

CEST 64 – Public Works Inspection & Testing

COURSE SYLLABUS SPRING 2025 **REV 0**

Instructor: Andre Hawks, PhD, PE, A/C57/HAZ

Email: TBD once get a Santa Rosa JC Email

Text or Whats Ap ONLY: 707-322-3507

Lecture Location: Online via Zoom

Lecture Time: Wednesdays, 6:00PM – 9:00PM

Lecture Meeting: https://santarosa-edu.zoom.us/meeting/register/ez_oihwQRNewIDEBqE2trA

Office Hours: Mondays, 8:00 PM to 9:00 PM (by appointment only)

Office: https://santarosa-edu.zoom.us/meeting/register/ez_oihwQRNewIDEBqE2trA

LINKS FOR COURSE DOCUMENTS

ADMIN:

<https://filedepot.santarosa.edu/index.php/s/rao7GPTNx9BaARE>

PICKUP

<https://filedepot.santarosa.edu/index.php/s/pHHXzMPctXEK3g8>

DROPOFF

<https://filedepot.santarosa.edu/index.php/s/4DzNbSt64Wiq2nH>

GRADED DOCUMENTS

Link to obtain graded documents will be provided individually

Student Rights and Responsibilities: <https://rightsresponsibilities.santarosa.edu/>

Student Conduct Expectations: <https://student-conduct.santarosa.edu/>

Textbook and Required Supplies:

- Construction Manual, State of California, Department of Transportation (Caltrans) available online at no cost
 - <http://www.dot.ca.gov/hq/construc/constmanual/>
- Standard Specifications 2024, State of California, Department of Transportation (Caltrans) available online at no cost
 - <https://dot.ca.gov/programs/design/october-2024-ccs-standard-plans-and-standard-specifications>
- Standard Plans 2024, State of California, Department of Transportation (Caltrans) available online at no cost
 - <https://dot.ca.gov/programs/design/october-2024-ccs-standard-plans-and-standard-specifications>
- Scientific-Engineering Calculator + Engineer Scale

Course Content

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

1. Read and interpret contract language, construction drawings, specifications, and standards.
2. Perform public works inspections for surface features, underground utilities, and site improvements.
3. Prepare appropriate diagrams and reports for public works projects.

Objectives:

At the conclusion of this course, the student should be able to:

1. Define and described the responsibilities, inspection policies, and procedures of the Public Works Inspector.
2. Prepare daily project journals, reports, and other written communication for public works projects.
3. Identify and perform the required tests for soils, concrete and aggregates.
4. Identify and describe correct safety procedures on a construction site.

Attendance:

- **Lecture material will be delivered live via Zoom.** Students can access the lecture material as it is available on the Filedepot website at their convenience and as it suits. Attendance of office hours to ask questions and clarify course material is encouraged but not required.
- Assignments are due on a regular basis. Attendance will be taken based on weekly submittal assignments. If you fail to submit an assignment when due, you will be marked absent for that week.
- Attendance will be recorded. It is good practice to notify the instructor **by email** if one is going to be tardy or absent. An excused absence may be granted by contacting instructor sufficiently **prior** to the beginning of class.
- Students are responsible for all material discussed in lecture and lab, class readings or instructions via the internet (email) as well as the readings and assignments. Taking notes is a strongly recommended practice.
- **Students are responsible for correctly obtaining any missed lecture or laboratory course information from their fellow classmates.** *Please do not expect the instructor to provide on-demand email services for absenteeism or failure to retrieve one's files from the network drives.*
- Class participation can and will affect one's final grade as will one's class conduct.
- There will be no make-ups for missed class activities (quizzes, exams, in-class demonstrations, labs, etc.). Rarely, certain late assignments may be accepted but will be discounted starting at 20% off of the total point value depending on how many classes have passed since the due date. Such instances will be solely at the instructor's discretion.

- *According to school policy, if a student misses over 10% of any course, they can be dropped from the course. In a 4-unit course, this is the equivalent of 1.75 lectures or lab meetings*

Online Content Delivery & Student Expectations:

- Students who wish to join the online Zoom meeting **shall identify both first and last name**.
- Participants not identified by first and last name will not be admitted to the lecture.
- Participants not shown on the course roster will not be admitted to lectures.
- Participants are expected to have audio capabilities through the duration of all live lectures

Assignments:

- All assignments are to be completed per instructions and due by the beginning of class on the assigned due date. Late assignments will only be accepted without instructor's **prior** approval.
- Assignments shall only be submitted through Filedepot website – **please do not email assignments.**
- Electronic file naming convention: 'Assignment Name – Student Name' i.e. 'Lecture 1 Assignment – Jane Doe'
- Late assignments will receive an automatic **50% reduction** in credit.
- Late assignment will not be accepted if more than 1 week late.
- All assignments shall be done on 8 ½" x 11" paper, or the sheets provided to you by the instructor, unless directed otherwise and submitted electronically.
- Put your name, course number, assignment parameters and due date on the first page.
- Any written reports, essays, or term papers shall be typed as instructed.
- Assignments are the responsibility of each student. Failure to observe these conditions will result in assignment being returned without credit.
- Unless otherwise specified, ALL assignments will be submitted as single PDFs. They may be saved/exported from an application (ArcGIS, C3D, MS Word, MS Excel, etc.). Multiple PDFs must be appended in logical assigned page order and submitted as ONE SINGLE PDF FILE.

Tests and Exams:

- **NO MAKE-UP EXAMS WILL BE GIVEN!**
- **Prior** instructor approval is necessary to reschedule an exam.
- Exams will be given on specific areas covered throughout the semester. Sufficient notice will be given prior to the scheduled exam.
- Exams will be administered in an online format via the course website and available for a specific period, to be determined by the instructor, to allow for flexibility.
- The final exam for this course will be comprehensive and **due no later than 11:59 PM on Monday, May 19th, 2025**, however, this is subject to change.
- The final exam is required. Failure to take this exam will result in a grade of **F** for the course.

SRJC STUDENT WEB READING (required):

It is the student's responsibility to consult the SRJC web-based information listed below -- please do so, they are considered parts of this syllabus.

SRJC Academic Schedules & Calendar to identify all important dates, deadlines and academic policies such as those relating to unexcused absences, adding and dropping classes. Students will follow all directions on exams and assignments sheets. When asked to work independently that means no collaboration *Also, please observe the emergency evacuation signs in each of the classrooms & computer labs...*

Schedule of Classes: <https://classes.santarosa.edu/>

Academic Calendar: <https://admissions.santarosa.edu/academic-calendar/>

SRJC Academics Information: <https://www.santarosa.edu/academics/>

SRJC Affairs and Programs: <https://studentlife.santarosa.edu/student-affairs-engagement-programs>

SRJC Disability Resources: <https://drd.santarosa.edu/>

SRJC Rights and Responsibilities: <https://rightsresponsibilities.santarosa.edu/>

(Please take careful note of the section on Academic Integrity, cheating of any type will not be tolerated)

Grading:

- Your grade will be based on the total number of points you accumulate with respect to the total number of "top score" points. Assignments and Exams are weighted accordingly:

$$\begin{aligned}
 &\text{Total ASSIGNMENT/SKILL DEMONSTRATION points multiplied by 55\%} \\
 &+ \text{Total Attendance/Participation points multiplied by 10\%} \\
 &+ \text{Total EXAM points multiplied by 35\%} \\
 &\quad \textbf{Total Points Accumulated}
 \end{aligned}$$

- Final grades are calculated as noted above and based on the following percentages of the total points accumulated by the top score in each category.

| | |
|-------------------|---|
| 90% to 100% | A |
| 80% to 89% | B |
| 70% to 79% | C |
| 60% to 69% | D |
| Below 60% | F |

- An incomplete grade "I" will only be given as prescribed by college rules and regulations. **Prior** approval of the instructor is required.

CEST 64 – Public Works Inspection COURSE OUTLINE SPRING 2025 **REV 0**

The objective of this outline is to assist you in planning your schedule. Every effort will be made to stay on schedule. However, the instructor may find it necessary to make appropriate changes to meet the learning objectives for the entire class. You should be familiar with the reading assignment **prior to the class lecture**. You should allow yourself a minimum of six hours per week to complete the reading and homework assignments. Instructor may change the homework problems listed below. See the Course Syllabus for guidelines and specific information on course objectives, homework, exams, and grading.

There are no problems in the assigned textbooks. Instructor will provide homework assignments online. Where no reading assignment is shown the instructor may provide instructions to access online materials

| Date | Lecture Topic | Reading | Assignment |
|---------|---|---|---|
| 1/15/25 | Lecture 1: Course Intro Public Works Overview | | <ul style="list-style-type: none"> • Student Questionnaire • 07-369704 Plans/Specs, make observation and answers questions Due 1/22/25 |
| 1/22/25 | Lecture 2: Caltrans Overview Bidding and Contract Award | Construction Manual Sections: 1-0, 1-1, 3-0, 3-1, 3-2, 3-3 | Lecture 2 Assignment: SMART Multi-Use Path Worksheet Due 1/29/25 |
| 1/29/25 | Lecture 3: Scope of Work Legal Responsibilities | Construction Manual Sections: 3-4, 3-7, 1-2 | <ul style="list-style-type: none"> • Lecture 3 Assignment: Lecture Worksheet Due 2/5/25 |
| 2/5/25 | Lecture 4: Control of Work | Construction Manual Sections: 3-5, 5-0, 5-1 | <ul style="list-style-type: none"> • Lecture 4 Assignment: Daily Report Due 2/12/24 |
| 2/12/25 | Lecture 5: Control of Materials Sampling and Testing | Construction Manual Sections: 3-6, 6-1, 6-2, 6-3 | <ul style="list-style-type: none"> • No assignment |
| 2/19/25 | Lecture 6: Prosecution and Progress Exam Review | Construction Manual Sections: 3-8 | <ul style="list-style-type: none"> • Study! |
| 2/26/25 | EXAM 1 – NO CLASS MEETING | EXAM ADMINISTERED via Website TBD | <ul style="list-style-type: none"> • No assignment |
| 3/5/25 | Lecture 7: Construction Details (Part 1) -existing facilities, clearing and grubbing, soil stabilization, subbases / bases | Construction Manual Sections: 4-00, 4-11, 4-15, 4-16, 4-19, 4-24, 4-26, 4-27 | <ul style="list-style-type: none"> • Lecture 7 Assignment: Earthwork Due 3/12/25 |
| 3/12/25 | Lecture 8: Construction Details (Part 2) -pavement systems | Construction Manual Sections: 4-37, 4-39, 4-40 | <ul style="list-style-type: none"> • Lecture 8 Assignment: Chip Seal Report Due 3/19/24 |
| 3/19/25 | SPRING BREAK – NO CLASSES | | <ul style="list-style-type: none"> • No assignment |

| | | | |
|----------------|--|---|--|
| 3/26/25 | VIRTUAL or IN PERSON FIELD TRIP - TBD | | • No assignment |
| 4/2/25 | Lecture 9: Construction Details (Part 3) -structures and foundations Exam 2 Review | Construction Manual Sections: 4-47, 4-49, 4-51, 4-52, 4-55 | • Study! |
| 4/9/25 | EXAM 2 – NO CLASS MEETNG | EXAM ADMINISTERED via Website TBD | • No assignment |
| 4/16/25 | Lecture 10: Construction Details (Part 4) -underground utilities, flatwork, signals and lighting | Construction Manual Sections: 4-73, 4-84, 4-82, 4-86 | • No assignment |
| 4/23/25 | Lecture 11: Safety & Traffic Control Environmental Stewardship | Construction Manual Sections: 4-10, 4-12, 4-21, 7-1, 2-2 | • Lecture 11 Assignment: Traffic control plan Due 4/30/25 |
| 4/30/25 | Lecture 12: Quantity Calculations & Payment | Construction Manual Sections: 3-8, 3-9 | • Lecture 12 Assignment: Daily Extra Work Report Due 5/7/25 |
| 5/7/25 | GUEST SPEAKER – TBD | | No assignment |
| 5/14/25 | Lecture 13: Change Orders & Disputes Final Exam Review | Construction Manual Sections: 5-3, 5-4 | • Study! |
| 5/19/25 | FINAL EXAM – NO CLASS MEETING | EXAM ADMINISTERED via Website TBD | |