Term	Course		Primary Dept	Primary Division	Enrolled: 50
Fall 2022	S&DS 240 01/S&DS 540 01 - Probability Theory		S&DS	Sciences	Responded: 39

Instructors
Wooster, Robert (P)

#1 What knowledge, skills, and insights did you develop by taking this course?
Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 19

Respondent	Answer
1608936	We looked at distributions, basic principles of probability, lot of computation.
1612283	This course was an amazing introduction to the theories and practices that underlie probability in all respects and applications, from distributions to analysis skills.
1614423	Learned a lot about probability.
1614437	Basic understanding of probability theory.
1615812	I learned the basics of probability theory, including counting, probability functions, and various theorems. More than just this content, I expanded on my problem-solving abilities.
1617214	Youll learn probability theory. I personally learned how to use a textbook to learn a course as well
1617522	I learned the fundamentals of probability, particularly in how to identify and use different types of statistical distributions.
1618900	This was a great intro to probability and stats. You learn pretty much all of the basics and its a good foundation for other subject or if you want to study these topics further.
1623295	I learned a lot of statistics and probably concepts, which will be very helpful for the certificate
1625093	Chapter 1: Probability and counting counting axioms of probability basic properties of probability Chapter 2: Conditional probability definition of conditional probability law of total probability Bayes rule independence of events Chapter 3: Random variables and their distributions random variables (function from sample space to R) CDFs, PMFs common distributions (Bernoulli, Binomial, Geometric, Hypergeometric, Discrete uniform) independence of random variables Chapter 4: Expectation mean, variance, LOTUS new distributions: Geometric, Negative binomial, Negative Hypergeometric, Poisson Poisson approximation indicator random variables Chapter 5: Continuous random variables PDFs and CDFs new distributions: Uniform, Normal, Exponential memoryless property of exponential Poisson process Chapter 6: Moments mean, median, mode mean, variance, skewness, kurtosis moment generating functions (definition and properties) Chapter 7: Joint distributions joint, marginal, and conditional distributions 2D LOTUS Covariance and correlation Multinomial distribution Chapter 9: Conditional Expectation conditional expectation given an event conditional expectation given a random variable properties of conditional expectation including: conditional variance - Adam and Eve's Law Chapter 10: Inequalities and Limit Theorems Markovs inequality Chebyshevs inequality Law of Large Numbers (LLN) Central limit theorem
1626328	I learned how to calculate probability in many real-life scenarios. We learned counting, how to use distributions (discrete and continuous), expected value, and more. I developed better problem-solving skills and deepened my understanding of probability!
1633216	Having never taken a probability course this was an amazing introduction that explained the basics very well.
1635924	Core probability theory concepts
1638382	How to break a problem down into smaller parts and think unintuitively about probability.
1638671	S&DS 240 provided a great foundation for stats. While it is a 200-level course, it can definitely be taken as a first stats class in college.
1638863	Probability theory - counting, combinations, conditional probabilities, pmfs etc
1639293	Learned Probability Theory, a wide variety of counting, choosing, sampling techniques, and some other functions
1639303	I enjoyed learning the fundamentals of probability.
1639538	I learned about how to compute probabilities.
1640309	Foundations of probably theory from basic counting to common distributions to clt

Term	Course		Primary Dept	Primary Division	Enrolled: 50
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Instructors

Wooster, Robert (P)

#2 Your level of engagement with the course was:

Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 2

Average and Standard Deviation

Question Average	Dept	Div	School
4.1 ±0.7	3.5 ±1.0	3.7 ±1.0	3.8 ±1.0

Choice Label	Counts
very low	0
low	0
medium	7
high	21
very high	9

| Term | Course | Primary Dept | Primary Division | Enrolled: 50 |
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Instructors
Wooster, Robert (P)

#3 What are the strengths and weaknesses of this course and how could it be improved?
Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 18

Respondent	Answer
1608056	The strength was definitely the instructor. Weakness were not too noticeable as OH were plentiful to provide extra help.
1608936	Strengths: learned a ton! Great prof/TFs. Weaknesses: psets were pretty hard- always had to go to office hours.
1612283	Strengths: The office hour setup and close connection to the textbook was critical for students who weren't able to understand a concept the first time around. and Prof Wooster made an active effort to engage students in the teachings of probability through asking for our (often wrong) intuitions before presenting the theory. Weaknesses: This course sometimes moved at varying paces, with some weeks that introduced a lot of new and complex content at once.
1614423	Keep the course as is.
1614437	This course is well-designed and uses a great textbook. The problem sets were doable and office hours were frequent. It was great overall!
1615812	I was extremely nervous about taking this course as I have always been bad at probability, but Professor Wooster taught it in a way that was so understandable and not terrifying. The lectures were extremely thorough, and the textbook was also very detailed and well-explained. I think the only improvement for this course would be to space out the topics a little better as we sort of rushed through the last two chapters in the final week of courses.
1617214	Lectures moved quickly and sometimes didnt go deep enough in depth. Psets were much harder than exams which almost made exams sometimes harder to prep for because it was hard to grasp the concepts using such difficult problems for practice. Sometimes prof Wooster will cover a chapter the day before an exam and put that content on the exam. Strengths are that things always felt very fair. If you put in the work youll get a solid outcome
1617522	I thought the office hours were really fun, and the lectures were typically pretty engaging as well. Occasionally the professor would run through content a little too quickly, but I enjoyed going over examples in class and found the course to be generally quite interesting. My one recommendation for improvement would be to slow down a bit with a few units that we seemed to sprint through, and to incorporate more examples into the lessons.
1618900	The course had a structure that I really like: weekly problem sets and two midterms. It makes it really easy to spread your work out so that you're putting in only a few hours per week and when the tests come you're already 80% prepared.
1619088	Strengths: professor wooster and the TFs! so kind, so willing to support you and go through concepts or set up one on one meetings for individualized support if needed. loved the availability of office hours. the exams were not too bad, just depending on your level of comfort with the material/how easily you can process all the things it might be easy for you to study and get the material or it might take a really long time for you to get it
1623295	The problem sets were very hard!
1625093	Strength: Dr. Wooster is amazing professor and person; Lectures are pretty engaging; Course content can be challenging but the psets are doable Weakness: On some weeks the workload can feel overwhelming depending on what other classes you have, but there are ample amount of OH.
1625459	Strengths: Professor Wooster was great. Very helpful and made lectures interesting! Weaknesses: The psets felt pretty different from the lecture materials as well as from the information on exams that is to say, they were way harder. It pushed me to think though, which was nice. Still, I felt like pset questions were a bit hard.

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Instructors
Wooster, Robert (P)

#3 What are the strengths and weaknesses of this course and how could it be improved?
Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 18

Respondent	Answer
1626328	Strengths of this course included the way that the material built on itself over the semester and the time spent on examples after learning new concepts. Also, I have taken a stats class before using R, and this class did not use it. I am glad we didn't use R with probability because I think I was able to engage with the material better rather than trying to understand the coding part. Another large strength was Professor Wooster! I am also happy that I could take a Probability class with Math 115 background and that I didn't need Math 120. I don't think there were any weaknesses.
1633216	I thought that the psets were very challenging, but the tests were very fair and manageable.
1638382	Strengths: Professor Wooster and the resources he provides. Weaknesses: None
1638671	Strength: Pace. You'll learn a ton in this class but it is definitely taught at a manageable pace. Weakness: Some parts of the class are very simple while others are taught a bit accelerated and harder to keep up with.
1638863	Strengths are straightforward content grading and instructor. Weaknesses are homeworks are very difficult, but all the answers are online or in office hours
1639293	Strength: Wooster is very nice Weakness: Class was difficult to follow and HW and practice problems were much more challenging than exams
1639303	Lecture style could be improved. Clear outline at the start of the lecture on what the scope is going to be e.g. roadmap.
1640309	This was a great course. Prof Wooster and the entire staff made this class not only real world applicable, but also incredibly engaging. I looked forward to class every Monday and Wednesday (and on Friday for mels office hours). Theres nothing I would change about this class.

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Instructors
Wooster, Robert (P)

#4 What is your overall assessment of this course?
Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 2

Average and Standard Deviation

Question Average	Dept	Div	School
4.1 ±0.9	3.6 ±1.1	3.5 ±1.1	3.8 ±1.1

Choice Label	Counts
poor	1
fair	0
good	7
very good	14
excellent	15

Term	Course		Primary Dept	Primary Division	Enrolled: 50
Fall 2022	S&DS 240 01/S&DS 540 01 - Probability Theory		S&DS	Sciences	Responded: 39

Instructors

Wooster, Robert (P)

#5 The course was well organized to facilitate student learning.

Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 2

Average and Standard Deviation

Question Average	Dept	Div	School
4.3 ±0.9	3.9 ±1.0	3.8 ±1.1	4.0 ±1.0

Choice Label	Counts
strongly disagree	1
disagree	0
neutral	5
agree	11
strongly agree	20

Term	Course		Primary Dept	Primary Division	Enrolled: 50
Fall 2022	S&DS 240 01/S&DS 540 01 - Probability Theory		S&DS	Sciences	Responded: 39

Instructors
Wooster, Robert (P)

#6 I received clear feedback that improved my learning.

Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 2

Average and Standard Deviation

Question Average	Dept	Div	School
4.2 ±0.9	3.4 ±1.0	3.5 ±1.1	3.8 ±1.1

Choice Label	Counts
strongly disagree	0
disagree	2
neutral	4
agree	14
strongly agree	17

Term	Course	Primary Dept	Primary Division	Enrolled: 50
Fall 2022	S&DS 240 01/S&DS 540 01 - Probability Theory	S&DS	Sciences	Responded: 39

Instructors
Wooster, Robert (P)

#7 Relative to other courses you have taken at Yale, the level of intellectual challenge of this course was:
Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 2

Average and Standard Deviation

Question Average	Dept	Div	School
3.6 ±0.8	3.5 ±0.9	3.5 ±1.0	3.3 ±0.9

Choice Label	Counts
much less	0
less	3
same	11
greater	20
much greater	3

Term	Course	Primary Dept	Primary Division	Enrolled: 50
Fall 2022	S&DS 240 01/S&DS 540 01 - Probability Theory	S&DS	Sciences	Responded: 39

Instructors
Wooster, Robert (P)

#8 Relative to other courses you have taken at Yale, the workload of this course was:
Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 1

Average and Standard Deviation

Question Average	Dept	Div	School
3.4 ±0.6	3.3 ±0.8	3.3 ±1.0	3.1 ±1.0

Choice Label	Counts
much less	0
less	2
same	20
greater	15
much greater	1

Term	Course	Primary Dept	Primary Division	Enrolled: 50
Fall 2022	S&DS 240 01/S&DS 540 01 - Probability Theory	S&DS	Sciences	Responded: 39

Instructors
Wooster, Robert (P)

#9 Would you recommend this course to another student? Please explain.

Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 15

Respondent	Answer
1608056	Yes, especially if being taught by Bob Wooster. He is so approachable and extremely good at explaining concepts to students who may not have the strongest math background.
1608936	Yes- especially for the data science certificate
1612283	I would absolutely recommend this course to another student, especially if they're pursuing the S&DS Certificate or are looking for a crash course in probability theory. Prof Wooster is one of the best people I can imagine to teach this content in an accessible way and I was able to look at my other quantitative (and non-quantitative) courses in a new way with this knowledge.
1614423	Yes.
1614437	If you're pursuing the S&DS certificate, then yes!
1615812	Yes. Whether you're interested in probability (which I didn't think I would be until I took this course) or need to fulfill the probability part of the S&DS certificate (which I also needed to do), this course was challenging but also very rewarding. It is extremely well-taught, which helps make the content less daunting/difficult to learn.
1617214	Take it for the certificate otherwise unless youre strongly inclined towards math Id find something else for a fun gutty class
1617522	Yes, if you're looking to complete the S&DS certificate, this is a great course to satisfy one of the requirements.
1618900	I would highly recommend this course for the Stats Certificate or just as an intro to stats in general.
1619088	its the one without pre big math reqs for the certificate so if you need to, yea
1619985	Yes, the professor is great; he really cares that you learn.
1623295	Yes for the certificate
1625093	Yes! If you're doing S&DS Certificate, I'd definitely recommend this course over S&DS 241. There's really no need to stress yourself with mathematical theories in 241 unless you're planning to take 242. The psets for this class are actually doable and I thought both midterms and final was really reasonable. The concepts are fairly interesting and Dr. Wooster does a wonderful job explaining during class. He also hosts a lot of OH and the TAs were also super friendly. FYI pset questions are a lot harder than the exam questions, so no need to freak out.
1625459	Yes! Especially if you're going for the stats certificate. I liked the class a lot, and think I learned from it.
1626328	I would definitely recommend this course to another student because I think that it was interesting content that is very applicable to everyday life and everyone's future professions. This is a class where if you put enough time and effort into it, you are in a great position to do well, and I think that is what makes it a great class. It is interesting, intellectually challenging, and students are equipped to do well.
1634829	ABSOLUTELY! Definitely take this if you're doing the S&DS certificate. The class is super manageable and well organized. The material is not too difficult to follow, and Prof Wooster is INCREDIBLE. There's only one pset every week, and OH help so much. The exams are also very reasonable. I learned a lotttttt and there is a lot of real-world applications to the info you learn.
1635924	It is a great intro course to probability theory.
1638671	Yes! The class was manageable and not too much work. You'll learn a bunch - as long as you stay on top of it it isn't too hard.
1638863	Yes. Probability theory is useful but not super easy to understand. Grading is very generous. Homeworks are hard but exams are easy. Dont really need to show up to every class either.
1638881	Yes! Excellent introductory class.
1639293	For the Data Science Certificate, yes Otherwise I'd say it's a pretty hard challenge esp for non STEM majors/backgrounds

Term	**Course**	**Primary Dept**	**Primary Division**	**Enrolled: 50**
Fall 2022	S&DS 240 01/S&DS 540 01 - Probability Theory	S&DS	Sciences	Responded: 39

Instructors
Wooster, Robert (P)

#9 Would you recommend this course to another student? Please explain.

Instructor(s): Wooster, Robert (P)

Declined to Answer Question: 15

Respondent	Answer
1639303	Yes. Good introduction to probability.
1639538	If you need it for the certificate, yea. I think the content of the class is generally interesting, but it's pretty difficult.
1640309	Absolutely. There is a lot of application and helps you better understand concepts taught in other classes

Term	Course	Primary Dept	Primary Division	Enrolled: 50
Fall 2022	S&DS 240 01/S&DS 540 01 - Probability Theory	S&DS	Sciences	Responded: 39

Instructors
Wooster, Robert (P)

#10 Summarize the strengths and weaknesses of the Teaching Fellow. In what ways was their teaching effective and in what ways could their teaching be improved?

Instructor(s): Pavlik, Melissa

Responses for Instructor: 20
Declined to Answer Question: 19

Respondent	Answer
1608056	Strengths: Incredibly intelligent, super great at explaining things, and incredibly at breaking down large concepts and even providing visuals. Weaknesses: none, increible the entire year.
1608936	Mel was awesome! Really helped me on the psets and made me feel much more solid on the psets.
1612283	MEL IS INCREDIBLE!!! She genuinely cares about her students' success, fielding questions from a huge crowd of students and doing it with grace and fun. Her explanations made sure that we understood both the mechanics and the intuition behind each concept, allowing students to master the concepts. Rather than giving her students a fish at office hours, Mel truly teaches us how to fish.
1614423	Really great and helpful.
1615812	Mel is one of the best TFs I've had at Yale. The PSETs were definitely the most difficult part of the class, but Mel's office hours always provided clarity. She would guide us through the questions while encouraging us to try them with our peers first. She always made herself available, whether through impromptu meetings, thorough and quick email responses, and detailed feedback on PSETs on Gradescope. I could not have made it through this course without her help.
1616536	Melissa is the most helpful TF I've encountered. Going to her office hours to work on problem sets was always the right combination of challenging and entertaining. I genuinely had fun working on these problems in a group of students, and listening to Melissa as she clarified our questions on the chalkboard or reviewed a concept from lecture. I remember once I had a doubt about why my solution to a question wasn't equivalent to the one on the answer key, so I asked Melissa during her office hours and, after explaining the intended approach to me, I later received an email from her explaining where and why the approach I had originally taken was inaccurate. That to me was very impressive, and I really appreciated her taking the time to do that.
1617214	Mels office hours were huge for this class. Shes super helpful and dedicated to helping out students and shes also very easy to get along with
1617522	Mel was an absolutely phenomenal TF. She was incredibly helpful and made this class a million times easier. Literally zero recommendations for how her teaching could be improved, she went over questions in office hours really effectively and was super helpful in making me better understand many of the topics I didn't immediately get.
1619088	Mel was AMAZING. She really ran through everything, even from the basics if needed, so that you were able to understand the problem. her office hours were so so helpful
1625093	Mel is great! She's super nice and tries her best to help us understand class content.
1625459	Helpful during office hours! Kept things real, and was funny.
1626328	Her office hours were very helpful and she answered any questions students had. In this way, she was a great TA. The only thing that could have made it better is if her office hours were more consistent. We received many emails about her office hours being online or moved, and sometimes this was difficult if I was depending on them being at a specific time. Melissa was a very kind and helpful TA overall!
1628713	Best TF I've had at Yale! Helped explain super challenging concepts and problems in an understandable way and was so kind and willing to spend extra time making sure we all understood the concepts.
1633295	Incredible at explanations and made herself very accessible to students. Thank you Mel!
1634829	THE BEST - super sweet, helpful, and knows the material very well. Loved Mel so much. She always took the extra mile to help us all.

Term	Course		Primary Dept	Primary Division	Enrolled: 50
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Instructors
Wooster, Robert (P)

#10 Summarize the strengths and weaknesses of the Teaching Fellow. In what ways was their teaching effective and in what ways could their teaching be improved?
Instructor(s): Pavlik, Melissa

Responses for Instructor: 20
Declined to Answer Question: 19

Respondent	Answer
1638671	Mel was great! Her office hours were always very helpful.
1638881	Great TF! Office hours are informative and organized.
1639293	Didn't really go to her office hours
1639538	Excellent Teaching fellow. Went the extra mile to answer questions and was great at explaining things.
1640309	She was great and always tried to find other ways to teach us the material if we were confused. I absolutely loved Mel.

Instructors
Wooster, Robert (P)

#11 What is your overall assessment of the Teaching Fellow?
Instructor(s): Pavlik, Melissa

Responses for Instructor: 28
Declined to Answer Question: 11

Average and Standard Deviation

Question Average	Dept	Div	School
4.6 ±0.7	4.3 ±0.9	4.3 ±1.0	4.3 ±1.0

Choice Label	Counts
poor	0
fair	0
good	3
very good	6
excellent	19