STAT3660: Intro to Statistics

4 credit hours

Schedule
Monday, Wednesday: 4:00pm – 7:20pm
Rood Hall 3391

Instructor
Hyunkeun (Ryan) Cho
hyunkeun.cho@wmich.edu
Everett Tower 5504

Office Hours
Monday, Wednesday: 9:00am – 10:00am

Course Webpage
http://www.stat.wmich.edu/~hzz3534/stat3660

Description
An introduction to statistics for students in the biological and related sciences with an emphasis on the basic concepts and explanations of why things work. The focus is on quantitative reasoning and statistical thinking for making decisions and conjectures. This numerical art will be illustrated with a wide range of interesting problems. Topics include descriptive statistics like means, medians, standard deviation, percentiles; correlation and regression - interpretation and prediction problems; the normal and binomial distributions; law of averages; sampling variability and standard errors; inferential statistics to -confidence intervals and tests of hypotheses for one- and two-sample problems.

Prerequisite
MATH 1100 or 1110, ACT Math 19, SAT Mathematics 460, or Math Online Placement Exam 07.

Any student who has completed this requirement elsewhere must go to 3303 Everett Tower, and verify eligibility to take Stat 3660. STUDENTS FAILING TO MEET THE PRE-REQUISITE WILL BE DROPPED FROM THE COURSE BY THE DEPARTMENT ON THE LAST DAY OF THE DROP/ADD PERIOD. The fee to be re-admitted into a course after the drop and add period is $50.

Textbook
STAT 3660 Introduction to Statistics, by Dr. Gerald Sievers (coursepack) is required for this class. It contains the content of class lectures, review exercises for group work in class, and practice exercises with answers at the end of the course pack. The practice exercises are an important part of your learning. They allow you to check on your understanding of the material.

Our work this term will be built around the materials of this text. You will be expected to read it to supplement the lectures. It contains many examples for you to study and problems to solve, to develop your skills. You are also expected to bring your book to class every day; I may refer to specific examples and exercises during class. Statistics is not a spectator sport; you need to do it to learn. You can’t learn it by just watching me.

In the past, the textbook used was Statistics by Freedman, Pisani and Purves (4th Ed.). It is no longer required, but you may find it helpful since the class is based on material as covered in this book.

Calculator
A simple calculator will be acceptable for this class. No cell phones will be allowed.
Quizzes and Workshops
Since this is a summer class (we have a lot to cover in one class period) you can expect some sort of graded item due each class period. These may include in-class group work, in-class quizzes, pop quizzes, etc. I do not accept late work.

Exams
There will be a final exam during the term on the last day of class, June 25th. The policy on make-up exams is very strict; A MISSED EXAM IS A ZERO SCORE. You are not allowed to take an exam early.

Crib Sheets
To avoid memorization of formulas, crib sheets will be allowed. For the final, a sheet of paper (8.5 x 11) can be used (both sides).

Grading Policy
Your grade for the course will be based on exam, quizzes, and group works with the following weights:

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<th>Component</th>
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<tr>
<td>Workshops</td>
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<tr>
<td>Quizzes</td>
<td>40%</td>
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<tr>
<td>Final</td>
<td>30%</td>
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The following scale will be used in determining your final grade:

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<tr>
<th>Grade</th>
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<tr>
<td>A</td>
<td>≥ 90</td>
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<td>BA</td>
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<td>B</td>
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<td>CB</td>
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<td>C</td>
<td>≥ 63</td>
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<td>DC</td>
<td>≥ 57</td>
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<td>D</td>
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Elearning
Elearning will be used to administer quizzes, update grades, and contact you.

Disabilities
If you have any sort of disability such that you require accommodations to participate in class, take exams, etc., let me know so that we can make the appropriate arrangements. I'm happy to work with you, but I need to know. For more information, see www.wmich.edu/disabilityservices.

Incompletes
Incompletes will only be given according to University and Departmental policy. An incomplete is not a substitute for a failing grade; they are given only after completing a major portion of the coursework with a passing grade, and circumstances beyond your control prevent you from completing the coursework.

Academic Integrity
Students are responsible for making themselves aware of and understanding the academic policies and procedures in the Undergraduate and Graduate Catalogs that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. [The policies can be found at http://catalog.wmich.edu under Academic Policies, Student Rights and Responsibilities.] If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. Students will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. Students should consult with your instructor if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.
Tutor Lab (May 7th – June 19th)
The tutor lab is located in ROOD 3363 and operates Monday and Wednesday 10:00am – 2:00pm and Tuesday and Thursday 12:00am – 4:00pm.

The purpose of the tutor lab is to give you additional support and explanation in supplement to what is being taught in your Statistic course(s). The tutors are available because of the course fees that you pay for your Statistics courses. Thus, you should take advantage of the additional help outside of your class and your professor's office hours.

You CAN expect tutors to:
• Work with you, when you arrive in the tutor lab, in a timely fashion.
• Answer questions and help clarify any new information from your course.
• Demonstrate problem-solving skills. They can help you identify areas that you might need more work in developing.
• Work through example problems. Tutors are an excellent source for helping you work through many example problems that supplement the material you are learning in class.
• Be professional and courteous at all times. We know Statistics is not everyone's favorite subject. You do not need to be self-conscious about getting a little extra help.

You CANNOT expect tutors to:
• Provide you with any course materials that you forget to bring to the tutor lab. Make sure you come prepared with your course pack, text book, class notes, calculators, pens, pencils, etc...
• Substitute as your instructor when you have missed class. It is your responsibility to attend class and be prepared. If you miss a class, it is your responsibility to make sure that you know what you have missed. Tutors are not in the lab to re-teach a lesson.
• Know all the answers to every question. Tutors do not always teach the course that you are currently in, so do not expect them to immediately KNOW everything that you are doing.
• To help you with your particular model of calculator. You are responsible for knowing how your calculator works. There are wonderful resources online to assist you in using technology (e.g. YouTube tutorials).
• Substitute for your OWN HARD WORK!

There is also a list of private tutors in the Statistics Department (Everett Tower 3304) if you need additional help.