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To: Undergraduate Council, HSSEAS

From: Professor Ertugrul Taciroglu, Chair Professor Jian Zhang, Vice-Chair of Undergraduate Affairs Professor Henry Burton, Instructor-in-Charge of CE&E 110 Civil and Environmental Engineering Department

Re: Online Offering of CE&E 110 During Summer Session

The Chair, Vice-Chair of Undergraduate Affairs, and the Instructor-in-Charge of CE&E 110 fully support offering CE&E 110, Wood and Timber Design, as a fully online course offered in the Summer Session each year. Below are responses to the request for "Supplementary Information for Fully Online Course Proposals," Part B of the "UCLA Undergraduate Fully Online Course Approval Policy."

A. What is the rationale for delivering this course fully online? Please provide specific justification for not offering the course in person. The in-person version of the course, which is offered during the spring quarter will remain. CEE 110 is a requirement for all undergraduates and is also taken by Environmental Science and Non-CEE students to satisfy their probability and statistics requirement. The enrollment of the in-person offering ranges from 150-200 students. Offering the course during the summer will provide students flexibility in terms of when the course is taken will also reduce the size of the enrollment for the in-person course to a manageable number. Also, since the course can be taken fully online, students can take this summer course without interrupting their internship opportunities or requiring them to travel back to UCLA during the summer.

B. What is the projected enrollment of the fully online course? Students must have the opportunity to interact regularly with their instructor, teaching assistants (if applicable), and other students, e.g. to ask questions and exchange ideas. How will this be achieved? Please be specific in regards to the number of hours of each mode of communication that will be utilized to teach the course. The expected enrollment of the course would be 25 to 50 students. The course would be taught live via Zoom and recorded for review by students. Students are encouraged to unmute themselves when they have questions or comments and time is built into the lectures for questions and answers. Students who are hesitant about speaking to the entire class can ask questions in the chat window, which is monitored by the Teaching Assistant (TA). The instructor holds regular office hours on Zoom after the lecture is done; students may also make an appointment for personalized Zoom office hours that better meets their schedule. CCLE will be fully implements for



announcements, and student discussions and questions. As enrollment grows, TAs will be added at a rate of one 25% TA per 25 students. As has been the case when the course was offered in person, the primary responsibilities of the TA(s) will be providing one office hour and answering email and CCLE questions.

- C. *Please describe the features of your fully online course that ensure equal access to students with disabilities.* During the initial period of the course offering, we will work with CAE to accommodate students with disabilities as they appear. Disabilities that we have accommodated in the past, such as notetaking, recording of lectures, and extra time on exams are easily and effectively accommodated by the features of Zoom and CCLE. Zoom and CCLE are core campus technologies that are full-featured and have proven effective for online instruction during the 2020 pandemic. Both are available for enrolled students for free. Also, due to their experience assisting disabled students during the pandemic, CAE is aware of any additional online technologies that would be helpful – we will be in dialogue with them during preparations for the course offering.
- D. *How does a fully online version of this course fit into the overall program for the major/minor?* This course is a requirement for all students pursuing a B.S. degree in Civil and Environmental Engineering. As described above, the course is also has significant enrollment from non-CEE HSEAS students and offering it fully online during the summer will allow students who have summer internships to take this course without increasing their course load during the regular academic quarters. This helps the department toward its goal of allowing more students to graduate on time. The course would also help any upper division transfer students get a head start on courses in the summer before they arrive on campus. Finally, since the course is not restricted to a physical classroom, it will be relatively easy to scale to course to demand so that as many students as desire can take the course.
- E. How will TAs and instructors receive support/training to deliver the course in a fully online format? Please assess whether your fully online course keeps within the nominal UCLA TA workload limits and provide a description of the anticipated TA workload associated with the course: through a pragmatic work grid, or records of time sheets, or quarter hours typically worked by historical TAs of this course (or similar courses). If the course requires TAs to be available online for a wider breadth of time than the usual 8 hour working day, please indicate accommodations that will keep the workload within **reasonable parameters.** The course is designed so that the instructor will teach all lectures. TAs will offer an office hour – this is within the normal requirements for the in-person class. Additionally, lectures and office hours will be performed virtually over Zoom, so TAs will not be required to travel to campus, or reside locally, to perform their duties. The instructor will provide training to TAs on the use of Zoom and CCLE, though our experience is that the students are already well versed in these technologies. As our experience with the online course increases, we



will evaluate the performance of our TAs and work with OID to identify any additional training needs.

- F. State how midterms and final exams will be administered. Note that there will be a strong preference for courses that use in-person examinations, supervised by the instructor and/or TAs. To avoid the potential problem of cheating, the final examination should be given simultaneously at all examination locations, unless by exception as approved by the instructor. At the beginning of the course, the instructor will poll the students to arrive at a date/time for all students to take the midterm and final exams. The exam will be administered remotely using Zoom, with the instructor and TAs monitoring the cameras and microphones of students for academic dishonesty. We had good success with this examination method for online final exams during the pandemic. In coordination with CAE and the students, any custom accommodations that may need to be made to these examination procedures can be implemented before the exam dates.
- G. *Explain how students will be able to assess their progress in the course as it proceeds.* Students will be able to access their scores for homework and weekly quizzes at any time as they will be graded in CCLE.
- H. *Explain the efforts that will be made to ensure academic integrity among students. This may include scheduling in-person exams, the use of specific software, testing/proctoring center, etc.* As described in Part F, the use of relevant CCLE tools (e.g., specifying a precise exam window), will limit opportunities for academic dishonesty on the midterm and final exams. Also, online proctoring of the midterm and final exam by the instructor and TA using Zoom has proven successful in the past.