4
Group Help Time

Session #8 Discussion of sections 7.1, 7.2, and 7.3
Group Help Time
Take Home TEST #3 (Due one week after last class)

Evaluation
Your grade will be based on the following percentage scale:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<td>A+</td>
<td>98-100</td>
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<tr>
<td>A</td>
<td>94-97</td>
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<td>A-</td>
<td>90-93</td>
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<td>B+</td>
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Grade Composition: 60% 3 Take Home Tests 40% Homework
*Homework – Turn in your homework using the following guidelines:

- write in pencil
- no staples
- clean edges paper
- box answers
- in a pocket folder
- writing on one side of paper only

**10 points will be deducted each day for work turned in late.

Course Policies
It is very important that you attend all classes. In the event that you should have to miss a session, you will be responsible for getting the notes from another person in the class and be ready to take the quiz and hand in any homework that may be due for the next session. Please notify me as soon as you anticipate a need to be absent. Attendance will be taken.

2 Absences = Automatic Failure

If an emergency should arise and you need to miss class, please email, phone my home (work or cell) number, or Doane College to leave me a message. The next day call me at home to make arrangements for getting anything you might need for the next class.

The Doane College Academic Policy will be adhered to in the class. All tests and quizzes should be done without the assistance from outside sources. Any violation of these policies can result in a loss of points for that particular assignment.

**In the name of courtesy to both classmates and instructor, please, no answering of or texting on cell phones during class.