

STT 441: Probability and Statistics I – Probability  
Michigan State University, Fall 2018  
Section: 003

## Instructor's Information:

**Name:** Leonard C. Johnson

**Office:** C410 Wells Hall

**Contacts:** By Phone - (517)-355-3287                      By Email - [john2772@stt.msu.edu](mailto:john2772@stt.msu.edu)

**Office hours:** Tues 1:30 – 2:30 p.m. & Fri 4:15 – 5:15 p.m. or By Appointment

## Class Information:

**Weekly Meetings:** Mon, Wed & Fri; 3:00 p.m. – 3:50 p.m. in 122 Berkey Hall

**Help Room:** The department of Statistics and Probability provides free help sessions for undergraduates students throughout the academic year. The help room is located at A102 Wells Hall. Please visit the [help room website](#) to get further information about scheduling.

**Class Attendance:** Students are expected to attend all lectures of this class. If you miss a class for any reason, you will be responsible for materials covered during that class period. In the event that a graded work is due at that time, you must provide documentation for a reasonable cause of your absence (for instance, doctors notes indicating you were sick, accident report etc).

**Webpage:** All course materials and Homework will be posted on [D2L](#). Please download course materials from D2L before you attempt to read them. The D2L viewer does not work well with power point slides and PDFs.

## Course Description:

This is the first course in a two-course sequence of introductory probability and statistical inference for students with calculus background. STT 441 covers the introductory probability theory and models part of the sequence at an intermediate mathematics level. The course covers basic Probability, conditional probability and independence. Random variables – Discrete and continuous; univariate and multivariate distributions; Expectation and its properties; Moment generating functions; Law of large numbers and central limit theorem.

**Prerequisite:** MTH 234 or MTH 254H or LB 220 or approval of college.

## Required Textbook:

### *Introduction to Probability*

**Author:** David F. Anderson, Timo Seppäläinen, Benedek Valkó

**ISBN:** 9781108415859

**Publisher:** Cambridge University Press

## Grading Policies:

Grades will be assigned using the following weight:

Quizzes	homework	Midterm Exam 1	Midterm Exam 2	Final Exam
10%	30%	15%	15%	30%

You final grade will be determined by the following grading scale:

Percentage	90-100	80-89	70-79	65-69	60-64	55-59	50-54	0-49
Grade	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.0

## Quizzes and Homework:

There will be two quizzes for 5% each and 10 homework assignments for 3% each during the semester. All homework are due in class on the specified due date. All homework and quizzes will be graded and the due date will be posted on D2L when they are assigned. Homework will be due mostly on Fridays of every week except during an exam week. **Late homework will not be accepted and there will be no make-up for homework.** Quizzes can be in class or online depending on how well the class is going.

## Examinations:

There will be two midterm exams and one cumulative final exam. All exams will be closed notes and taken in-class on the schedule day. Please see the tentative dates for the midterm exams on the schedule below:

### **Exam Schedule:**

Exam	Dates	Time
Midterm Exam 1	09/28/2018	3:00 – 3:50 p.m.
Midterm Exam 2	11/02/2018	3:00 – 3:50 p.m.
Final Exam	12/10/2018	3:00 – 5:00 p.m.

**Extra Credits:** There will be a 2 – percent extra credit for attendance. There is no other form of extra credits. This class **will not** be curved. Attendance will be taken at the instructor’s discretion.

## Course Policies:

### Classroom Civility

Please silence your cell phones and other electronic devices as you enter the class. Computer use during class should be strictly limited to class activities. Please do not watch videos in class as other might be distracted as well. In general, just be nice!!

### Feedbacks and Communications

- All course announcements will be made in class or using D2L. Please check D2L regularly.
- Please DO NOT reply to mass emails sent via D2L, you should create an email with new subject line in case you wish to respond to mass emails.
- The best way to contact me is via my department’s email : [john2772@stt.msu.edu](mailto:john2772@stt.msu.edu) . Please give me up to 24 hours for email response. Emails sent over the weekend may have a longer waiting time.

### Academic Integrity and 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. Additional information can be found at <https://honorcode.msu.edu>

Student who plagiarize will get a zero for the assignment or quiz.

### ADA:

- To arrange for accommodation, students with disabilities should contact the Resource Center for People with Disabilities.
- Resource Center for Persons with Disabilities(RCPD): Telephone: 355-9642; Website: <http://www.rcpd.msu.edu>
- Once you obtain a RCPD VISA please contact the instructor via email to arrange for a meeting to discuss your accommodation options.

### Disclaimer

The instructor reserves the right to make small or large scale changes to this syllabus as he sees academically appropriate without any consultation. If and when such changes occur, the instructor will make a formal announcement to the class via multiple media.

## Important Dates

- Aug 29 First day of class
- Sep 03 Labor Day Holiday - University Closed
- Sep 09 On Line open add period ends (8.00 p.m.)
- Sep 24 Last day to drop a class with refund (8.00 p.m.)
- Sep 28 Exam 1 (3:00 p.m. – 3:50 p.m. in 122 Berkey Hall)
- Oct 17 Middle of Semester - last day for withdrawal or dropping courses with no grade (8.00 p.m.)
- Nov 2 Exam 2 (3:00 p.m. – 3:50 p.m. in 122 Berkey Hall)
- Nov 24-25 Thanksgiving Holiday - University Closed
- Dec 07 Last day of class
- Dec 10 Final Exam (3:00 p.m. – 5:00 p.m. in 122 Berkey Hall)

## Tentative Class Schedule:

Week	Content	Assessments - Due Dates
1 (08/29 – 08/31)	Section 1.1 – 1.3	
2 ( 09/05 – 09/07)	Section 1.4 – 1.5 , 2.1	Hwk 1 – 09/07
3 (09/10 – 09/14)	Section 2.2 – 2.4	Hwk 2 – 09/14
4 ( 09/17 – 09/21)	Section 2.4 – 2.5, 3.1	Hwk 3 – 09/21
5 (09/24 – 09/28)	Section 3.2 – 3.4	Exam 1 – 09/28
6 (10/01 – 10/05)	Section 3.5, 4.1 – 4.2	Hwk 4 – 10/05
7 (10/08 – 10/12)	Section 4.3 – 4.5	Hwk 5 – 10/12
8 ( 10/15 – 10/19)	Section 5.1 – 5.2	Hwk 6 – 10/19
9 (10/22 – 10/26)	Section 6.1 – 6.2	Hwk 7 – 10/26
10 (10/29 – 11/02)	Section 6.3, 7.1 – 7.2	Exam 2 – 11/02
11 (11/05 – 11/09)	Section 8.1 – 8.2	Hwk 8 – 11/09
12 ( 11/12 – 11/16)	Section 8.3 – 8.4	Hwk 9 – 11/16
13 ( 11/19 – 11/21)	Section 9.1 – 9.3	
14 (11/26 – 11/30)	Section 10.1 – 10.3	Hwk 10 – 11/30
15 (12/03 – 12/07)	Review & catching up	No homework

**Final exam Monday, 12/10; 3:00 p.m. – 5:00 p.m. in 122 Berkey Hall**