STT 441 - SECTION 1  
PROBABILITY AND STATISTICS-1  
Spring 2015

Instructor: Aylin ALIN  
e-mail: alina@stt.msu.edu  
Office: C 419 Wells Hall  
Office Hours: M W F 10:30AM-11:30 AM and by appointment

Lecture Times: M W F 12:40 PM – 1:30 PM  
Lecture Room: A318 Wells Hall  
Prerequisite: MTH 234 or MTH 254H or LB 220 or approval of college  
Text Book : Ross, Sheldon M., A First Course in Probability (8nd edition) (Required)  
Class Web Page: http://www.stt.msu.edu/academics/classpages/  
Choose  STT 441.

All the materials including the homework assignments will be posted on the class web page.

Course Objective:

• STT 441 is an important prerequisite for several statistics classes and a required course for Statistics and Actuarial Science majors. The purpose of this course is to teach students basic probability principles and techniques. The course will cover the most of Chapters 1-7.

• At the end of this course students are expected to master the following components: Combinatorial Analysis, Basic probability concepts, Conditional probabilities, Discrete and continuous random variables, Classical probability distributions, Joint probability distributions, Expected values, Laws of large numbers, The central limit theorem.

Assessment Methods:

<table>
<thead>
<tr>
<th>Grading</th>
<th>Midterm exam</th>
<th>Quiz</th>
<th>Homework</th>
<th>Final Exam</th>
<th>Extra credit class exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>%25</td>
<td></td>
<td></td>
<td>%15</td>
<td>%35</td>
<td>0.5 pt for each</td>
</tr>
</tbody>
</table>

6 homeworks will be assigned during semester each with 20 points. The lowest score will be dropped. Then, sum of the remaining 5 HWs will be your HW grade.

• There will be 6 in class quizzes each with 20 points. The lowest score will be dropped. Sum of the remaining 5 quizzes will be your quiz grade.

• There will be two in-class midterm exams each with 50 points. Sum of these exams will be your Midterm exam grade.

• The final exam will cover all the material from the beginning. It will worth 100 points.

• The exam and quizzes will be based on the text material, classroom examples and homework assignments.

• Students will have a chance of winning extra points by solving questions assigned in class. The total extra credit will be added to the total grade without taking any percentages.

• Your final grade will be calculated as below: Midterm*0.25+Homework*0.15+Quiz*0.25+Final*0.35+Total extra credit

• The maximum possible grade will be 100.

• Below is the grading scale in terms of 4 point scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>90-100</th>
<th>80-89</th>
<th>70-79</th>
<th>60-69</th>
<th>50-59</th>
<th>40-49</th>
<th>30-39</th>
<th>&lt;30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>4.0</td>
<td>3.5</td>
<td>3.0</td>
<td>2.5</td>
<td>2.0</td>
<td>1.5</td>
<td>1.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Important Dates:

--Classes begin                Monday, 1/12
--Martin Luther King Day day (University open, classes cancelled )     Monday, 1/19
--Online Open Add Periods Ends at 8 p.m.  
--End of %100 Refund              Friday, 1/16
--Middle of Semester; Deadline to drop with no grade  
--Spring Break                    Monday, 3/9-Friday, 3/13
--Classes End                      Friday, 5/1


Dates for the Homeworks, Quizzes, Midterm and Final Exams:

<table>
<thead>
<tr>
<th>EXAM DATES</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EXAM1</td>
<td>EXAM2</td>
<td>FINAL EXAM</td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td>Friday</td>
<td>Thursday</td>
<td></td>
</tr>
<tr>
<td>February 20</td>
<td>April 10</td>
<td>May 7</td>
<td></td>
</tr>
<tr>
<td>12:40-1:30 p.m</td>
<td>12:40-1:30 p.m</td>
<td>12:45-2:45 p.m</td>
<td></td>
</tr>
</tbody>
</table>

| TENTATIVE QUIZ DATES |          |          |          |          |          |          |
| QUIZ1      | QUIZ2    | QUIZ3    | QUIZ4    | QUIZ5    | QUIZ6    |
| Friday     | Friday   | Friday   | Friday   | Friday   | Friday   |
| January 23 | February 6| March 6  | March 20 | April 3  | April 24 |

- The quizzes will be given in the first 20 minutes of the class.

| TENTATIVE HOMEWORK DUE DATES |          |          |          |          |          |
| HW1      | HW2      | HW3      | HW4      | HW5      | HW6      |
| Friday   | Friday   | Friday   | Friday   | Friday   | Friday   |
| January 23 | February 6| March 6  | March 20 | April 3  | April 24 |

Course Policies and Rules:
- This course is demanding and requires a great deal of work. Students are responsible for all material covered in class. Students are expected to attend each class period and to bring their textbook.
- Please feel free to ask any question during lecture hours as they occur to you. Use the office hours to get help as needed.
- It is not possible for me to reply the e-mails of the students. So, do not send an e-mail except for requesting an appointment.
- No opportunities to improve a grade will be offered after the end of the course, which is the final examination. Additionally, no opportunities to improve a grade will be offered besides those specified in this syllabus, unless offered by me to all students. Students should stay up to date on calculating their grades and adjust study during the semester to earn the grade they seek.
- The course is not curved so all students can earn a 4.0.
- All concerns regarding questions on examinations and tests must be discussed with me within 5 working days of when the results are returned; during the office hours is the preferred venue. After that, the examination/test is considered closed.
- Late homework will not be accepted.
- There will not be any make-up exam for final.
- For midterms, do not request make-up exams unless it is absolutely necessary and you can substantiate your reason for the request. In this case, please notify me prior to the test date. If you do not make prior arrangements with me you will not be permitted to take the examination and your score will be recorded as a zero.

Academic Honesty: The Department of Statistics and Probability adheres to the policies of academic honesty as specified in the General Student Regulations 1.0, Protection of Scholarships and Grades, and in the All-University of Integrity of Scholarship and Grades which are included in Spartan Life: Student Handbook and Resource Guide (or visit the Spartan Life website http://www.vps.msu.edu/SpLife/ ). Students who plagiarize will receive a grade 0.0 on the homework, exam or quiz.

Disclaimer: The instructor reserves the right to make any changes she considers academically advisable. Changes will be announced in class. It is student's responsibility to keep up with any changed policies.