

**Statistics 3470**  
**Introduction to Probability and Statistics for Engineers**  
**Autumn Semester 2016**

**Class Meetings:** University Hall (UH), Room 14, MWF 1:50pm – 2:50pm

**Instructor:** Nicole T. Kelbick, PhD

**Contact:** kelbick.1@osu.edu

**Office Hours:** 435 Cockins Hall (CH), TR 8:30am – 10:30am, 2:00pm-3:00pm

**Grader:**

<b>Name</b>	<b>Kumar Somnath</b>
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<b>Office</b>	CH 134 (Tutor room)
<b>Hours</b>	TBA

**Prerequisites:** Math 1152, 1161.xx, 1172, 1181H, 153 or 254, or equivalent, or permission of instructor. Not open to students with credit for 3450, 3460, 427, or 428.

**Enrollment:** ADD and SECTION CHANGES will be processed, contingent upon availability, starting at 7am on Monday August, 29<sup>th</sup> through Tuesday, August 30<sup>th</sup>. This will be on a first-come first-served basis in 405A Cockins Hall. **The instructor does not sign any Add or Section Change forms.** Check out [www.stat.osu.edu/node/1643](http://www.stat.osu.edu/node/1643) for more detailed information regarding Add and Section Changes.

Closed Section Strategy: If the section you wish to take is closed, consider enrolling into another section that is still open. It is much easier to do a section change (and there are no late add fees either) if a space opens up. It is more complicated to do a late enrollment and the chance of succeeding is not great.

**Textbook:**

*Probability and Statistics for Engineering and the Sciences 9 edition* by Jay L. Devore.

**Website:** The course has a web page on Carmen (<http://www.carmen.osu.edu>). Homework assignments, class schedule, and other relevant material and announcements will be posted on the web page. Please check it on regular basis.

**Course Description:** Introduction to probability, Bayes theorem, discrete and continuous random variables, expected value, probability distributions, point and interval estimation, hypotheses tests, and least squares regression. This course is a GE Data Analysis Course.

**Goals:** Develop skills in logical reasoning, including the ability to identify valid arguments, use mathematical models and draw conclusions based on quantitative data.

**Expected Learning Outcome:** Students understand basic concepts of statistics and probability, comprehend methods needed to analyze and critically evaluate statistical arguments and recognize the importance of statistical ideas.

## Important Dates:

Date	Reason
September 5	Labor Day (no classes)
September 16	Last day to drop without receiving a "W" on student record.
October 13-14	Autumn break (no classes)
November 11	Veteran's Day (no classes)
November 23, 24, 25	Thanksgiving break (no classes)
December 7	Last day of classes

**Homework / WebAssign:** There will be approximately weekly homework assignments. The due dates will be announced IN CLASS. The assignments will be posted on WebAssign. Solutions will be posted on Carmen. Electronic (emailed), printed or handwritten homework will NOT be accepted.

Although students are often encouraged to work together on homework assignments, all students must submit their own work in their own words. DO NOT SIMPLY COPY ANY PART OF SOMEONE ELSE'S HOME- WORK OR SOLUTIONS FROM ANY OTHER SOURCES. Violations will be treated as academic misconducts. NO LATE HOMEWORK WILL BE ACCEPTED.

WebAssign rules (homework points, allowed number of attempts, etc.) will be announced along with each assignment. Login to your WebAssign account at:

<https://www.webassign.net/osu/login.html>.

There is a free trial (no excuse to miss homework assignments). You can get the Access code with the bundle offer (printed book and access code with eBook) at the bookstore or get the access code by login in into WebAssign and follow the instructions. The access code with eBook can be purchased as well at <https://www.cengagebrain.com/shop/>.

**Grading:** Your grade will be based on homework assignments, two midterms, and a comprehensive final exam. The relative point-worth of these components are as follows:

Homework	25%	Approximately weekly
Midterm I	20%	<b>Tentatively</b> Friday, Sept. 23 <sup>rd</sup> , in class
Midterm II	25%	<b>Tentatively</b> Friday, Oct. 28 <sup>th</sup> , in class
Final	30%	Wednesday, Dec. 14 <sup>th</sup> , 2:00pm – 3:45pm, in class
	<u>100%</u>	

**Homework:** There will be approximately weekly assignments. Homework problems and solutions will be posted on Carmen. **No late homework will be accepted.** All homework are due at the beginning of class.

**Exams:** All exams will be closed book and closed notes. The final exam will be cumulative, but will emphasize the more recent material. For the two midterms you may be allowed to bring one standard size (8.5 × 11 inch) sheet containing formulae and for the final exam you may be allowed to bring two standard sized (8.5 × 11 inch) sheets. There will be NO makeup exams.

NOTE: For all the exams you are allowed the use of a BASIC CALCULATOR. Exam rules will be announced in class. **No make-up exams will be administered.**

<b>Exam</b>	<b>Date</b>	<b>Chapters Covered</b>
Midterm I	<b>Tentatively</b> Wednesday, Sept. 28 <sup>th</sup>	TBA
Midterm II	<b>Tentatively</b> Wednesday, Nov. 2 <sup>nd</sup>	TBA
Final	Monday, Dec. 12, 8:00am-9:45am	<b>Comprehensive</b>

**Office Hours:** While questions are welcome and expected during class sessions, all students should feel free to visit during office hours for individual assistance with the course material. Questions regarding grades or scores will only be answered during office hours. Students unable to attend office hours may easily make an appointment to see the instructor at another time.

**Communication Devices:** Cell phones, PDAs and other communication devices must be either turned off or put on vibrate during class. Please refrain from texting during class as a courtesy to those sitting around you. All electronic devices other than a calculator must be shut off and put away during examinations.

**Academic Misconduct:** Although you are encouraged to work together, you are expected to produce independent work for homework and exams. Academic misconduct for any sort will not be tolerated. If students are caught indulging in dishonest activities during exams, they will be reported immediately, without any exception. Please review OSU's policies at <http://studentaffairs.osu.edu/csc/>.

**Special Accommodation:** Students with ADA-documented physical, sensory, emotional or medical impairments may be eligible for reasonable accommodations. Veterans may also be eligible for services. All accommodations are coordinated through the Office of Disability Services (ODS) in Room 150 of Pomerene Hall, (614) 292-3307. Please contact the ODS as early in the semester as possible. You can also contact the instructor privately to discuss your specific needs.

**Disclaimer:** The schedule and procedures contained in this syllabus should be taken as a fairly reliable guide for the course content and policies. They are, however, subject to change at the instructor's discretion. Any changes will be announced in class as well as posted on Carmen.

See tentative course schedule below.

## Tentative Course Schedule

<b>Week of</b>	<b>Sections to be covered</b>
August 22 <sup>nd</sup>	2.1 – 2.2 (Note: Still responsible for reading chp 1.)
August 29 <sup>th</sup>	2.3 – 2.5
September 5 <sup>th</sup>	3.1 – 3.3
September 12 <sup>th</sup>	3.3, 3.4, (3.5*) 3.6
September 19 <sup>th</sup>	4.1, Review*, Exam 1
September 26 <sup>th</sup>	4.1 – 4.4
October 3 <sup>rd</sup>	5.2 – 5.3
October 10 <sup>th</sup>	5.4, 6.1
October 17 <sup>th</sup>	6.1 – 6.2
October 24 <sup>th</sup>	7.1, Review*, Exam 2
October 31 <sup>st</sup>	7.1 – 7.3
November 7 <sup>th</sup>	8.2 – 8.4 (14.1*)
November 14 <sup>th</sup>	8.4 (14.1*), 12.1 – 12.2
November 21 <sup>st</sup>	12.2 – 12.4
November 28 <sup>th</sup>	(13.1* - 13.4*)
December 5 <sup>th</sup>	Review*

Actual Exam and Homework dates will be announced in class. Sections/Reviews marked “\*” may be omitted in order to finish covering unmarked sections.