Probability and Statistics

Math 1530-011 - Fall 2014

Instructor:	Dr. Yali Liu
Office:	Gilbreath Hall 308 - H
Office Hours:	MW 10:30am - 11:30am or by appointment
Phone number:	439-6980
Email:	liuy01@etsu.edu

Class Time and Place: M 12:10pm - 1:30pm ; Gilbreath Hall 306; W 12:10pm - 1:30pm ; Gilbreath 304.

Credits: 3

Prerequisites: Two years of high school algebra.

Text Package:

- CP ETSU Essential Statistics 2e StatsPortal Package, by David S. Moore, William Notz, Michael Fligner 2nd Ed., Freeman, 2013. The ISBN is 1-4641-6639-0. The package contains

  - Custom loose leaf text.
  - StatsPortal which includes standard interactive ebook, extensive resources and is available via access-code-protected Web site. `http://courses.bfwpub.com/ess2e.php`.

  Note that if you do not purchase the text package, you will not have access to statsportal to receive up to 50 points in grades.

Course Web Page: `http://math.etsu.edu/1530/`. Add this in your favorites.

Class Notes: Class notes are provided and are available on D2L `https://elearn.etsu.edu/`. However, the textbook contains more material than what can be covered in the lectures and hence **you are expected to read and digest material in the text book.**

Technology Required:

- A calculator that does basic math is sufficient.
- MINITAB, a statistical software package, will be introduced and used in the class. Make sure that you could access MINITAB through Citrix from your home computer. Refer to `http://www.etsu.edu/oit/helpdesk/xenapps.aspx` for information and steps on installing Citrix XenApp.

  You could also download a free 30-day trial version of Minitab 16 from `http://www.minitab.com/en-US/products/minitab/free-trial.aspx`.

- Make sure that you have access to the D2L and statsportal. You need to take your quizzes and midterm exams and download notes, datasets, and homework assignments through D2L and statsportal.

Course Objectives: To develop a basic understanding of probability and statistics and how they relate to the world around us.

Course Work:

Item	Points
Learning Curve Assignments	50
Quizzes/Homework/Lab	250
2 Mid-term Exams	400
Capstone Project	100
Final Exam	200
Total	1000

- Learning Curve Assignments: there are 19 learning curve assignments available from statsportal (`http://courses.bfwpub.com/ess2e.php`). The assignments account for 5% (50 points) of your final grade. You have unlimited attempts to complete each assignment but must achieve the goal to get credit (2.5pts) on that assignment. Another 2.5 points will be given if you achieve the goal for all chapters. All learning curve assignments must be taken and submitted by **7am, Monday, Dec 8, 2014**.

- Attendance quizzes, homework/lab, and quizzes will be given frequently during the semester. No makeup or late homework/lab will be accepted in any circumstances. Quizzes are given in class or outside class and should be completed in a limited period. The homework/lab assignments will be announced on most Wednesdays and due one week late on Wednesday. For homework/lab, **only hard copies are acceptable.** When turning in your homework or lab, **each problem must be presented in order**. This includes all relevant graphs and tables, which must be easily readable and appropriately labeled. **Any graph or figure that is turned in without comments or spans across more than one page will be ignored**. The homework, labs and quizzes account for 25% (250 points) of your final grade.

- Two mid-term exams (in-class) will be given and any change of the tentative date will be announced at least one week in advance. Mid-term exams are open book and open notes. Only a calculator that does basic math is allowed. Neither cell phone nor sharing of any material is allowed during the exams. If for any reason you have to miss the exam, talk to me at least one week before the exam. With acceptable written documentation why an exam cannot be taken at the given date, a makeup with more problems will be given. Each mid-term exam accounts for 20% (200 points) of your final grade.

- Capstone project: a Minitab assignment worth 100 points will be handed out. This assignment will be based on an in-class survey conducted during the first two weeks of the term. More details of this assignment will be given before it is assigned.

- A comprehensive departmental **final examination will be held on Wednesday, Dec 10, 2014, at 1:20pm.** The Final Examination will count 20% (200 points) of your final grade. For **extremely low scores on the Final Examination (less than 80 points or less than 40%)**, the student will be assigned a semester grade of F. Request for any exceptional arrangement must be made at least one week before the exam.

- **BONUS FOR GOOD ATTENDANCE**: Attendance is important for this class. You will be rewarded 50 points to your total score for perfect attendance after the first week; 40 points for only 1 absence; 30 points for 2 absences; 20 points for 3 absences; 10 points for 4 absences. For 5 or more absences, refer to the Department Attendance Requirements. All notes other than university note will not be excused for absences.

- **Missed quizzes/homework/lab will count as a zero. No makeups will be given.**

Grading Scale:

The grade will be based on a possible 1000 points. The scale follows:

A	$950 - 1000$	$A-$	$900 - 949$	$B+$	$880 - 899$	B	$820 - 879$
$B-$	$800 - 819$	$C+$	$780 - 799$	C	$720 - 779$	$C-$	$700 - 719$
$D+$	$650 - 699$	D	$600 - 649$				
F	less than 600 or less than 40% on final or **academic misconduct**						

Department Attendance Requirements: (approved by department vote on February 28, 1994; revised July 1999*)

The Department of Mathematics strongly advises students to attend all mathematics classes when physically able. Because there is a positive correlation between attendance and student success in mathematics, the following attendance guidelines will be used in all mathematics courses. Regardless of the reasons for the absences, should a student exceed the following limits, the instructor has the authority to assign a grade of FN or W; this policy takes precedence over the grade assignment policy for MATH 1530: **5** absences for classes scheduled for TR or MW classes.

Tutoring:

- **Center for Academic Achievement (CFAA):** Provides free individual, group, and online tutoring.
  Location: 123 Sherrod Library;
  Phone: 423-439-7111
  Website: `http://www.etsu.edu/uged/cfaa/default.aspx`
  Hours: Monday-Thursday 9am-9pm; Friday 9am-3:30pm; Saturday 11am-5pm; Sunday 3pm-9pm. Need to make an appointment.

- **Student Support Services, NURSE Center, Athletics, Disability Services:** Provide one-on-one and/or group tutoring available for those who qualify for their services. Check with them to see if you qualify.

- **Private Tutors:** Fee-based private tutors are available. Check
  `http://www.etsu.edu/uged/cfaa/learning/privatetutors.aspx` for contact information.

Student Success:

- **S**tudy and read before attending the lectures. Keep up with the course.

- Devote some **T**ime to studying each day, rather than a large amount of time once a week.

- Take an **A**ctive role in learning. Come to class and participate.

- **T**utor each other. If you feel that you are lost help is out there; see your instructor/tutor early. Don't wait until the last minute!

- **A**lways talk to me before you decide to stop attending the lecture or drop the class.

- **LEARNING DISABILITY:** Students requesting special assistance due to a learning disability must show proof that they have properly registered their disability. Call Disability Services at 439-4841 for information.

Tentative Schedule:

Week	Monday	Wednesday
1	Introduction & Ch.1	Ch.1&2
2	Holiday	Ch 2
3	Ch. 2 & 8	Ch. 8& 9
4	Ch.9 & 4	Ch. 4
5	Exam 1 **9/22/2014**	Ch. 5
6	Ch.5 & 3	Ch.3
7	Ch.10 & 12	Ch. 13
8	Break	Ch.11
9	Ch.14	Ch15
10	Exam 2 **10/27/2014**	Ch.16
11	Ch.18	Ch.18
12	Ch.19	Ch.20
13	Ch.20	Ch.23
14	Ch.23	Holiday
15	Review	Review