Application Number	M63
Applicant	Dr. Kyle Chapman
Position	Limited Term Assistant Professor
Institution	University of Georgia
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Team Members	Dr. Jennifer Royal - jroyal@uga.edu
Туре	Creation of ancillaries for pre-existing OER

Course Number / Title	MATH 2250 Calculus I; Math 2260 Calculus II
Final Semester	Fall 2019
Grant Amount	\$4,000
Works Being Revised	WebWork problems for OpenStax Calculus Volume I https://oer.galileo.usg.edu/mathematics-ancillary/10/ OpenStax Calculus Volume II https://openstax.org/details/books/calculus-volume-2

Description

In Fall 2019, the Mathematics department at University of Georgia will be piloting the use of the OpenStax Calculus textbook for Calculus I and II; listed as Math 2250 and 2260. This transition is to replace the current textbook University Calculus, Early Transcendentals by Hass, Weir and Thomas. This would result in a per student savings of \$150 - \$200. To maximize the efficacy of this transition, we would edit and create ancillary materials in the form of a bank of WebWork problems synchronized to the new textbook and consistent with the desired learning outcomes of the department.

- Dr. Royal, the Calculus I course coordinator at our department at University of Georgia, and Dr. Chapman will prepare the ancillary materials as follows:
- 1. Adapt the existing ancillary materials for Calculus I which are present on the Galileo materials repository by incorporating existing problems from the current UGA database as needed and editing the materials to coincide with the departments desired learning outcomes.
- 2. Create ancillary materials for Calculus II by modifying and reorganizing the problems in the current UGA database to coincide with the ordering of material and notation present in the OpenStax textbook.

These new materials would aid in the implementation of a zero cost Calculus curriculum at UGA. It would also expand the materials currently available on Galileo from Calculus I to Calculus II.

Timeline March 2019: Evaluate current Calculus I materials on Galileo to determine aspects most in need of editing or expanding to coincide with UGA intentions. March-April 2019: Creation of draft of WebWork problem set structure for Calculus II OpenStax textbook using problems from UGA WebWork database and other WebWork databases as needed. May 2019: Editing of WebWork databases for both courses to ensure consistency with both textbook and departmental goals. Post materials to the Galileo repository. Compile final report Dr. Chapman will be responsible for creating databases, while Dr. Royal will be responsible for reviewing the materials and determining necessary adjustments. Dr. Chapman will also post materials after completion and write final reports, while Dr. Royal will ensure proper incorporation of the new materials into the pilot program.

Budget	\$2000 Compensation to Dr. Chapman
	\$2000 Compensation to Dr. Royal

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