

CODING COMMUNITY FOR DATA SCIENCE COMPONENTS OF INDEPENDENT RESEARCH PROJECTS

Tuesdays 12:00 -1:00 PM

Class Info

Instructor:

Kaho Tisthammer, Ph.D.

Contact: ktist@sfsu.edu

Office Hours: TBD, Zoom.

Please feel free to e-mail me related or non-related to the class matters!

Credit Hour: 1

Prerequisites: Graduate standing and BIOL/CHEM 806 Exploratory Data Analysis for Scientists (concurrent enrollment acceptable) or equivalent or consent of instructor.

Course format: Synchronous online: Meet every Tuesday from 12pm via Zoom at:

<https://sfsu.zoom.us/j/81352271931?pwd=NW52UEIeXNUMvcHZ4ay9FL3dDVU1IZz09>

Required materials: A computer on which software can be installed as necessary & an internet access.

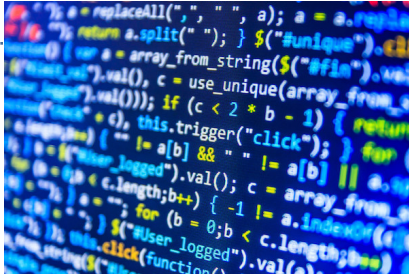


Welcome

Course Description & Objectives

This course provides support for masters' students to apply data science principles to their independent research by creating a community in which students can mentor each other in coding, statistics, interfacing with new software, and other data science skills. In addition, students will have the opportunity for guided support to implement the data science cycle - prepare data, analyze data, communicate data - within their thesis project. The course provides protected time for students to independently learn new skills and analyze data with support from the instructor and fellow students in the class.





Online best practice

We will be flexible and adjust to the situation and prioritize supporting each other. Meeting online is not the same as meeting and talking in-person, and some of you may feel shy to ask questions. But please, please email me or talk to me if you have questions, concerns, or requests for the class and school. Please get to know your peers, share resources, and help each other. Working together is highly encouraged!

Disability Access

Students with disabilities who need reasonable accommodations are encouraged to contact the instructor. The Disability Programs and Resource Center (DPRC) is available to facilitate the reasonable accommodations process. The DPRC is located in the Student Service Building and can be reached by telephone (voice/ 415-338-2472, video phone/ 415-335-7210) or by email to dprc@sfsu.edu.

The major GOALS of this course are:

- Organize and store your thesis data according to *data science best practices*
- Identify aspects of independent research to which one can apply *data science principles*
- Apply the *data cycle* (prepare, analyze, communicate) to your masters thesis data and identify the steps as they are carried out (write reflections)
- Justify/ motivate a data analysis project and plan of work through writing
- Make monthly and weekly goals to learn new skills or software and perform analyses, follow the plan of work, and assess their own progress, and learn through helping colleagues
- Report data analyses, especially visually, but also through writing and speaking

Evaluation:

Weekly reflections (1 paragraph or an assigned task)	80 pts (80%)	<ul style="list-style-type: none"> • Submit at least 10 reflections for the first 13 weeks. • 8 pts each x 10 = 100 pts total.
Data organization and storage	10 pts (10%)	<ul style="list-style-type: none"> • 4 check-ins (turn in your progress) • 2.5 pts x 4 = 10 pts
Oral presentations	10 pts (10%)	<ul style="list-style-type: none"> • Each student will present their reflections/progress at least once during the semester (2 pts) • Each students will present their progress/results at the end of the semester (8 pts)

- Grading will be based on completing the weekly reflections and oral presentations. Student's data organization and storage for their project will be assessed four times to encourage growth and accountability.
- All materials should be upload to iLearn

Disclosures of Sexual Violence (Title IX):

SF State fosters a campus free of sexual violence including sexual harassment, domestic violence, dating violence, stalking, and/or any form of sex or gender discrimination. If you disclose a personal experience as an SF State student, the course instructor is required to notify the Dean of Students. To disclose any such violence confidentially, contact:

- The SAFE Place – (415) 338-2208; psyservs.sfsu.edu/content/safe-place
- Counseling and Psychological Services Center – (415) 338-2208; psyservs.sfsu.edu
- For more information on your rights and available resources: <http://titleix.sfsu.edu>

Withdrawals:

Students may withdraw from this course at their own discretion up until September 13, 2021 Feb. 12. After this date, University policy states that “withdrawal is permissible only for serious and compelling reasons” and requires completion of a ‘Petition for Withdrawal’ form (available in the Department Office), copy of unofficial transcript, and Instructor, Chair, and Dean approval (The deadline is December 10, 2021). The student will receive a ‘W’ on their transcript, if approved. The last day to switch to Credit/No Credit option is October 18, 2021.

Religious Holidays:

The faculty of SFSU shall accommodate students wishing to observe religious holidays when such observances require students to be absent from class activities. It is the responsibility of the student to inform the instructor, in writing, about such holidays during the first two weeks of class each semester. If such holidays occur during the first two weeks of the semester, the student must notify the instructor, in writing, at least three days before the dates of absence. It is the responsibility of the instructor will make every reasonable effort to honor the student request without penalty, and of the student to make up the work missed.

Student Evaluation of Teaching Effectiveness:

All instructors in all courses must be evaluated by students enrolled in the course. The Department takes student evaluations of instructors very seriously. Evaluations are used to provide feedback to instructors to help them improve their teaching skills, and to guide decisions about future teaching assignments. We encourage students to participate in this important activity.

Student evaluations will be done on-line. Two weeks before the end of instruction, students will receive an email from online@sfsu.edu with links to teaching evaluations for each course. These links will also be available through the student’s iLearn portal. All teaching evaluations will remain anonymous and will not be available to instructors until one week after grades have been submitted.