

STA 523: Statistical Programming

Classroom	Perkins Link 071 (Classroom 5) Mondays and Wednesdays, 4:40 pm - 5:55 pm
Professor	Colin Rundel
Office	Old Chemistry 223E
Email	colin.rundel@stat.duke.edu
Teaching Assistants	Michael Lindon - mssl33@stat.duke.edu Derek Owens-Oas - derek.owens.oas@duke.edu
Course Website	http://stat.duke.edu/~cr173/Sta523_Fa15/
Office hours	
<i>Professor</i>	Tuesdays, 1:00 - 3:00 pm or by appointment, 223E Old Chemistry
<i>TAs</i>	Michael Lindon - Fridays, 12:00 - 1:00 pm and 2:30 - 3:30 pm, 211A Old Chemistry Derek Owens-Oas - Mondays and Wednesdays, 6:00 - 7:00 pm, 025 Old Chemistry
Lab Sections	LSRC A247 (Classroom 5) 01L - Friday 1:25 - 2:40 pm
Exams	Take home final, due Friday, December 4 th , by midnight
Holidays	Fall Break - Monday, October 12 th Thanksgiving - Wednesday and Friday, November 25 th and 27 th

Grading:

Your final grade will be comprised of the following.

Participation	20%
Final Exam	20%
Final Project	20%
Homework	40%

The exact ranges for letter grades will be curved and cutoffs will be determined after the final exam. The more evidence there is that the class has mastered the material, the more generous the curve will be.

Lectures & Lab:

The goal of both the lectures and the labs is for them to be as interactive as possible. My role as instructor is to introduce you new tools and techniques, but it is up to you to take them and make use of them. Programming is a skill that is best learned by doing, so as much as possible you will be working on a variety of tasks and activities throughout each lecture / lab.

Teams:

To construct functional and diverse teams, you will be asked to complete a short survey to gauge your previous exposure to programming topics. After completing the survey, you will be assigned to teams of 4 students. After assignment the teams will not change throughout the semester, other than under extraordinary circumstances. You will work in these teams during class and on the homework assignments as well as for the final project. Only the take home final exam will be completed individually.

Homework:

Beyond the in class activities, you will be assigned larger programming tasks throughout the semester (roughly every other week). These assignments will be completed collaboratively by your team. All team members are expected to contribute equally to the completion of each assignment and you will be asked to evaluate your team members after each assignment is due.

Students are expected to make use of their team's git repository on the course's github page as their central collaborative platform. Commits to this repository will be used as a metric of each team member's relative contribution for each homework.

Each team's work will also be shared with and evaluated by at least one other team in the class in order to provide feedback in the form of code review.

Final Project:

You will have the opportunity to form your own team of 3-5 students and will be responsible for the completion of an open ended final project for this course, the goal of which is to take an "interesting" problem using the tools and techniques covered in this class. Additional details on the project will be provided as the course progresses.

Exam:

There will be a single take home final exam that you are expected to complete individually. It will ask you to complete a number of small programming tasks that cover the breadth of the material presented in the class.

Email:

I will regularly send course announcements by email, make sure to check your email daily. Email is the easiest way to reach me outside of class, note that it is much more efficient to answer most questions in person.

Academic integrity:

Duke University is a community dedicated to scholarship, leadership, and service and to the principles of honesty, fairness, respect, and accountability. Citizens of this community commit to reflect upon and uphold these principles in all academic and non-academic endeavors, and to protect and promote a culture of integrity. Cheating on exams or plagiarism on homework assignments, lying about an illness or absence and other forms of academic dishonesty are a breach of trust with classmates and faculty, violate the [Duke Community Standard](#), and will not be tolerated. Such incidences will result in a 0 grade for all parties involved. Additionally, there may be penalties to your final class grade along with being reported to the [Undergraduate Conduct Board](#).

Please review the Academic Dishonesty policies at <http://www.studentaffairs.duke.edu/conduct/resources/academicdishonesty>.

A note on sharing / reusing code - I am well aware that a huge volume of code is available on the web to solve any number of problems. Unless I explicitly tell you not to use these resource the course's policy is that you may make use of these resources (e.g. StackOverflow) but you must explicitly cite where the code was obtained from in your comments. Any recycled coded that is discovered and is not explicitly cited will be treated as plagiarism. The one exception to this rule is that you may not directly share code with another team in this class, you are welcome to discuss the problems together and ask for advice, but you may not send or make use of code from another team.

Excused Absences:

Students who miss a class due to a scheduled varsity trip, religious holiday or short-term illness should fill out an online *NOVAP*, *RHoliday* or *short-term illness* form respectively. Note that these excused absences do not excuse you from assigned homework, it is your responsibility to make alternative arrangements to turn in any assignments in a timely fashion.

Those with a personal emergency or bereavement should speak with your director of graduate studies or your academic dean.

Late work policy for homework:

- late, but same day: -10%
- late, next day: -20%
- 2 days or later: no credit