

# Fall 2023 | Bioinformatics Program Auditor Information | Registration

The Department of Computational Mathematics, Science, and Engineering is offering six 1-month modular courses during the Fall 2023 semester.

## Track 1:

CMSE890:301: Programming Foundations for Bioinformatics: August 30 — September 27

CMSE890:302: Statistical Analysis and Visualization of Biological Data: October 4 — November 1

CMSE890:309: Classical Sequence Analysis: November 8 — December 6

## Track 2:

CMSE890:303: Data Handling : September 5 — September 28

CMSE890:304: Intro to Genomics and Sequence Data Analysis: October 5 — November 2

CMSE890:305: Transcriptomic Data Analysis: November 9 — December 7

Classes are being offered in hybrid mode with in-person options as reasonable and Zoom options for all class sessions. Modules 301, 302, and 309 meet 3:00pm — 4:50pm, Mondays and Wednesdays, A158 Plant & Soil Sciences Bldg. Modules 303, 304, and 305 meet 3:00pm — 4:50pm, Tuesdays and Thursdays, A158 Plant & Soil Sciences Bldg.

Modules 301, 302, 303, 304, 305, and 309 are available as audit workshops through CMSE. If you are a postdoc, faculty, research staff, or are otherwise affiliated with MSU and have a NetID, but are not enrolled as a student, then you can use this registration form. CMSE does not allow students to audit courses. Send answers to the questions below to the Bioinformatics Program Coordinator Alexis Black Pyrkosz ([ablackpz@msu.edu](mailto:ablackpz@msu.edu)).

## Audit Workshop Registration

These audit workshops are only open to postdocs, faculty, research staff, and other persons who are affiliated with MSU and have a NetID, but not enrolled. MSU students are encouraged to take CMSE 890 Sections 301, 302, 303, 304, 305, or 309.

Cost for audit workshops is \$50 per person per workshop and must be paid via an MSU institutional account (general account preferred but grant accounts accepted). At this time, funds from personal accounts **cannot** be accepted. Note that the workshop fee will only be this low during the Fall 2023 semester; expect the fee to increase in following semesters to cover administrative costs.

Registration fees will be collected the second week of each module. Talk to your research advisor about getting an account number. Email the Bioinformatics Program Coordinator with questions. Auditors who register but find that their schedule is too full will not be charged the fee if they contact the Coordinator to drop during the second week of the module.

It is not necessary to attend all workshops in a track, but the later workshops will be offered with the expectation that registrants have a background equivalent to the earlier workshops in the track. There will NOT be time or personnel to help registrants learn material that was covered in earlier workshops.

Auditors will be accepted on a first-come-first-served basis for a seat in the classroom. Once that limit is reached, auditors will only be accepted for online auditing up to a limit. Email the Coordinator with questions about availability. (This is rarely an issue.)

### **Registration Information**

1. Name \_\_\_\_\_
2. MSU NetID \_\_\_\_\_
3. Preferred Email (only if different from your MSU Email) \_\_\_\_\_
4. PI or Advisor \_\_\_\_\_
5. Department or Program \_\_\_\_\_
6. You are a(n)
  - \*Undergraduate
  - \*Grad Student
  - \*Postdoc
  - \*Visiting Scholar
  - \*Staff
  - \*Faculty
  - \*Other \_\_\_\_\_

### **Prerequisites:**

CMSE890:301 -- Programming Foundations in Bioinformatics has no prerequisites other than basic computer skills (email, web surfing, installing software on one's own laptop).

CMSE890:302 -- Statistical Analysis and Visualization of Biological Data has the prerequisite of CMSE890:301 or equivalent R programming experience.

CMSE890:303 — Data Handling: Unix and Python has no prerequisite, but previous programming experience or simultaneous enrollment in CMSE890:301 is strongly recommended

CMSE890:304 — Intro to Genomics and Sequencing Data Analysis has the prerequisite of CMSE890:303 or equivalent experience in command-line programming on HPCCs

CMSE890:305 — Transcriptomic Data Analysis has the prerequisite of CMSE890:304 or equivalent experience with processing genomic data on supercomputers

CMSE890:309 — Classical Sequence Analysis has the prerequisite of CMSE890:302 or equivalent experience with statistics in R and basic knowledge of biochemistry (nucleotides, amino acids, etc.)

7. Which workshops do you want to attend?

- \*301 — Programming Foundations
- \*302 — Statistical Analysis and Visualization of Biological Data
- \*303 — Data Handling: Unix and Python
- \*304 — Intro to Genomics and Sequence Data Analysis
- \*305 — Transcriptomic Data Analysis
- \*309 — Classical Sequence Analysis

8. Laptop Availability (you have a...)

- \*Mac Laptop
- \*Window Laptop
- \*ChromeBook
- \*Linux Laptop
- \*Other \_\_\_\_\_

9. HPCC account (only applicable if you are taking 303, 304, or 305)

- \*I already have an HPCC account through my research advisor or department
- \*I do not have an HPCC account and need to be given one for the course
- \*I'm not sure if I have one or not
- \*What's an HPCC account?

9. Modality — how will you attend the workshops?

- \*I will attend in-person and online sessions
- \*I might come to class in-person but will be mostly online
- \*I will only attend online sessions
- \*I will be auditing asynchronously and watching lecture videos through D2L

10. Do you want to be on the Bioinformatics Email List?

\*Yes

\*No

\*Already there