**Math 102 – Introduction to Mathematics – Fall 2010**

**Section 08**

3 credit hours per week

**Meeting time and room:** 11:30am – 12:20pm, Bridges Hall 357 on Monday, Wednesday and Friday.

**Instructor:** Damiano Fulghesu  
Office: MacLean 375W  
Phone: (218) 477-4017  
E-mail: fulghesu@mnstate.edu.

**Office Hours:**  
Monday and Friday: 9:30am-11am;  
Tuesday and Thursday: 9:30am-Noon  
Wednesday: 1:00pm-2:50pm  
or by appointment.


**Prerequisites:** Students are required to have an ACT math score of 19 or higher or a score of 15 or higher on the MnSCU math placement test. Students who do not meet these criteria should take a Mathematical Concepts (MDEV 102) prior to taking MATH 102. Transfer students should contact their instructor at the start of the semester if they are questioning their placement in this course.

**Course Description:** Logic, sets, probability and statistics, problem solving strategies.

**Goals:** To increase students’ knowledge about mathematical and logical modes of thinking. This will enable students to appreciate the breadth of applications of mathematics, evaluate arguments, and detect fallacious reasoning. Students will learn to apply how mathematics, logic and statistics in making decisions concerning their lives and careers.

**Student Competencies**

Students will be able to

1. Solve real-life problems using mathematics/logic systems.
2. Express mathematical/logical ideas clearly in writing.
3. Organize, display, analyze information and understand methods of data collection.
4. Explain what constitutes a valid mathematical/logical argument (proof).
5. Apply a variety of higher-order problems-solving and modeling strategies.
6. Exhibit mastery of Computational skills and the ability to make reasonable estimates.

**Learning Outcomes:**  
**Students will:**  
1. Determine whether arguments are valid.
2. Solve real-life problems by using the principles of set theory.
3. Make decisions regarding the possible events that are governed at least in part by chance.
4. Apply the basic concepts of statistics, such as collecting data; drawing graphs; finding measures of average, variation, and position; and solving problems using the standard normal distribution.
5. Demonstrate understanding of select concepts in logic, set theory, probability, and statistics by solving a real-life problem and communicating their work to the class orally and/or in writing.

**Attendance Policy:** I will not formally take attendance each day and you will need a formal excuse only when you miss an exam.

**Assistance Available:** The Math Department offers tutoring (hours and location to be announced).

**Exams:** Each hour exam covers the material since the last exam. They will be on Friday, September 17; Friday, October 8; Wednesday, November 3; Monday November 22.

**Final Exam:** The final exam will be on Wednesday, December 15, at Noon and it will be comprehensive.

**Make-up tests:** There will be no makeup for the final exam. If you miss a one-hour test for a legitimate reason, you may take a make-up test.

**Grading Weights**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 4</td>
<td>20%</td>
</tr>
<tr>
<td>Final</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Questions:** Don’t be shy about asking questions in class. If you don’t understand something it’s very likely that many of your classmates are also having difficulty. If you have further questions, try and see me during office hours or by making an appointment.

**Academic Honesty:** See Academic Honesty

[http://www.mnstate.edu/sthandbook/policiesprocedures/academicichonesty.cfm](http://www.mnstate.edu/sthandbook/policiesprocedures/academicichonesty.cfm)

**Special Accommodations Statement**

Students with disabilities who believe they may need an accommodation in this class are encouraged to contact Greg Toutges, Director of Disability Services at 477-2131 (Voice) or 1-800-627-3529 (MRS/TTY), CMU 114 as soon as possible to ensure that accommodations are implemented in a timely fashion.

**Evaluation:** Four unit exams and a comprehensive final will be given and each of these is weighted equally in determining your final grade. The letter grade earned on each exam will be told you on the day your exam is returned. Other “in class” evaluations (graded homework, quiz) may change your grade by one step (B+ to A- or B- to C+).