

Welcome & Syllabus

Lecture 01

Dr. Colin Rundel

Course Details

Course Team

Instrutor

- Dr. Colin Rundel
 - colin.rundel@duke.edu / cr173@duke.edu / rundel@gmail.com

TAs

- Alonso Guerrero Castañeda
- Natalie Smith

Course website(s)

- GitHub pages - <https://sta523-fa23.github.io>
 - HTML, PDF, and qmds of Slides
 - Lecture screencasts (youtube)
 - Readings
- Canvas - <https://canvas.duke.edu/courses/8611>
 - Announcements
 - Gradebook

Course Timetable

- Lectures (weekly) - Old Chemistry 116
 - Wednesdays, 10:05 - 11:20 am
 - Fridays, 10:05 - 11:20 am
- Labs (weekly) - Old Chemistry 001
 - Lab 01 - Thursdays, 10:05 - 11:20 am

Labs

- Attendance is expected
- Opportunity to work on course assignments with TA support
- Labs will begin in Week 2 (September 7th)

Announcements

Will be posted on Canvas (Announcements tool), be sure to check canvas regularly

Grading

This course is assessed 100% on your coursework (there is no exam). We will be assessing you based on the following assignments,

| Assignment | Type | Value | n | Assigned |
|-------------------|-------------|--------------|----------|--------------------|
| Homeworks | Team | 50% | ~6 | ~ Every other week |
| Midterms | Individual | 40% | 2 | ~ Week 6 and 14 |
| Project | Team | 10% | 1 | ~ Week 10 |

Teams

- Team assignments
 - Roughly biweekly assignments
 - Open ended, ~5 - 15 hours of work
 - Peer evaluation after completion
- Expectations and roles
 - Everyone is expected to contribute equal *effort*
 - Everyone is expected to understand *all* code turned in
 - Individual contribution evaluated by peer evaluation, commits, etc.

Collaboration policy

- Only work that is clearly assigned as team work should be completed collaboratively (Homeworks + Project).
- Individual assignments (Midterms) must be completed individually, you may not directly share or discuss answers / code with anyone other than the myself and the TAs.
- On Homeworks you should not directly share answers / code with other teams, however you are welcome to discuss the problems in general and ask for advice.

Sharing / reusing code policy

- We are aware that a huge volume of code is available on the web, and many tasks may have solutions posted.
- Unless explicitly stated otherwise, this course's policy is that you may make use of any online resources (e.g. Google, StackOverflow, etc.) but you must explicitly cite where you obtained any code you directly use or use as inspiration in your solution(s).
- Any recycled code that is discovered and is not explicitly cited will be treated as plagiarism, regardless of source.
- The same applies to the use of LLM like ChatGPT or GitHub Copilot - you are welcome to make use of these tools as the basis for your solutions but you must cite the tool when using it.

Academic integrity

To uphold the Duke Community Standard:

- I will not lie, cheat, or steal in my academic endeavors;
- I will conduct myself honorably in all my endeavors; and
- I will act if the Standard is compromised.

Course Tools

RStudio

<https://rstudio.stat.duke.edu>

- Browser based, departmental RStudio instance(s)
- Requires Duke VPN or on campus connection to access
- Provides consistency in hardware and software environments
- Local R installations are fine but we will not guarantee support

Common issues:

- If `This site can't provide a secure connection` change `https` to `http` in the url.
- If `This site can't be reached` make sure you are on a Duke network and are not use an alternative DNS service.
- Anything more exotic please reach out for help.

Local R + RStudio

If working locally you should make sure that your environment meets the following requirements:

- latest R (4.3.1)
- latest RStudio (2023.06.2+561)
- working git installation
- ability to create ssh keys (for GitHub authentication)
- *All* R packages updated to their latest version from CRAN

GitHub

- We will be using an organization specifically to this course
<https://github.com/sta523-fa23>
- All assignments will be distributed and collected via GitHub
- All of your work and your membership (enrollment) in the organization is private
- We will be distributing a survey this week to collection your account names
 - Before lab next week you will be invited to the course organization.

Before next week

- Create a GitHub account if you don't have one
- Complete the course survey (you will receive before next Monday)
- make sure you can login in to the Department's RStudio server
<https://rstudio.stat.duke.edu>
 - Setup ssh key authentication with GitHub, see
https://github.com/DukeStatSci/github_auth_guide

For those not yet enrolled (non-MSS)

- We have seats available
- Enrollment survey posted at
 - https://bit.ly/sta523_fa23_enroll
- Complete as soon as possible, permission numbers will be issued by the beginning of next week

