

**FALL 2018 KOLT TEACHING INNOVATION GRANT PROPOSALS**

Instructor	Course Name	Department / College	Objective of the Teaching Innovation Initiative	Previous Applications
Oğuzhan Özcan	ASIU 118 Design Thinking	MAVA / CSSH	<p>In Summer 2018, the instructor designed ASIU 118 Design Thinking course as <b>one of the first</b> design thinking course in the world that is included in the core program, by using the <b>problem-oriented project-based learning methodology</b> (to <b>harness divergent thinking skills</b> in students from variety of disciplines. However, the course outline and methods <b>lack to measure</b> the progress of students’ divergent and convergent thinking skills. To instructor’s knowledge, there is no study to quantitatively measure divergent-convergent thinking skills in the context of design thinking education. The literature comes short to inform on <b>teaching styles to enhance</b> divergent-convergent thinking skills and <b>quantitative and qualitative tests</b> and measures to track students’ combination of <b>divergent-convergent thinking skills</b>. The aim of this proposal is to redesign ASIU 118 Design Thinking course,</p> <ol style="list-style-type: none"> <li>1. with <b>enhanced teaching styles</b> to harness a combination of divergent-convergent thinking skills, and</li> <li>2. with most relevant <b>quantitative and qualitative tests</b> to measure the progress of students’ divergent-convergent thinking skills throughout the course.</li> </ol>	No
Mehmet Gönen	COMP/INDR 421 Introduction to Machine Learning	INDR / CE	<p>This proposal aims to teach COMP/INDR 421 Introduction to Machine Learning course in <b>an interactive manner using R Markdown documents</b>, which will help students see the concepts they learn during the lecture in action and interact with the graphical user interface before leaving the classroom. This proposal considers KOLT TIG priorities #1 (<b>course design that uses educational technologies</b>) and #3 (course design that promotes active learning and critical thinking). The most important outcome of this proposal would be making students pay more attention to the lectures. The proposed active learning will ensure that the message given by the instructor will be received more clearly with the help of interactive documents provided to the students before each lecture. The students will be more familiar with the concepts and mathematical details before problem sessions and will be more equipped towards solving real problems. The instructor is planning to conduct a survey with the students to evaluate this active learning scheme by comparing against the courses they took before.</p>	Yes

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Hakan S. Orer Gülnihal Özcan	CPAR 406	SOM	The proposal aims to incorporate a <b>pharmacotherapy training program</b> as a five-day course block into to the <b>Grade 4 curriculum</b> as a separate clerkship (Clinical Pharmacology-CPAR406) to help students acquire the skill set to <b>use drugs judiciously</b> . The proposed course consists of a series of <b>problem-based learning sessions</b> . The pharmacology faculty will facilitate PBL sessions. <b>Small groups of 6-8 students</b> will be formed. An animated discussion atmosphere and critical appraisal of the existing literature will be provided in the classroom. Independent study out of the class is encouraged. Once the P-drug list is constructed, and the patient's treatment is specified, students will perform <b>prescription writing and communication skills</b> exercises in role-playing activities. Feedback from students will be obtained at every step of the training. The proposal is compatible with the KOLT TIG priority: Course design that promotes active learning and critical thinking. Additionally, this course will also allow the <b>accumulation of publishable data on student learning and teaching</b> . A pre- and post-training quizzes and surveys will be given to assess the student progress and satisfaction.	Yes/No
Özgür Pala	Upper Intermediate Reading and Writing	ELC	This proposal aims to <b>bolster critical thinking skills</b> of students at the ELC, and by extension the Koc University, by introducing intellectual standards such as <b>accuracy, clarity, relevancy</b> , etc. and asking students to apply these to their regular everyday thinking. New coming KU students especially need to improve critical thinking in their essays. To help students improve their critical thinking, qualities of critical thinking will be introduced and practiced using <b>weekly activities on the Blackboard in the form of discussing content of appropriate reading texts or videos from the internet</b> . The proposal will be incorporated into the regular Syllabus without designing a new course. This means, this proposal is not a stand-alone course that is specifically created for improving critical thinking skills, rather, it aims to insert small doses of critical thinking practice throughout the Fall 2018 semester and help students attain writing skills that demonstrate strong and disciplined critical thinking. It is expected that the practices and results from this course will encourage other instructors to follow a similar path in honing critical thinking skills of their students.	No

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Arzu Ruacan Gülnihal Özcan	School of Medicine Year 3 Program	SOM	<p>This proposal intends to enhance 3<sup>rd</sup> year medical school students' knowledge and skills on <b>history taking process</b>. History taking is a process which is very convenient to practice with <b>reciprocal learning strategy</b>, one student with specific instructions playing the role of the patient and the other student in the role of physician taking the medical history. The United States Medical Licensing Examination (USMLE) Step2 Clinical Skills (CS) <b>Exam case books</b> are important tools that feeds this <b>peer-practice</b>. By the help of the <b>cases within these books</b> in the clinical lab at Rumeli Feneri Campus, the students will be able to <b>practice history taking and get feedback from their peers about the 3 questions they have forgotten to ask for that specific case</b>, their attitude to patient, ability to communicate and deal with challenging situations. This proposal is compatible with KOLT TIG priority "Course design that promotes active learning and critical thinking" since it will build an active learning platform for medical students, and help them to take history from the patients with confidence, <b>in a more structured and professional manner at their clinical years</b>. These innovations in the year 3 program will direct the students who are focused only on theory at the first 3 years more to the practice, increase their awareness that the theoretical knowledge that they are learning on diseases is not to treat diseases but the patients. Thereby, this program will be an important step on our way as year 3 coordinators to <b>build a bridge between basic and clinical sciences in medical education</b>.</p>	No