

Programming for Biomedical Research & Clinical Practice

GMS 5905 – 1H75

[Dr. Srikar Chamala](#) – Spring 2021

Schedule ^{***}	Credits	Dates
Tue 12 – 1:30 PM (or) Thu 5:15 – 6:45 PM	3	1/12/2021 - 4/19/2021

^{***} Attendees have the flexibility to attend any one (or even both) of the classes per week based on their needs and availability.

Course Overview

This course provides hands-on informatics training in **Unix/Linux operating systems** and **Python programming language**, which are crucial programming skills in the fields of medicine/pathology and other healthcare data sciences. Additionally, **advanced big data analysis and visualization** concepts are taught through usage of data science python libraries. In this course students will explore and solve practical problems using previously published scientific datasets from clinical, genomics, and laboratory medicine settings that are tailored for practicing clinicians and basic science researchers. This course will build fundamental computational skills necessary among researchers, pathologists, clinicians, and other healthcare professionals for pursuing specialized and advanced informatics training in the areas of clinical bioinformatics, biomedical informatics, artificial intelligence, digital pathology imaging, etc. It is assumed students have no knowledge of programming or computing.

Course teaching pedagogy and outcomes will be similar to our previously published manuscript.

Maness, H. T., Behar-Horenstein, L. S., Clare-Salzler, M., & Chamala, S. (2020). [Informatics Training for Pathology Practice and Research in the Digital Era](#). *Academic Pathology*, 7, 2374289520911179.

Course Registration

This is a department-controlled course, where interested students have to send an email to Kendra Smith (krs2@ufl.edu) for registering in the course. If you have any questions on registration please contact Kendra Smith.

Additional Notes

- UF Employees – You can register for the course via UF Employee Education Program, which allows you to register for free up to six credits. <http://hr.ufl.edu/learn-grow/education-programs/employee-education-program/>
- Medical residents and fellows please contact Kendra Smith for attending this course.