

**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

New Course Request

SDSU	Agriculture & Biological Sciences / Agronomy, Horticulture & Plant Science
Institution	Division/Department
Dennis D. Hedge	5/8/2018
Institutional Approval Signature	Date

Section 1. Course Title and Description

Prefix & No.	Course Title	Credits
PS 735	Next Generation Sequencing Data Analysis	2

Course Description
This course covers bioinformatics applications in next-generation sequencing (NGS) data analysis for students in plant science, biology and microbiology, computer science, and mathematics and statistics. The students will be exposed to general/advanced computational techniques for NGS data analysis, public databases/web servers, and major bioinformatic algorithms and programs. A project-based strategy will be adopted throughout the class so that students can understand algorithms in the context of solving the biological problems.

Pre-requisites or Corequisites

Prefix & No.	Course Title	Pre-Req/Co-Req?
STAT 535	Applied Bioinformatics or STAT 541 Predictive Analytics I	Pre-req

Registration Restrictions

None

Section 2. Review of Course

2.1. Was the course first offered as an experimental course?

Yes (if yes, provide the course information below) No.

2.2. Will this be a unique or common course?

Unique Course

Prefix & No.	Course Title	Credits
STAT 535	Applied Bioinformatics	3

