PROPOSAL TO TEACH MATH 475 OR 476

This form must be completed and approved by the Department of Mathematics and Statistics Chair and College of Sciences and Mathematics Dean before an individual study course (475 or 476) may be scheduled.

Course number (475 or 476): 4195   Semester: Summer 2nd 6-weeks 2021

Name of student: Johanna Grove   ID#: 20255423

Who will teach the course? K Hubbard   Number of hours: 1

What is the justification for teaching the course?

see attachment

Outline in detail what is to be taught in the course. Submit a detailed prospectus for the course.

see attachment

(Continue on the back if necessary, or attach extra pages.)

Student
Approved: ✓ / Approved: 

Professor
K Hubbard

Chair
Kerr

Date
2/9/2021

Not
Approved: ✓ / Approved: 

Dean
Kimble-Chalmers

Date
2/11/2021
Data Driven Predictions of Student Disengagement – MATH 4195

Johanna Grove – Hubbard – Summer II 2021

Justification:

Studying data driven prediction of SFA student disengagement is an accessible and engaging topic for undergraduate research. Johanna Grove is a SMART Texas scholar, and a portion of that grant is oriented toward offering scholars undergraduate research experience.

Prospectus for the course:

The course will consist of exposure to anonymized SFA datasets for student academic progress, GPA earned, academic major and minor, meal plan usage data, Brightspace usage data, and recreation center usage data. The student will need to understand the datasets. Next the research will examine how these data indicate academic disengagement, identify methods for how to use this data to identify students who become academically disengaged before the end of the semester, and work to implement this plan in collaboration with other researchers.

Parts of the undergraduate research:

*Understanding and cleaning data

*Brainstorming with other researchers how to mine the data

*Identifying and implementing appropriate statistical tests and models

*Reviewing findings and obstacles, then adjusting the plan

As the student works through this process, a part of the independent study requirement will be documenting questions, attempted solutions, obstacles, and next steps. This will be accomplished through a student-kept research journal.

In addition to submitting the research journal, the student will also prepare and present finding in a presentation to other researchers, likely in collaboration with one other undergraduate researchers.