

**Professor:** Dr. Thomas Fisher

**Office:** 334 E Upham Hall

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**Email:** [fishert4@miamioh.edu](mailto:fishert4@miamioh.edu) (best)

**Office Hours:** MW: 11:00-11:40 & 2:00-3:00\*

TuTh: 10:00-11:00\* and by appointment

(\*regular office will begin the week of Sept 9)

**Personal Web Site:** <http://www.users.miamioh.edu/fishert4/>

**Class Materials:** Textbook, notes and a Calculator may be helpful from time-to-time.

**Text:** Mathematical Statistics with Applications (7th ed) by Wackerly, Mendenhall & Schaeffer

**References:** Introduction to Mathematical Statistics by Hogg and Craig

**Catalog Description:** A study of estimation and hypothesis testing including a development of related probability ideas. Topics include derivation of the distribution of functions of random variables, point estimation methods, properties of point estimators, derivation of confidence interval formulas, and derivation of test statistics and critical regions for testing hypotheses.

**Topic Outline:** Brief review of probability, methods of transformation, sampling distributions, point estimators and properties, interval estimation, methods of estimation and properties, hypothesis testing for means and variance, properties of hypothesis tests.

**Exams:** Two in class exams will be given (each worth 20%) and a cumulative final exam (worth 30%). Tentative Dates:

Exam 1 – in class week of October 4th-ish

Exam 2 – in class week of November 7th-ish

Final Exam – Friday, December 13, 10:15 a.m.-12:15 p.m. (student confirm?)

*Details will be determined closer to the exam times.*

**Homework:** Homework will be given throughout the semester and will count as 30% of your final grade. I expect to give regularly graded homework assignments (at least one assignment every two weeks, but once a week is the plan). You may discuss homework problems with other students; however, the final work must be your own!! Late homework will not be accepted.

**Attendance Policy:** The pace of this class is such that it will not be advisable to miss any sessions. If you know you will be absent, please inform me in advance. When you are absent, it will be your responsibility to contact another student for the notes and announcements. While attendance does not factor into your grade, I may take attendance for my own records. *You are expected to be an active participant for the entire 55-minute class. Indications that this is not happening include sleeping, surfing the web or instant messaging on your laptop, text-messaging on your cell-phone, studying for another class, etc. Please turn your cell phone to silent before class.* Students are expected to wait quietly for 15 minutes after class is scheduled to begin. If I have not yet appeared the students are free to leave

**Letters of Accommodation:** *If you have a letter stating specific testing accommodations to which you are entitled, please come by my office to discuss the accommodations that you will need and to give me a copy of the letter. Even if you do not anticipate using any accommodations, it is a good idea to turn in the letter as soon as possible. Please note that unless I have at least one week's notice I will be unable to provide any accommodation on an exam.*

**Prerequisites:** STA401/501 and Calculus III

**Student Code of Conduct:** Any violations of *Academic Integrity* within the *Student handbook* will not be tolerated.

**Conduct:** This includes cheating, plagiarism, storing information in a calculator, sabotage of another's work and disrupting class. See the Student Handbook for a complete listing of the student code of conduct. All violations will be handled in accordance with established procedures and policies concerning student academic responsibility.

<http://www.miamioh.edu/handbook.pdf>

**Final Grades:** At the end of the semester, the final grades will be compiled using the following:

Instrument	Value
Graded Homework	30%
2 Test @ 20% each	40%
Cumulative Final Exam	30%
Total	100%

Grades will be assigned based on the follow:

Percentage	Grade
[97, 100)	A+
[93, 97)	A
[90, 93)	A-
[87, 90)	B+
[83, 87)	B
[80, 83)	B-
[77, 80)	C+
[73, 77)	C
[70, 73)	C-
[67, 70)	D+
[63, 67)	D
[60, 63)	D-
[0, 60)	F