SCHOOL of MEDICINE DEPARTMENT OF INTERNAL MEDICINE Translational Informatics Division

Independent Study in Biomedical Data Science

Project templates available in bioinformatics, cheminformatics, systems biology and other areas. (BIOMED 505: Special Topics in Biomedical Sciences,

> "Ind Study Biomed Data Sci") https://datascience.unm.edu/isbdscourse/

Prerequisites

- Preliminary research plan instructor approval
- Project advisor (may be faculty, staff, or external)
- Coursework in biology, chemistry, computer science, etc. as needed

Project areas and ideas

- Bioinformatics
- Cheminformatics
- Genomics
- Drug discovery
- Clinical informatics
- Public health
- Machine learning

Introduction

This course involves designing, executing, and presenting a independent research project, intended for graduate and advanced undergraduate students.

Banner image % NIH NCATS.

- 1. 1-3 credits, depending on project scope.
- 2. Students must submit a research plan for instructor approval prior to registration.
- 3. Students will execute the research project independently, with limited supervision.
- 4. Major deliverables:
 - a. Final Report
 - b. Virtual poster presentation
- Natural language processing
- Data visualization
- Web dbs and tools
- ...and many others!

Course leadership:

Instructor: Jeremy Yang, PhD, Research Associate Professor Lead Advisor: Vincent Metzger, PhD, Post-doctoral Fellow Course Administrator: Tonya Morgan, Division Administrator

For project ideas, templates, examples, and help finding a project advisor, visit our course home page at https://datascience.unm.edu/isbdscourse/ or contact jjyang@salud.unm.edu

c. Participation via online forum