

Course Syllabus



Instructor Information

- **Instructor:** Fabiana Ferracina
 - **Email:** fabiana.ferracina@wsu.edu (<mailto:fabiana.ferracina@wsu.edu>)
 - **Office Hours:** 4:10-5:00 PM Mon & Tue or by appt.
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Class Information

- **Location/Schedule:** Zoom Classroom, M-Th 2:30-4:05 PM
 - **Prerequisites:** MATH 172 or MATH 182.
 - **Course description:** Probability models, sample spaces, random variables, distributions, moments, comparative experiments, tests, correlation and regression in engineering applications. Credit not granted for both STAT 360 and MATH 370. Cooperative: Open to UI degree-seeking students. 3 credits.
 - **Course website:** Class material, assignment material, and class communication will be done through the Canvas site at canvas.wsu.edu. Please visit it continuously to see any class announcements, class material and assignments, and to review your grades. The online homework is available also in Canvas via a linked account to [MyOpenMath](https://www.myopenmath.com/) [\(https://www.myopenmath.com/\)](https://www.myopenmath.com/).
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Textbook

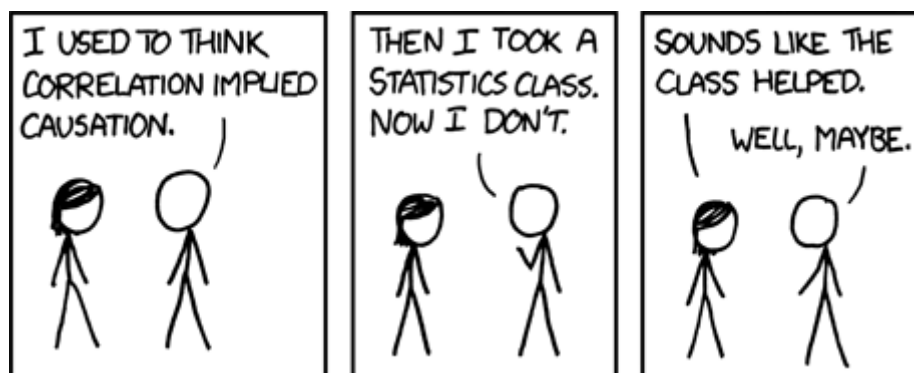
Walpole, R.E., Myers, R.H., Myers, S.L., and Ye, K. (2012): Probability & Statistics for Engineers and Scientists. Pearson, ninth edition. ([DuckDuckGo search results](https://duckduckgo.com/?q=valpole+statistics&atb=v82-2_&ia=web) [. \(https://duckduckgo.com/?q=valpole+statistics&atb=v82-2_&ia=web\)](https://duckduckgo.com/?q=valpole+statistics&atb=v82-2_&ia=web).)

Work for this Class

- **Lectures:** The course material will be presented mostly live via Zoom. All lectures will be recorded and shared with all students. Attendance is not required, however for students not attending the live lectures, watching the recorded lectures will be required.
- **Student participation:** Student participation is strongly encouraged, especially in the class and in the discussion forum. I expect students to answer and formulate questions during class time and/or office hours. In order to be prepared for class discussion, read the relevant sections in the textbook before class .

- **PREP homework:** Each lecture is designed based on the assumption that an assigned homework (reading and/or video, and quiz) will be completed before class. These PREP material allow us to focus the class time to clarifying ideas and solving practice problems. The PREP homework is due every day before class by noon. The PREP quizzes consists of 5 questions about the topics discussed in the PREP homework. Each quiz is graded as: 4-5 correct: 100%; 3 correct: 80%; 2 correct: 70%; 1 correct: 60%. Failure to complete the PREP homework before the class means no points.
- **Weekly assignments:** There will be weekly comprehensive (longer) assignments. MyOpenMath (integrated with Canvas) will be used for assignment management . These assignments will work as practice exercises of the topics covered during the week. The assignments will be available after every Thursday class, and must be completed before Monday's class. You will access the MyOpenMath assignments directly from Canvas . No late assignments will be accepted. However, you can use one of your LatePasses in MyOpenMath for a 24-hour extension. You have 3 late passes in total – use them properly. You can discuss the assignments with your classmates and work in groups to solve them and to develop a better understanding of the class material. However, notice that MyOpenMath may assign different (although similar) questions for every student – copying your classmate's answers will only give you 0 points. You CANNOT use online tutoring (Chegg, for instance) to obtain the answers to the assignments – email me your questions instead, or reach out to QSC tutors. I recommend that you solve the questions on paper and then you post your answers online, in that way you can email me your work if there is any technical issue.
- **Exams:** Like the PREP work and the weekly assignments, four exams will be given via MyOpenMath, and they will be timed. Exams should be completed before Monday's class (see the course outline for due dates). Exams are closed notes and closed book. You will be allowed one double sided 8.5 by 11 inches notes sheet and a scientific calculator.
- **Grading policy:** The final grade for the course is given by the weighted average of the grades of assignments (30%), quizzes (20%), exams (for a total of 50%). Grades will be converted to a letter grade using the following scale:

A	A-	B+	B	B-	C+	C	C-	D+	D	F
93-100	90-92.9	87-89.9	83-86.9	80-82.9	77-79.9	73-76.9	70-72.9	67-69.9	60-66.9	0-59.9



Course Outline

Week	Dates	Prep	Topic	Reading
1	6/21		Statistics and Data Analysis	Ch. 1
	6/22	*	Sample Spaces and Events	Ch. 2.1-2.2
	6/23	*	Probability Rules	Ch. 2.4-2.5
	6/24	*	Counting Probabilities and Rules	Ch. 2.3-2.4, Assignment 1
2	6/28		Counting Probabilities and Rules	Ch. 2.3-2.4
	6/29	*	Conditional Probability	Ch. 2.6-2.8
	6/30	*	Conditional Probability	Ch. 2.6-2.8
	7/1	*	Random Variables	Ch. 3.1, Assignment 2
3	7/5		Independence Day - No Class	
	7/6	*	Probability Distributions	Ch. 3.2-3.3
	7/7	*	Joint Probability Distributions	Ch. 3.4
	7/8	*	Mathematical Expectation	Ch. 4.1, Assignment 3, Exam 1 (ch. 2 and 3)
4	7/12	*	Variance. Covariance.	Ch. 4.2-4.4
	7/13	*	Variance. Covariance.	Ch. 4.2-4.4
	7/14	*	Discrete Probability Distributions	Ch. 5
	7/15	*	Discrete Probability Distributions	Ch. 5, Assignment 4, Exam 2 (ch. 4)
5	7/19	*	Continuous Probability Distributions	Ch. 6
	7/20	*	Continuous Probability Distributions	Ch. 6
	7/21	*	Fundamental Sampling Distributions	Ch. 8.1-8.3
	7/22	*	Fundamental Sampling	Ch. 8.4-8.5, Assignment 5, Exam 3

			Distributions	(ch. 5 and 6)
6	7/26	*	Fundamental Sampling Distributions	Ch. 8.4-8.5
	7/27	*	Single Sample. Parameter Estimation.	Ch. 9.1-9.4
	7/28	*	Interval Estimates	Ch. 9.4
	7/29	*	Interval Estimates	Ch. 9.4, Assignment 6, Exam 4 (ch. 8 and 9)

Additional Information

- **Read your textbook.** Read the sections that will be covered in class before each class. Read the class material before solving the assignments. In addition to the assignment exercises, solve as many examples and exercises as you can. Use your textbook frequently – take advantage of your investment.
- The course syllabus provides a general plan for the course; deviations may be necessary.
- Take advantage of the help available for this course. Use my office hours and the **Quantitative Skills Center (QSC)**. The QSC currently offers online tutoring. You can find the information in their website <https://studentaffairs.vancouver.wsu.edu/quantitative-skills-center-qsc> [↗]
(<https://studentaffairs.vancouver.wsu.edu/quantitative-skills-center-qsc>)
- **Academic calendar** : Students are encouraged to refer to the academic calendar often to be aware of critical deadlines throughout the semester. The academic calendar can be found at <https://registrar.wsu.edu/academic-calendar/> [↗] (<https://registrar.wsu.edu/academic-calendar/>)
- **Students with Disabilities**: Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please contact the Access Center at 360-546-9238 or van.access.center@wsu.edu (<mailto:van.access.center@wsu.edu>). The Access Center is located in the Classroom Building, Room 160. Accommodations may take some time to implement so it is critical that you contact the Access Center as soon as possible.
- **WSU Academic Integrity Statement**: Academic integrity is the cornerstone of higher education. As such, all members of the university community share responsibility for maintaining and promoting the principles of integrity in all activities, including academic integrity and honest scholarship. Academic integrity will be strongly enforced in this course. Students who violate WSU's Academic Integrity Policy (identified in Washington Administrative Code (WAC) 504-26-010(3) and -404) will receive a "F" in this course, will not have the option to withdraw from the course pending an appeal, and will be reported to the Office of Student Conduct. Cheating includes, but is not limited to, plagiarism and unauthorized collaboration as defined in the Standards of Conduct for Students, WAC 504-26-010(3). You need to read and understand all of the definitions of cheating:
<http://app.leg.wa.gov/WAC/default.aspx?cite=504-26-010> [↗]

<http://app.leg.wa.gov/WAC/default.aspx?cite=504-26-010>). If you have any questions about what is and is not allowed in this course, you should ask course instructors before proceeding. If you wish to appeal a faculty member's decision relating to academic integrity, please use the form available at <https://studentaffairs.vancouver.wsu.edu/student-affairs/student-conduct> [↗](#) (<https://studentaffairs.vancouver.wsu.edu/student-affairs/student-conduct>). If you have any questions about the process on the Vancouver campus, please call Helen Gregory at 360-546-9573.

- **WSU Public Safety:**

- Emergency Closure/Adverse Weather Bus Information for WSU Vancouver Campus:
 - WSU Vancouver VanCoug ALERTS: <http://www.vancouver.wsu.edu/alerts> [↗](#) (<http://www.vancouver.wsu.edu/alerts>)
 - Weather Closure Media Web Sites: <http://www.oregonlive.com/> [↗](#) (<http://www.oregonlive.com/>)
 - During adverse weather conditions when C-Tran is operating on snow routes, the WSU Vancouver campus will not be served as the snow route ends at 20th Ave. For more information on bus routes and C-Tran scheduling, please visit their website at: <http://www.c-tran.com/> [↗](#) (<http://www.c-tran.com/>)
- WSU Vancouver Home Page (Announcements and Alerts):
 - <https://www.vancouver.wsu.edu/> [↗](#) (<https://www.vancouver.wsu.edu/>)
- WSU Vancouver Police:
 - Police Services: <https://www.vancouver.wsu.edu/public-safety/campus-police> [↗](#) (<https://www.vancouver.wsu.edu/public-safety/campus-police>)
 - Campus Safety Plan: <https://www.vancouver.wsu.edu/safety-plan/annual-security-report#clery-act> [↗](#) (<https://www.vancouver.wsu.edu/safety-plan/annual-security-report#clery-act>)
 - Campus Alert Information: <https://www.vancouver.wsu.edu/alerts> [↗](#) (<https://www.vancouver.wsu.edu/alerts>)

- **Cougar Food Pantry:** We know that it can be hard to make ends meet when you're paying for college and living on a tight budget. If you are struggling to feed yourself or your family, the Cougar Food Pantry can help. The pantry provides free, nonperishable food items for WSU Vancouver students in need. The process is simple, anonymous and judgement-free. Learn more and request food at <https://studentaffairs.vancouver.wsu.edu/cougar-food-pantry> [↗](#) (<https://studentaffairs.vancouver.wsu.edu/cougar-food-pantry>) or stop by the Cougar Center in the Student Services Center. Help your fellow Coug; refer a friend in need!
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