



**THE GEORGE
WASHINGTON
UNIVERSITY**
WASHINGTON, DC

STAT 1051 - 10 (CRN: 66170)

Introduction to Business and Economic Statistics

M/W 06:10PM - 07:25PM, FNGR 210

Last updated: 1/18/2023

Instructor: Jiashen You

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Office Hour: after class or by appt

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Office Hour: Wednesday 2:30 - 3:30PM ROME 753; Friday 3 - 4PM virtual;

Course Description: This is an introductory statistics course. Topics covered in this class include: frequency distributions, descriptive measures, probability, probability distributions, sampling, estimation, tests of hypotheses, regression and correlation, with applications to business and economics.

Credit Hours: 3

Note: Stat 1051, 1053, 1111, and 1127 are related in their subject matter, and credit for only one of these courses may be applied toward a degree. One entrance unit in algebra is prerequisite to all courses in statistics.

Learning Outcomes:

At the completion of this course, students will be able to:

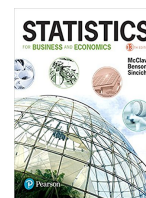
1. perform exploratory analyses by means of summary statistics and visualization tool
2. apply laws of probability
3. construct and interpret large-sample and small-sample confidence intervals
4. evaluate evidence for and against hypotheses using statistical tests
5. find the least-squares equation for simple linear regression and assess the utility of the model
6. utilize statistical software (R) to analyze real data sets

Required Textbook: *Statistics for Business & Economics*, 13th Edition

Author(s): McClave, Benson and Sincich

ISBN - 13: 9780134506593 (MyLab Statistics Series)

Supplementary Textbook: OpenIntro Statistics, 3rd edition



Other Required Materials:

- access to Blackboard
- a scientific calculator (phone/tablet/laptop etc. is not allowed)
- access to a computer where RStudio is installed. All PCs in the Academic Technologies computer lab in the basement of Gelman Library, Room B05 are equipped with an array of statistical softwares. You need a GWeb account to use those computers. First, install R. Then, install R Studio.

Course Policies:

- **General**

- Students are expected to spend on average **a minimum of 5 hours per week** to work on assignments, improve comprehension and study for assessments outside the classroom contact hours for this course.
- Students are expected to work independently unless otherwise specified (such as group labs/project). **Offering** or **accepting** solutions from/to others is an act of **plagiarism**, which is a serious offense and **all involved parties will be penalized according to the Academic Honesty Policy**. Discussion amongst students on outside testing environment is encouraged, but when in doubt, direct your questions to the professor, teaching assistant, or tutor.
- There is free peer tutoring provided by the Department of Statistics for students in this course. Check <http://statistics.columbian.gwu.edu/peer-tutoring> for detail.
- Quizzes and exams are closed book. The final exam is comprehensive.

- **Grades**

- If you would like your work to be regraded, you must request within **one week** from the time the item is available for distribution.
- *Incomplete* grade will only be granted if “a student, for reasons beyond the his/her control, is unable to complete the work of the course, and if the instructor is informed of, and approves, such reasons before the date when grades must be reported”. An *Incomplete* may only be given if the student asks for such a grade and if s/he has been passing in the course until such time as the *Incomplete* is requested.
- **All course grades are final once assigned after the final exam.** You may request to view your final exam per university policy.

- **Homework Assignments**

- Assigned homework problems represent a minimum set of exercises students need to complete in order to keep up with lectures. You are responsible to spend more time, if needed, to grasp a better understanding of these concepts and do well on the exams.
- **No late assignments will be accepted under any circumstances.**

- **Attendance and Quizzes**

- Attendance is expected and may be taken in the form of in-class quiz submission.
- Students are responsible for all missed work, regardless of the reason for absence. It is also the absentee’s responsibility to get all missing notes or materials.

Grade Distribution: * - subject to change

Final Project	30*%
Lab Assignments	10*%
Quizzes	15*%
Midterm Exam	20*%
Final Exam	25*%

Letter Grade Distribution: (*: Cutoffs subject to flow down at instructor’s discretion)

$\geq 87.50^*$	A
75.00* - 87.49*	B
60.00* - 74.99*	C
50.00* - 59.99*	D
$\leq 49.99^*$	F

Important Dates:

Class begins	Jan. 17
President’s Day (no class)	Feb. 20
Midterm Exam	(tentative) week of Mar. 6
Spring break (no class)	Mar. 13 - Mar. 18
Final Exam	Projected - Monday, May 1

University Policies:

- **Academic Integrity Code:** I personally support the GW Code of Academic Integrity. It states: “Academic dishonesty is defined as cheating of any kind, including misrepresenting one’s own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” For the remainder of the code, see <https://studentconduct.gwu.edu/>
- **Religious Holidays**
 1. **Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance.**
 2. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations.
 3. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities.
- **Safety and Security:** In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.
- **Disability Support Services (DSS)** Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to <https://disabilitysupport.gwu.edu/>.
- **University Counseling Center (UCC) 202-994-5300** The University’s Mental Health Services offers 24/7 assistance and referral to address students’ personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations, confidential assessment, counseling services (individual and small group), and referrals <https://healthcenter.gwu.edu/counseling-and-psychological-services>.

Tentative Schedule: “D” stands for Recitation Session (Wednesdays)

MONDAY		WEDNESDAY	
Jan 16th MLK Day - No class	1	18th Chapter 1, 2	2
23rd Chapter 2	3	25th Chapter 2 - 3, Lab 0 (D)	4
30th Chapter 3	5	Feb 1st Chapter 3 - 4, Lab 1 (D), Quiz 1 (D)	6
6th Chapter 4	7	8th Chapter 4 - 5, Lab 1 cont. (D)	8
13th No lecture	9	15th No lecture, Lab 2 (D), Quiz 2 (D)	10
20th President’s Day - No class	11	22nd Chapter 5, Lab 3 (D)	12
27th Chapter 5	13	Mar 1st Chapter 11, Quiz 3 (D)	14
6th Chapter 11	15	8th Midterm, Lab 4 (D)	16
13th Spring break (no class)	17	15th Spring break (no class)	18
20th Chapter 11	19	22nd Chapter 6	20
27th Chapter 6	21	29th Chapter 7, Lab 5 (D), Quiz 4 (D)	22
Apr 3rd Chapter 7	23	5th Chapter 7 - 8, Quiz 5 (D)	24
10th Chapter 8	25	12th Chapter 8, Quiz 6 (D)	26
17th Chapter 8, Chapter 11 revisited, Project Help	27	19th Chapter 12 (optional), Project Help	28
24th Group Q & A, Project Help	29	26th Project Presentation	30
May 1st Project Presentation	31	3rd 32	