

CEE 494 CON 494 CON 598 Engineering and Construction Professional Practice

Arizona State University | Del E. Webb School of Construction
Course Syllabus

COURSE INFORMATION

Semester: Fall 2019
Time/Location: Fridays, 9:40 – 10:30 AM, CAVC 455
Class #: 88731 (CEE 494), 88683 (CON 494), 88686 (CON 598)
Website: Canvas (through MyASU)

INSTRUCTOR INFORMATION

Instructor: Dr. Tony Lamanna
Office: CAVC 521
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Office Hours: Tuesdays 1:00 – 4 PM and by appointment (email or text to schedule an appointment)

Dr. Tony Lamanna is the Program Chair of the Del E. Webb School of Construction and the Sundt Professor of Alternative Delivery Methods and Sustainable Development. His research focuses on repair, rehabilitation, retrofit, and adaptive reuse of existing buildings, as well as sustainable materials and construction methods. Dr. Lamanna started his teaching career in 2002 in the Department of Civil and Environmental Engineering at Tulane University in New Orleans, LA. After Hurricane Katrina, he started his own consulting company to assist in rebuilding the city through design, management, and expert witness testimony. In 2013, he went back to teaching full-time in the Department of Applied Engineering and Technology at Eastern Kentucky University. He joined the faculty in the Del E Webb School of Construction in the summer of 2017. He has taught a variety of courses including materials and methods, statics, structures, and concrete, steel, and timber design. He holds a BCE in Civil Engineering with a concentration in Construction Management from the Catholic University of America, a MSCE in Construction Materials from Purdue University, and an MS in Engineering Mechanics and a PhD in Civil Engineering – Structures from the University of Wisconsin – Madison. He is an active member of the American Society of Civil Engineers (ASCE), the American Council for Construction Education (ACCE), ASTM International, and the American Concrete Institute (ACI), where he sits on the Educational Activities Committee (EAC). In 2017 he was named a Fellow of both ACI and ASCE.

OVERALL PROGRAM GOALS

Construction management professionals combine knowledge of innovative technologies, construction principles and business management to lead a wide variety of construction projects from residential and commercial buildings to infrastructure projects. The DEWSC program goals are to teach students how to become responsible leaders in the construction industry through organization, leadership, and current/innovative management techniques. The American Council for Construction Education (ACCE) states that it is essential that every Constructor be capable of effectively managing personnel, materials, equipment, costs, and time. The Constructor must be able to effectively communicate and understand their role as a member of a multi-disciplinary team, the assessment of project risk, and the alternate methods that can be used to structure the owner-designer-constructor team.

COURSE DESCRIPTION

Situations encountered in professional engineering and construction practice. Guidance in skills needed to begin careers with both small and large companies such as writing reports, making presentations, financial management, selling work, client relationships, staff management and travel.

COURSE LEARNING OBJECTIVES

Students will be able to:

1. **Create** written communications appropriate for the engineering or construction industries.
2. **Evaluate and analyze** ramifications of decisions made early in an engineering or construction career.
3. **Analyze** the ethical lapses in business decisions leading to failures, and recommend potential remedies.
4. **Developing** a personal professional development plan for their early careers.

ABET Applied and Natural Science Commission (EAC) Student Outcomes:

This course covers the following ABET ANSAC Student Outcomes:

- (2) An ability to formulate or design a system, process, procedure or program to meet desired needs. (CLO 4)
- (3) an ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions (CLO 2)
- (4) an ability to communicate effectively with a range of audiences (CLO 1)
- (5) An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts (CLO 2, 3)

American Council for Construction Education (ACCE) Student Learning Outcomes:

This course covers the following ACCE SLOs:

1. Create written communications appropriate to the construction discipline. (CLO 1)
6. Analyze professional decisions based on ethical principles. (CLO 2, 3)

TEXTBOOKS AND REFERENCE MATERIAL

Materials will be posted on the course Canvas site.

GRADING POLICY

The following criteria, weights, and grading scale will be used to calculate the Final Grade (the Instructor may modify/adjust as necessary):

Weight	Assignment
15 %	Attendance and Participation
30 %	Homework Assignments
30 %	Writing Assignments
25 %	Personal Professional Development Plan

Grading Scale

A	90-100%
B	80-89%
C	70-79%
D	60-69%
E	< 60%

COURSE POLICIES, PROCEDURES, AND REQUIREMENTS

Classroom Procedures – Please turn off your cell phones prior to attending class. Cell phone usage in class is not allowed (this includes texting). If you are caught texting, typing, or using cell phones during class, you may be asked to leave and your departure will count as an unexcused absence. During graded exercises, students may not use the calculator function of a wireless communication device such as a cell phone.

General Responsibilities – The responsibility for learning rests with each student. The professor or lecturer will assist by making the classroom environment one conducive to learning but your preparation is essential. The student is responsible for completing all reading assignments and assigned homework problems, and seeking assistance if needed. Students are expected to bring relevant texts, readings, required notes and handouts, appropriate writing materials, and a willingness to engage to every class.

Attendance and Participation – Class attendance is mandatory. Attendance will be taken regularly. Punctuality, class attendance, participation and preparation are explicit reflections of the student's interest in the course. Grading will reflect the student's individual effort and knowledge. Absence from class will result in the loss of participation points. Attending lectures, turning in homework, and completing online assignments is expected behavior and will result in participation points for the course. To score a high participation grade you must engage the instructor and other students regarding the lesson material.

Make-Up Policy – Prior notice, when possible, will be given to the instructor when a class will be missed. Only under the most extreme circumstances, supported by written documentation, will a make-up oral presentation be given. The final decision rests with the instructor. When a class is missed, it is the student's responsibility to obtain notes and assignments from fellow classmates.

Assignments – Assignments are due at the time posted on Canvas (typically the beginning of class). Late submissions will not be graded, and will receive a score of zero. All writing requirements must be completed using a word processor, spell and grammar checked and well written with a logical flow.

Grade Contestation Window – For 24 hours from the time at which a grade is posted to Canvas, students may not see the instructor regarding the specific grading of the assignment. Students will have one week starting after the 24 hours is over to question the grade that was given. Once this week has past, the grade is considered final.

Professional Work – To receive credit for your work, it is imperative the work be organized, readable, and professional (part of your grade will be based on presentation of your work). Plagiarism of any type will not be tolerated. At the first occurrence, your work will be returned to you to re-do. Following occurrences will result in the instructor reporting this lack of academic integrity to university administrators. If you are unclear about how to cite the work of others, **please ask!**

Course Requirements – When assigned a reading, please complete it before the lecture so that the class discussion will be more meaningful. The importance of keeping current in reading assignments cannot be overemphasized. You are responsible for all assigned reading materials, whether or not the exact topics are discussed directly in the lecture. A course of this nature depends highly upon faculty - student discussion and student participation. Open discussion is authorized and encouraged on all graded work, but each student must formulate his or her own answers because grades are based on the original work of each student. Use of published references is authorized but must be properly cited.

Official E-mail – An official ASU e-mail is established for each student, faculty member, and staff member. All university communications sent via e-mail will be sent to this ASU e-mail address. You are required to check your e-mail daily.

Laptops and Tablets – If you will be using a laptop or tablet, you must sit in the front row, and I will make a note of those students at the beginning of class. If you bring your laptop or tablet to class, you are required to e-mail your notes to me immediately after class. Failure to do so will result in an absence.

Recent studies suggest that students who bring laptops to class perform worse than their non-laptop using peers, and are much less likely to pay attention in class. Laptops can also be a distraction for other students. One increasingly popular option is to ban laptops in the classroom, but this policy accommodates students who can efficiently use a laptop in class for note-taking. As an added bonus, it helps me be a better teacher by giving me a sample of what students take down as notes.

UNIVERSITY POLICIES

Academic Integrity - Students in this class must adhere to ASU's academic integrity policy, which can be found at <https://provost.asu.edu/academic-integrity/policy>). Students are responsible for reviewing this policy and understanding each of the areas in which academic dishonesty can occur. In addition, all engineering students are expected to adhere to both the ASU Academic Integrity Honor Code (<https://provost.asu.edu/academic-integrity/honor-code>) and the Fulton Schools of Engineering Honor Code (<https://engineering.asu.edu/ira-a-fulton-schools-of-engineering-honor-code/>). All academic integrity violations will be reported to the Fulton Schools of Engineering Academic Integrity Office (AIO). The AIO maintains record of all violations and has access to academic integrity violations committed in all other ASU college/schools.

Student Code of Conduct - The Student Code of Conduct sets forth the standards of conduct expected of students who choose to join the university community. Students who violate these standards will be subject to disciplinary sanctions (<http://students.asu.edu/srr/code>).

Classroom Behavior - The use of recording devices is not permitted during class. Any violent or threatening conduct by an ASU student in this class will be reported to the ASU Police Department and the Office of the Dean of Students.

Absence & Make-Up - Accommodations will be made for religious observances provided that students notify the instructor at the beginning of the semester concerning those dates. Students who expect to miss class due to officially university-sanctioned activities should inform the instructor early in the semester. Alternative arrangements will generally be made for any examinations and other graded in-class work affected by such absences. The preceding policies are based on ACD 304–04, “Accommodation for Religious Practices” and ACD 304–02, “Missed Classes Due to University-Sanctioned Activities.”

Disability Accommodations - Suitable accommodations will be made for students having disabilities. Students needing accommodations must register with the ASU disabilities resource Center and provide documentation of that registration to the instructor. Students should communicate the need for an accommodation in sufficient time for it to be properly arranged.

Harassment and Sexual Discrimination - Arizona State University is committed to providing an environment free of discrimination, harassment, or retaliation for the entire university community, including all students, faculty members, staff employees, and guests. ASU expressly prohibits discrimination, harassment, and retaliation by employees, students, contractors, or agents of the university based on any protected status: race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, and genetic information. Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

As an employee of the University I am considered a mandated reporter and therefore obligated to report any information regarding alleged acts of sexual discrimination that I am informed of or have a reasonable basis to believe occurred. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish to discuss any concerns confidentially and privately.

Academic Calendar - The academic calendar (<https://students.asu.edu/academic-calendar>) contains important dates that students should be aware of, including: the first and last day of class, drop/add deadlines, withdrawal deadlines, and observed holidays.

Copyright Protection - Course content, including lectures, are copyrighted materials and students may not share outside the class, upload to online websites not approved by the instructor, sell, or distribute course content or notes taken during the conduct of the course (see ACD 304–06, “Commercial Note Taking Services” and ABOR Policy 5-308 F.14 for more information). You must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

Threatening Behavior - Students, faculty, staff, and other individuals do not have an unqualified right of access to university grounds, property, or services. Interfering with the peaceful conduct of university-related business or activities or remaining on campus grounds after a request to leave may be considered a crime. All incidents and allegations of violent or threatening conduct by an ASU student (whether on- or off-campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students.

Syllabus Changes - Any information in this syllabus may be subject to change with reasonable advance notice.

DETAILED CLASS SCHEDULE

Class sessions will be in accordance with the schedule posted on Canvas that we develop as a class. The instructor reserves the right to modify and/or adjust the schedule. If you have requests for content you'd like covered, please let the instructor know.

CIV/CON 494 Engineering and Construction Professional Practice

Preliminary Topics

Introductions and getting oriented at work
Knowing the hot buttons

Conducting analysis: document reviews and interviews
Writing reports
Making presentations

Managing projects
Financial management

Preparing proposals
Client relationships

Staff management
Travel

Wrap up
Not worrying so much