NEXT-GENERATION SEQUENCING AND ANALYSIS

BSC4933/BSC5936 & ISC4933/ISC5935

<u>Syllabus</u>

OVERVIEW:

The purpose of this course is to introduce students to cutting edge DNA sequencing technologies. Students will gain conceptual knowledge of the methods and applications and gain hands-on experience analyzing the data. Students with computational background and/or interests will work as a team to develop a new methods of analysis. Students with laboratory experience and/or interests will learn to prepare samples for sequencing in a laboratory setting.

INSTRUCTOR CONTACT INFORMATION:

Dr. Alan R. Lemmon Office: Dirac 150-A

Office hours: By Appointment.

Phone: 850.445.4393 Email: alemmon@fsu.edu

GRADES:

25% Participation / Attendance

20% Quiz I

20% Quiz II

10% Oral Presentation

25% Independent Project Report

CALENDAR: (details on Google calendar, I will email it to you)

Introduction Jan 4th

Sequencing Technologies Jan 6th - Jan 25th

Enrichment & Multiplexing Jan 27th - Feb 8th

Quiz I Feb 10th

Assembly Feb 15th - March 15th

Spring Break Feb 8th & Feb 10th

Quiz II March 17th

Student Projects March 22nd - April 19th

Project Presentations April 19th

Project Reports Due April 21st

NO FINAL EXAM

READING ASSIGNMENTS:

Available for download on Blackboard (See Google Calendar for Dates).

University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy:

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://dof.fsu.edu/honorpolicy.htm.)

Americans With Disabilities Act:

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center 874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) sdrc@admin.fsu.edu http://www.disabilitycenter.fsu.edu/

Syllabus Change Policy

"Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice."