

UTMOST Project Application

Institution: William Jessup University, Rocklin, California

Faculty Applicants: Bradley Wagner, PhD and Michelle Clark, MA

Application Questions

- *Provide a short statement that describes*
 - a. *which course(s) you could teach and exactly which semester(s) or quarter(s) each would be possible, including the possibility of control sections*

Bradley Wagner: Abstract Algebra Fall 2018; Abstract Algebra II Spring 2019

Michelle Clark: Linear Algebra Spring 2018 & Spring 2019

- b. *your experience teaching these courses*

Bradley Wagner: Taught Abstract Algebra once (Fall 2014) as an Independent Study Course using *Abstract Algebra: Theory and Applications* (Judson). (Prior to the UTMOST research study, Bradley will be teaching Abstract Algebra again in Fall 2016 as a traditional lecture course.)

Michelle Clark: Taught Linear Algebra once (Spring 2015) using *Elementary Linear Algebra* (Larson). (Prior to the UTMOST research study, Michelle will be teaching Linear Algebra again in Spring 2016 & 2017.)

- c. *your experience using mathematical software in courses (e.g., names of software systems and courses)*

Bradley Wagner:

MyMathLab	Precalculus
LaTeX	Precalc, Calc 1-3, Proofs, Real Analysis, Abstract Algebra
Mathematica (moderate)	Calc 1-3
Sage (limited)	Calc 3

Michelle Clark - none as an instructor

- d. *your experience with Sage and SageMathCloud in particular.*

Bradley: Used Sage and SageMathCloud briefly in Calc 3 for generating 3D surfaces and curves

Michelle Clark: None

- *Also include in your statement a description of your college or university, and student population for the relevant courses.*

William Jessup University is a small, private, WASC-accredited university with about 1100 undergraduate students. It focuses on a liberal arts education in the context of a faith-based worldview. WJU provides fourteen bachelor of arts degrees (including a mathematics degree), several bachelor of science degrees, and two master of arts degrees.

The student-faculty ratio at WJU is 12:1, and the school has 60.3 percent of its classes with fewer than 20 students. In the traditional undergraduate program at

Jessup, the student demographics are as follows:

Men 42%

Women 58%

Hispanic/Latino 16%

Black or African American 5%

White 68%

Asian 3%

Other or unknown 8%



December 20, 2015

To Whom It May Concern:

The Mathematics Department of the Division of Natural and Applied Sciences at William Jessup University is aware of the UTMOST Project and its research study that is being proposed to IUSE for which participants are being solicited. The department understands and approves this application by our faculty members (myself and Michelle Clark) and will make every effort to accommodate the activities and requirements of the project, including implementing the proposed class schedule.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bradley Wagner', is written over the printed name.

Dr. Bradley Wagner
Mathematics Department Coordinator

