Intro Stochast Proc (Fall 2020)

Instructor: **Sarantsev, Andrey**
Subject: **STAT**
Catalog & Section: **662 1001**
Course ID: **83479**
Objectives: **Upon completion of this course, students will be able to:**
1. demonstrate understanding of the probability foundations for stochastic processes through proofs and examples.
2. build and use stochastic processes, including random walks, Markov chains, branching processes, Poisson and renewal processes.
3. build and use continuous time stochastic process to model real-world phenomena.

Enrollment: 12
Responses Incl Declines: 7
Declines: 0

Teaching (Lecture) (12 comments)

Q: Please provide your thoughts on the instructor's teaching, including strengths and areas for possible improvement.

1 The professor has clear understanding of the material, but applying more examples, say in the case of real world problems, would make the theoretical work more understandable.

2 Dr. Sarantsev is very clear and concise, making his lectures enjoyable.

3 Dr. Andrey Sarantsev teaches very interesting and applicable stats relatively clearly and comprehensively given the lack of similarity between continuous time process and the stats most students will have experienced before this class. In fact, his comprehensive lecture notes were perhaps the best I've ever seen from one of my professors. My one critique is that there is a bit of a disconnect between, in-class lecture material, what is in the course catalogs description of the class, and what is expected on homework assignments. Briefly, the course description and pre reqs have no indication that students will be expected to know or learn python or R to demonstrate comprehension of course material, despite this the homeworks were weighted as much as 50% towards problems requiring the utilization of R or Python. And the Lecture material (in class and lecture note format) did not attempt to bridge this gap. Meaning some students would have to spend many extra hours learning to code for statistical analysis and meeting with Dr. Sarantsev in his office hours regularly to fill in the gaps in knowledge. All of this would be fair in my opinion if the course catalog reflected these expectations so students may plan the extra time in their schedule necessary to learn a coding platform in addition to the fundamentals of continuous time processes.

4 Dr. Sarantsev is very passionate about statistics and this shows in his teaching. He is very approachable outside of class and is always willing to help students understand the material and their assignments.

5 Overall a very good course, many applications for the subject

6 The instructor is incredibly knowledgeable about the information being taught in the course. The instructor always makes sure that the material is being understood, and is very fair in grading. I really enjoyed this course.

Q: Please provide your thoughts on the course as a whole, including strengths and areas for possible improvement.

1 The course overall was good, not too difficult and not too lenient. Very understanding and empathetic environment to learn in. I would suggest making a coding class as a prerequisite to the course, especially if someone does not have a strong coding background.

2 I wish there were some demos of how to do the programming problems on the homework, presented to us during class/separate files on Canvas. Sometimes the majority of time spent on homework was searching how to do the programming problems.

3 Great course, Great professor, small room for improvement.

4 I think this course is structured more like a topics course, which allows to the instructor to focus the material on their particular areas of interest. Dr. Sarantsev liked to put a bit of a mathematical finance emphasis on the material showing us certain applications for different topics that we covered. I think that this complemented there material very well.

5 Good course, well taught and well organized

6 This course was well laid out, with not too much material being taught at one time. The grading was very fair, and the weighing of the class made it easy to succeed if the work was put in.