MATH 3335A – A First Course in Probability  
MW 12:10-1:25  Malloy 022

Instructor:  Jack Follis, Ph.D.  
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Email:  follisj@stthom.edu  
Office:  Math 113  
Office Hours:  MW 10am – 12 pm  
TTh 11am – 12 pm  
Th 4:30-6:30 p.m.  
Other times by appointment


Course Catalog Description:  
An elementary introduction to the mathematical theory of probability for students of mathematics, engineering and the sciences (including the social sciences and management science). Topics include combinatorial analysis, axioms of probability, conditional probability and independence, and random variables.

Prerequisite:  MATH 1432.

Course Objectives:  
Upon Completions of this course students will be able to:  
- Identify the key concepts of probability, conditional probability and independence  
- Identify random variables and probability distributions  
- Derive expected values and variance for random variables  
- Understand the significance of the Central Limit Theorem and the Law of Large Numbers

Course Outline:  
The outline below is tentative; it may change in the event of circumstances beyond the instructor's control.  
1. Combinatorial Analysis  
2. Axioms of Probability  
3. Conditional Probability and Independence  
4. Random Variables  
5. Continuous Random Variables  
6. Jointly Distributed Random Variables  
7. Properties of Expectation  
8. Limit Theorems
GRADE IN COURSE:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Quizzes*</td>
<td>20%</td>
</tr>
<tr>
<td>Assignments**</td>
<td>10%</td>
</tr>
<tr>
<td>Exams/Projects</td>
<td>40%</td>
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<tr>
<td>Final</td>
<td>30%</td>
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* There are no make-ups for missed quizzes.

**Late assignments and/or electronic submissions will only be accepted with the instructor’s consent.

GRADING SCALE: *In this class the final course grades will be determined using the following grade scale:*

<table>
<thead>
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<th>Grade</th>
<th>93.0-100</th>
<th>90-92.9</th>
<th>87.0-89.9</th>
<th>83-86.9</th>
<th>80-82.9</th>
<th>77.0-79.9</th>
<th>73-76.9</th>
<th>70-72.9</th>
<th>67.0-69.9</th>
<th>60-66.9</th>
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<tr>
<td></td>
<td>A</td>
<td>A-</td>
<td>B+</td>
<td>B</td>
<td>B-</td>
<td>C+</td>
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<td>D+</td>
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| Policy on Academic Dishonesty

(From the 2014-2016 Undergraduate Catalog)

**Policy/Procedure**

Every offense against academic honesty seriously undermines the teaching-learning process for which the University exists, and such offenses will be dealt with expeditiously according to the following criteria.

**Definition**

Academic dishonesty includes but is not limited to:

1. Cheating on an examination or test; for example, by copying from another’s work or using unauthorized materials before or during the test, including the use of electronic devices;
2. Plagiarism, which represents as one’s own the work of another, whether published or not, without acknowledging the precise source;
3. Participation in the academic dishonesty of another student, even though one’s own work is not directly affected;
4. Any conduct which would be recognized as dishonest in an academic setting.

**Penalty**

The penalty for an incident of academic dishonesty is, at the discretion of the faculty member, either a mark of zero for the work in question or a grade of F for the course.
Disabilities
Any student with a disability requiring accommodations in this course is encouraged to contact me after class or during office hours. Additionally, students will need to contact Counseling and Disability Services in Crooker Center. This office can be reached at (713) 525-2169 or 6953

DROPPING THE COURSE: If you decide you do not wish to continue the course, it is your responsibility to go through the proper channels and officially drop the course.

Tutorial Services
Students needing extra assistance with course concepts may also visit the Tutorial Services Center and/or ust.askonline.net.