NOTE: Please do pay attention to our course ethics code. Ignorance of this code is not an excuse.

Homework:

Weekly homework will consist of online knowledge assessment quizzes and application assignments (a.k.a. "hands-on lab sections" and/or "mini projects"). From week 2 onward we will also have **DataCamp** exercises to be done at home together with pre-class reading and video screen-casts.

Generally for each class you will submit your completed lab reports or mini-projects as PDFs to **GradeScope** 🗷 and complete a GoogleForm based quiz.

Specific grading criteria (assessment rubrics) for each homework will be given at the time of assignment. Weekly grades will be posted online to the class **GradeBook .** Each student is responsible for checking to ensure that a grade has been entered for their submissions. Documents submitted by email or google forms do not always arrive at their intended destination and late submissions will not be accepted after one week past the original due date. Collectively homework performance will account for 65% of the course grade.

Find a gene project assignment:

A total of 35% of the course grade will be assigned based on the "find-agene project assignment". The purpose of this project assignment is for you to grasp the principles of database searching, sequence analysis, functional annotation and exploratory data analysis with R that we cover in the course

• Mid term example assignment instructions (PDF) .

Final Exam:

There will be NO final exam for this quarter.

Assignment due dates:

A complete listing of class assignments along with anticipated due dates is available here . Typically, assignments are due 12PM San Diego time on the Monday following class (whether that is Tue or Thur). Note that these dates are subject to change and will likely not be updated in the afore linked listing. Please see GradeScope for the most updated listing. As always, "if in doubt, reach out" and contact us on piazza.

week	class	assignemnt_name	du
1	1	01. Lab Class1 (Key Databases and Online Resources) [20.0]	Арі
1	1	01. HW Class1 Quiz	Арі
1	2	02. Global Alignment HW Class2 [10.0]	Арі
1	2	02. Lab Class2 (Alignment and Database Searching) [23.0]	Арі
1	2	02. HW Class2 Quiz	Арі
2	3	03. HW Class3 PSSM [10.0]	Арі
2	3	03. Lab Class3 (Advanced database searching) [10.0]	Арі
2	3	03. Project (Find a Gene Assignment Part 1) [1.0]	Ар
2	DC	03. DataCamp 1 (IntroToR)	Арі
2	4	04. Lab Class4 (R script to PDF report) [10.0]	Ар
2	4	04. Extra credit lab OPTIONAL R intro	Арі
2	4	04. HW Class4 Quiz	Ар
3	5	05. Lab Class5 (ggplot R script to PDF submission) [10.0]	Ар
3	5	05. HW Class5 Quiz	Ар
3	DC	DataCamp 3 (Intro to ggplot2)	Ар
3	6	06. HW Class 6 (R Functions) [10.0]	Ар
3	6	06. Lab Class6 (R Functions) [10.0]	Арі
3	6	06. HW Class6 Quiz	Ар
4	7	07. Lab Class7 (Machine Learning 1) [10.0]	Ар
4	DC	07. DataCamp 4 (tidyverse)	Ap
4	8	08. HW/Lab Class9 (ML Mini Project) [16.0]	Ар
5	9	09. Lab Class10 (Candy Mini-Project) [10]	Ма
5	10	10. Lab 10 (Structural Bioinformatics) [6.0]	Ма
6	11	11. Lab 11 (AlphaFold)	Ма
6	12	12. Lab Class12 Pt.1 (RNASeq Galaxy) [12.0]	Ma
6	12	12. HW Class12 Pt.2 (Population analysis) [Extra Credit BoxPl	Ма
7	13	13. Lab Class13 (DESeq2 lab) [12.0]	Ма
7	14	14. HW/lab Class13 DESeq2 mini project [Extra Credits] [10.0	
7	DC	13. DataCamp 2 (Intermediate R)	Ma
8	15	15. HW Class15 (GitHub Repo) [10.0]	Ма
8	16	16. Lab Class17 (Unix Basics) [10.0]	 Ma
8	DC	16. OPTIONAL DataCamp (git)	Ma
9	17	17. Lab Class 18 (AWS Cloud Computing)	Jur
9	18	18. Lab Class 18 (Pertussis mini project)	Jur
10	19	19. Lab Class19 (CMI-PB prediction challenge project) [10.0]	Jui
01	- assignmen		

Course Director

Prof. Barry J. Grant 🗷 (Email: bjgrant@ucsd.edu)

Course Syllabus

Spring 2024 (PDF)



BIMM 143 A hands-on introduction to

the computer-based analysis of genomic and biomolecular data from the Division of Biological Sciences, UCSD 🗷.

Overview

Schedule

Computer Setup

Learning Goals

Assignments & Grading

Ethics Code









