January 23, 2018

Course Title: Genomics and Transcriptomics
Course Number: GBIO 493 (undergraduate)/ GBIO 593 (graduate)
Course Website: https://paleantology.github.io/SELUGandT/
Course Date: Spring 2018
Course Meeting Times: Tuesday and Monday 1PM - 3:50 PM
Course Meeting Location: Biology Building 210

Course Faculty: Dr. April Wright & Dr. Raul Diaz
Office: Biology Building 403 (April) & 332 (Raul)
Office Phone: 5556 (April) & 5295 (Raul)
Email: april.wright@selu.edu & raul.diaz@selu.edu
Office Hours: April: Monday, Tuesday, Thursday, Friday 10-12am. Raul: Monday Wednesday 1-3pm. And by appointment

Course Description This is a 3-unit course. In this course, we will explore the fundamentals of genomics and transcriptomics. Using hands-on laboratory and computational methods, you will become familiar with the types of cutting-edge analyses that researchers in this discipline use in pursuit of questions about biology.

Course Objectives

- Understand why researchers sequence genomes and transcriptomes in biology.
- Explain how experimental design relates to the biological questions being asked.
- Use the command line to explore and process biological data
- Describe workflows and software that are appropriate for different genomic and transcriptomic applications.

Assessment A grade of 'C" or better in this course is required to satisfy the curriculum requirements for the College of Science and Technology. There are a total of 500 points in this course. They are distributed as follows:

- Standard Exams
- **Project One:** 100 pts

- **Homeworks:** 100 pts
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- **Quizzes:** 100 pts
- **Project two:** 100 pts
- **Group presentation:** 100 pts

Grades will be assigned as follows:

A: 450-500 points, B: 400-449 pts, C: 350-399 pts

Attendance and Make-Up

Attendance is expected. Homeworks will be posted via the course websited, and turned in via GitHub. Homework will be due every Friday on non-exam weeks. Because they will be available for the entire week before they are due, **no make ups** will be available for assignments unless prior approval is granted. Quizzes will be Tuesday at the start of class.

If you are aware in advance of absences, please let us know. The more information we have, the easier it is for us to accommodate you.

Important Dates

- Feb. 8: Academic Checkpoint 1
- March 9: Academic Checkpoint 2
- March 23, 12:30: Last drop period
- May 4: Last day of classes