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Subject: New Project Proposal Submission
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Lab Address:	PS&T 205, Particle Engineering research center
Department:	Materials Science and Engineering
Title:	Development of Teaching material for Interfacial Phenomena
Problem:	Interfacial phenomena are in every aspect of the daily life. From food items such, salad dressing, condiments and ice cream, to detergents and polishing slurries. Understanding these phenomena is important to optimize the performance, improve the efficiency reduce the cost. The class of interfacial phenomena deals with that particular problem and is investigating the application of the phenomena in very these processes. The first part of the course deals with liquid-liquid and liquid gas interfaces, and applications like foams, detergents, aerosols and emulsions. The second part deals with solid liquid interfaces, and applications such paints, polishing, friction and lubrication.
Approach:	The student that will be working on the project will make scribe the lectures and create small modules that will be used alongside the lecture notes. He/she will also organize the problems and the homework assignments according to topic/subject and assist with the solution.
Techniques/Equipment:	Through the lectures the student will acquire a depth of the interfacial phenomena and grasp the fundamental concepts.
Systems and Materials:	Recorded lectures and supplementary material provided by the instructor.
Goals:	Scribe the lecture videos. Organize the problems in modules.
Relevant	Excellent experience for future teachers, lecturers, and

Industries/Applications:	very improtant in chemical engineering industries such detergents, electronic manufacturing and food industry.
Number of Students Requested:	1-2
Time Commitment:	10 hours/a week minumum
Semesters Required to Complete Project:	1+1
Will this Project Satisfy Senior/Honor Research Requirements in your Department?	No
If not, Can the Scope of this Project be Expanded to Meet Senior/Honor Research Requirements?	No