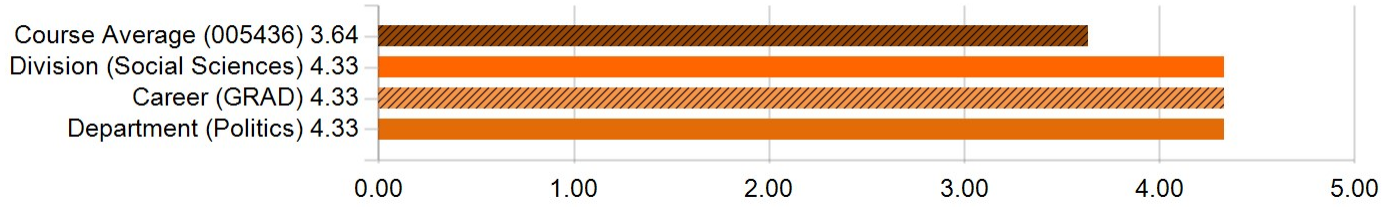
POL 571: Quantitative Analysis I - P01 - P. Carter

Department, division and career level statistics are survey-specific (i.e. the main survey, FRS, Writing Program, and graduate program surveys). Statistics below are based on responses of the course population that completed the same survey questionnaire as this course.

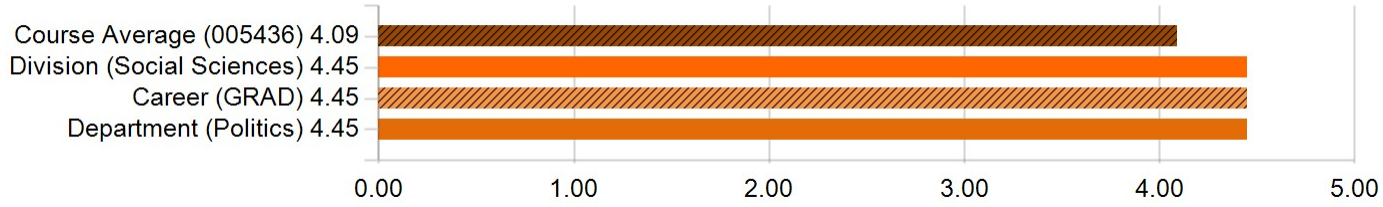
Score Analysis

Course questions - Score Analysis

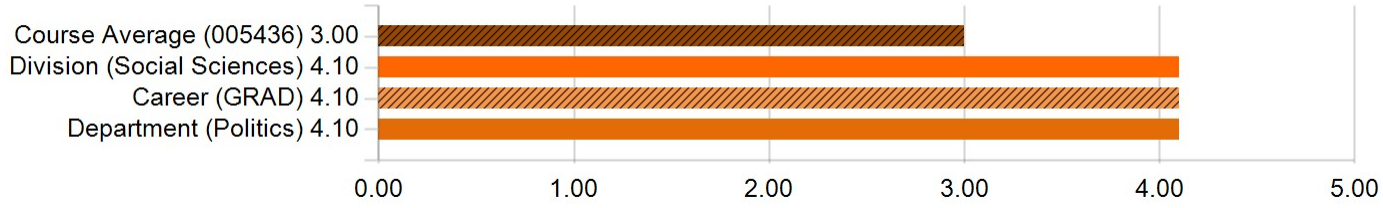
1. Readings I - Rate the overall quality of the readings



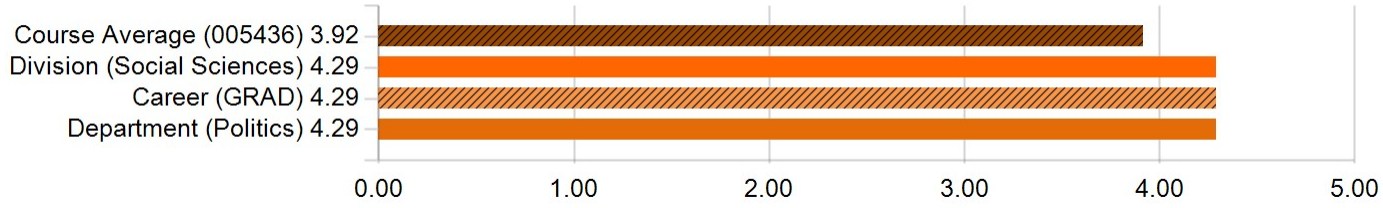
2. Papers - Rate the contribution to your education of papers or problem sets or other written work



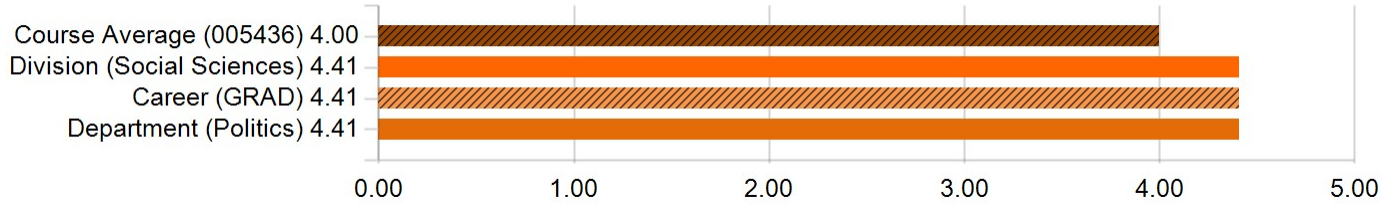
3. Oral Presentation Skills - Rate the contribution of this course to improvement of your oral presentation skills:



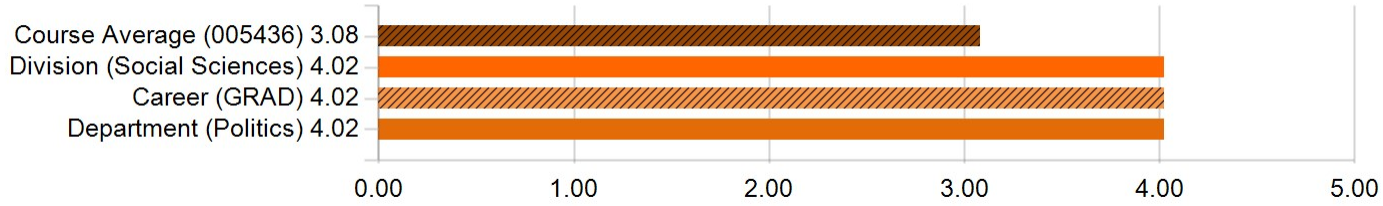
4. Analytical Skills - Rate the contribution of this course to the development of your analytical skills:



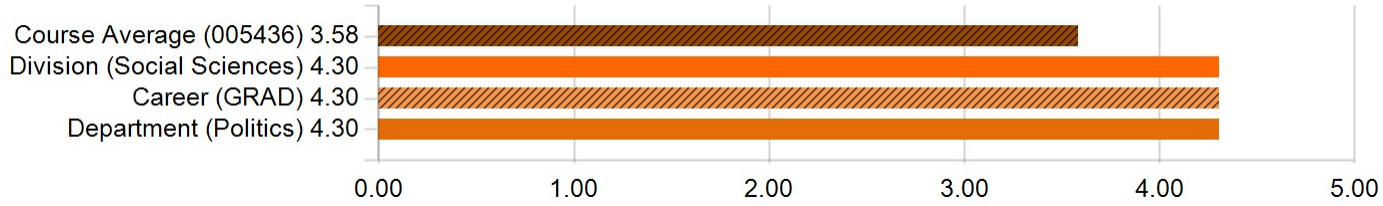
5. Critical Evaluation - Rate the contribution of this course to improvement of your capacity for critical evaluation of the subject:



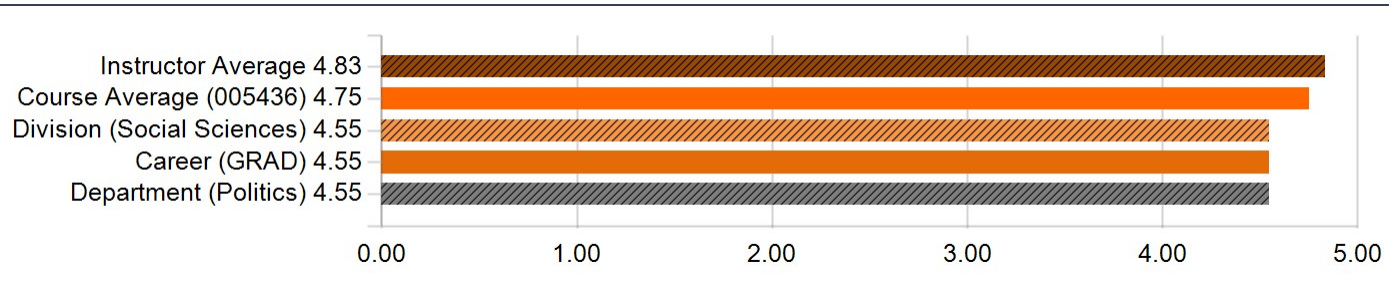
6. Course Workload - Rate the course workload:



7. Overall Quality - The overall quality of this course was:



Preceptor Quality - Rate the overall quality of the assistant instructor's precepts:



Course Questions - Frequency Analysis

Readings I - Rate the overall quality of the readings

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Options	Score	Count	Percentage
Excellent	5	4	36%
Very Good	4	2	18%
Good	3	2	18%
Fair	2	3	27%
Poor	1	0	0%

Papers - Rate the contribution to your education of papers or problem sets or other written work

Papers - Rate the contribution to your education of papers or problem sets or other written work			
Options	Score	Count	Percentage
Excellent	5	6	55%
Very Good	4	1	9%
Good	3	3	27%
Fair	2	1	9%
Poor	1	0	0%

Oral Presentation Skills - Rate the contribution of this course to improvement of your oral presentation skills:

Oral Presentation Skills - Rate the contribution of this course to improvement of your oral presentation skills:			
Options	Score	Count	Percentage
Excellent	5	0	0%
Very Good	4	0	0%
Good	3	1	100%
Fair	2	0	0%
Poor	1	0	0%

Analytical Skills - Rate the contribution of this course to the development of your analytical skills:

Analytical Skills - Rate the contribution of this course to the development of your analytical skills:			
Options	Score	Count	Percentage
Excellent	5	6	50%
Very Good	4	1	8%
Good	3	3	25%
Fair	2	2	17%
Poor	1	0	0%

Critical Evaluation - Rate the contribution of this course to improvement of your capacity for critical evaluation of the subject:

Critical Evaluation - Rate the contribution of this course to improvement of your capacity for critical evaluation of the subject:			
Options	Score	Count	Percentage
Excellent	5	6	55%
Very Good	4	1	9%
Good	3	2	18%
Fair	2	2	18%
Poor	1	0	0%

Course Workload - Rate the course workload:

Course Workload - Rate the course workload:			
Options	Score	Count	Percentage
Excellent	5	1	8%
Very Good	4	4	33%
Good	3	3	25%
Fair	2	3	25%
Poor	1	1	8%

Overall Quality - The overall quality of this course was:

Overall Quality - The overall quality of this course was:			
Options	Score	Count	Percentage
Excellent	5	2	17%
Very Good	4	5	42%
Good	3	3	25%
Fair	2	2	17%
Poor	1	0	0%

Instructor Questions - Frequency Analysis

Preceptor Quality - Rate the overall quality of the assistant instructor's precepts:

Preceptor Quality - Rate the overall quality of the assistant instructor's precepts:			
Options	Score	Count	Percentage
Excellent	5	5	83%
Very Good	4	1	17%
Good	3	0	0%
Fair	2	0	0%
Poor	1	0	0%

Qualitative Feedback

Readings II - What reading assignments should be eliminated? Do you have suggestions for reading that might be added?

Comments
Readings were helpful! CB textbook was definitely most accessible. I think that, given the level of most students in the class, it may have been best to substitute some of the chapters we read later in the course for the CB versions.
The reading assignments are very dense for people without a good math background. I recommend the instructor to consider using more approachable materials for the pre–class reading assignments
Honestly, a lot of the readings, while perhaps useful to people who have more of a background in probability and statistics theory, were extremely difficult to parse. I remember on multiple occasions not even knowing how to start to pick apart the equations and mathematical jargon that we were encountering. I think these need to be adjusted in recognition of the variety of backgrounds that people have when it comes to prior mathematical training.
Take out Ruud. The matrix algebra is hard to follow, especially since there is almost no mention of linear algebra at the start of the course. Casella and Berger was phenomenal. Lehmann was a very easy read, too.
Rudd
Some extra clarification would be beneficial, through either lecture or notes, to help with the varying notation between the multiple textbooks
All three textbooks are amazing. Though all three were a challenge at first, I learned a lot from them as I got used to reading them, and they will be cherished possessions.
None should be eliminated, although the notation in Rudd was sometimes hard to follow.
I felt the Ruud was very opaque.

Class Assignments - Which problem sets, exercises, papers, or exams were very helpful in learning the course subject matter, and which did not help at all? Did you receive timely and constructive feedback? Were there too many assignments, or too few?

Comments
It would have been helpful for me to have completed, say, weekly problem sets with 2–4 problems each, rather than four large psets with many problems each. Otherwise, I thought the problem sets were super helpful in understanding the material and preparing for the exam.
The problem sets are sometimes too stressful due to the number of repetitive calculations involved. Problem set 4, in particular, is too much to handle right before finals.
The problem sets ranged from appropriate and manageable, to a bit ridiculous and impractical. Especially problem set 4 was, in this student's opinion, far too long and (and personally extremely challenging). Most people's submissions were between 20–30 pages – for just this one problem set! I think it would have been useful to have slightly more frequent, but lower difficulty problem sets. Have simpler questions that help establish clearer and more basic foundations. I don't think these assignments were well–calibrated to the level of the students, many of whom do not have a recent or strong mathematical background. As a result, I don't think the problem sets were as useful in the learning process as they could have been.
Some problem sets were WAY too long (especially the last one). They were very helpful in learning the course assignments, though. Shorter, more frequent assignments could be helpful.
I hope the amount of questions could be more stable through out all assignments.
The problem sets were very helpful in building my understanding and giving myself a chance to practice the material. In my opinion, exams were not reflective of either problem sets or lectures. Aside from problem set #4, I felt that all of the problem sets were manageable.
The last pset on testing was extremely helpful.
All problem sets were very helpful. The last problem set in some ways led to the most insight, but at the same time I felt that it required too much commitment because we did not spend enough time in class on some of the topics. One idea could be to shorten the main problem sets slightly and supplement them with a few weekly short and easy questions just to make sure that everyone is at least clear on the most basic ideas.
The problem sets were certainly helpful and challenging. Problem set 4 could have, perhaps, been split into two to make it more manageable.
The problem sets, while challenging, were a really great chance to practice. I really appreciated detailed feedback on problem sets from the TAs.

Course Content - Please comment on the content and organization of the seminar. Do you have any suggestions for its improvement?

Comments
I really appreciate that Tiffany and Rocio (and Perry) held live lectures/precepts consistently all semester. They were the only instructors of mine to do this and it made an immense difference in my understanding of the material.
The course sometimes moves too fast for students without recent formal training in math. The course also expects a very high level of familiarity with statistical notations and symbols. I personally struggled with the notations during the first few lectures.
I think the pace of this course was a bit much – both the final lecture before the midterm, and the final lecture before the final involved an overwhelming wave of new information, that left very little time for discussion, internalization, and examples. The speed of the course was a major point of difficulty for me and other students – there were few examples during the class, with most examples being relegated to precept – except that in precept, we had other NEW information to cover and review. This meant there were few formal opportunities to really reinforce or consolidate our learning. One might say that was the point of the problem sets, but if we don't have a sufficient grasp on the material before starting those problem sets, then we don't even know how to start them. I was quite frustrated in this regard. I question how much of this content I was able to meaningfully absorb and I think a lot of other people felt the same (if our offline conversations were any indication).
I think we moved too fast on the MLE part and sometimes the material doesn't seem very clear
The way the sequence is designed, I think this class is mostly a "pay it now, benefit later" type of foundation. Even if it doesn't take away from the focus of the class, I think it would be helpful if more of the lecture could keep an eye towards that.
I would have preferred to cover the topic of testing more extensively.
My suggestion would be to spend much more time on guided practice. The material is challenging for most in the class and often requires a big commiment to make inroads in understanding and intuition – some more support on the intuition front will be helpful. Rather than spend so much class time on proofs/developing the theory, maybe some of this can be prerecorded and assigned for homework while more class time can then be spent on going through instructive examples and guided group practice. This kind of setup will probably be much easier in person than on zoom. The course also felt quite rushed at times, so perhaps a smaller set of topics can be assigned or the pacing can be altered (though I'm not sure what can be de–emphasized). Overall, this was an absolutely excellent course for me, but I am probably coming in with roughly the right amount of math background. I think more support and resources will need to be provided to those coming in with less math so that they can prepare over the summer etc. More motivation might also be helpful for those who are not as interested in statistics for its own sake.
Very well organized. No suggestions for improvement.
The content and organization of the seminar were fine, but I think that the amount of content covered was excessive. It felt impossible to absorb even close to the amount of the material that we were expected to.

Course Expectations - How did this course compare to your expectations when you enrolled in it - and to other courses taken here or elsewhere?

Comments
I expected lots of math and I received lots of math. This course was far more challenging but not actually more work than undergrad courses I took at Princeton, so that was a good balance.
There are two things I did not expect when I joined the course. 1. I was expecting something more practical and relevant to data analysis before the class. But the problems are highly theoretical and did not cover anything related to practical skills such as data processing and replication. 2. I also expected the course to use recent scholarly works to contextualize the material in class. However, the course only uses statistical textbooks.
This course was harder than I imagined it would be, and I imagined it would be extremely challenging. I thought it would be difficult but manageable, but honestly, I felt the course was unreasonable most of the time. The way the content was presented and structured made me quite frustrated because it was just so unapproachable to the many of us who had no background in this content. I honestly do not know how much I learned as a result, and question whether my time might have better been spent elsewhere or in other training. Fortunately, I don't think the course had a disproportionate effect on my mental health, but I know it definitely took a toll on a lot of my cohort mates. And, I very much empathize with their frustrations – and I likely performed worse than they did!
Not as hard as I thought it would be. If you have sufficient math background, it's not bad.
More difficult than I expected
This course was certainly more rigorous; that said, it provided an excellent foundation that I am confident will be beneficial in the future.
This was an excellent foundational course in statistics.
Significantly more difficult (esp. exams) and demanding than my expectations, but also more insights gleaned than my expectations.
It was much more thorough and challenging than expected.
This course was more intense than any course I've taken before. I felt the problem sets were more challenging and long than I am used to, but were the only way to help me learn at least a fraction of what I was expected to. Mainly, the pace of the course felt too fast.

Preceptor Contribution - Please comment on the relative value of the assistant instructor's lectures, other formal commentaries, and open discussion.

Comments
Perry was absolutely phenomenal. He is a really good educator.
Handwriting in precepts is sometimes hard to recognize, but overall is great. Perry clarifies the questions we had very well.
Precepts were very helpful and invaluable for the last pset. I liked the couple of times we split up and did guided practice. I think this should happen more often, perhaps with shorter problems to accomodate time limits.
I am so impressed with the amount of work Perry and Tiffany put into the class. I so appreciate all the lecture and precept notes they compiled. Perry's precepts were really useful for reviewing key concepts in class.