Round	14
Grant #	M86
Applicant Name	Tashia Caughran
Applicant Position	Lecturer
Applicant Institution	University of North Georgia
Applicant Email Address	tashia.caughran@ung.edu
Other Team Members	Greta Giles and Clarke Miller
Type of Project	Creation of ancillaries for pre-existing OER
Course Number(s) and Title(s)	CHEM 1152, CHEM 3100, CHEM 4841K, and CHEM 4842K
Final Semester of the Project	Summer 2020
Proposed Grant Funding Amount:	\$4,800.00
Currently- Existing Resource(s) to be Revised / Ancillaries Created	Creation of Case Studies for Survey of General Chemistry, Organic, Biochemistry courses and upper level Biochemistry courses
Project Description	Students taking the CHEM 1152, 3100, 4841, and 4842 courses are primarily students who intend to pursue a career in a medical field. Students must pass the HESI, TEAS, PCAT, DAT or the MCAT exam in order to be admitted to their desired program of study. It is necessary for these students to retain the material throughout the semester to perform well on these comprehensive exams. Faculty teaching these courses want to move away from a traditional lecture setting to a more active learning environment where students are more engaged. Our faculty also desire to introduce examples of situations students might encounter during their careers as medical professionals. The purpose of this proposal is to develop lecture activities i.e. case studies to introduce during lecture time or as an outside group activity. The case studies will provide an opportunity for students to explore chemistry topics in a more approachable format. Literature suggests that in-class activities promote increased long-term retention of the subject matter being taught. In addition, these activities will connect fundamental General, Organic and Biochemistry topics to medical situations. The proposal is to develop six case studies to be used in the GOB and Biochemistry courses on three of our UNG campuses. The case study material will cover important chemistry and biochemistry content decided by the team of instructors at the

	beginning of the project. There is significant material overlap between the courses listed for this grant. However, student activities and assignments will be made applicable according to the difficulty level of the material. Other ancillary materials used may include worksheets, lecture demos, lecture videos, and in-class activities to complement the case study material.
Timeline and Personnel	 All team members will be involved in each of the tasks listed below: May 1-10, 2019 Final topics for Case Studies established. May 10-August 10, 2019: Development of Case Study content, lecture demos, and in-class activities. In the Fall 2019 semester, the case studies will be implemented in the CHEM 1152, CHEM 3100, and CHEM 4842 courses. CHEM 4841 is taught in the spring semester, and case studies will be implemented in that course at that time. Edits to the studies will be made at the end of the semester based on instructor and student feedback. In the Spring 2020 semester, a worksheet or quiz will be presented to students in the GOB and Biochemistry courses before and after the introduction of the case study. Scores will be compiled for these activities and evaluated. At the end of the Spring 2020 semester, team members will compare results of the worksheets/quizzes to make assessments of the effectiveness of the case study.
Budget	 Funds will be used for summer support for all team members (maximum of \$2,000 to each member). A budget of \$400 will be divided equally among the team members and used to purchase materials. Depending on the case study, these materials will include supplies for presenting a lecture demo introducing the case study, or the materials might include kit supplies for an in-class activity. A budget of \$400.00 will be equally divided among team members to attend and possibly present a poster of the results at a local or regional scientific meeting.
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