Contents

I. Biography

Anne Marie Sowder is an Assistant Professor at New York City College of Technology (City Tech) in the Department of Construction Management and Civil Engineering Technology (CMCE). Anne Marie is a builder, researcher, and construction educator with specializations in construction management and urban resilience. She has earned degrees in Building Construction (B.S., University of Florida), Construction Management (M.S., University of Florida) and Sustainable Urban Development (MSc, University of Oxford) and is currently a PhD Candidate in Design Construction and Planning – CM Specialty at the University of Florida, where she is also a Rinker Fellow. She has worked 15 years on a portfolio of Construction Management services including agency interface, client-side management, construction administration, contract writing and award, hiring, project estimating and budgeting, scheduling, team development, and training. Her research interests include construction history, vernacular construction techniques, storm resilient building, and the use of technology to explore these topics.

Prof. Sowder teaches courses in the Construction Management specialization, primarily courses that aren't taught by other full-time faculty. She teaches topics including Construction Management, budgeting, scheduling, project delivery, safety, sustainability, cost control, quality assurance, construction technology, and ethics. Courses for which she is the only full-time faculty instructor include CMCE 1221, CMCE 1224, CMCE 2321, CMCE 2421, and CMCE 4471. In the Construction Management track, she is the only full-time faculty instructor for four required classes taught in the first four semesters and the only full-time instructor teaching two of our senior-level technical electives.

Prof. Sowder stresses student engagement and collaboration in the classroom, with special emphasis on what are sometimes called soft skills or executive skills – team leadership, conflict resolution, effective communication and presentation. Her classroom delivery is consistently well reviewed by students and peers. Her engagement with students includes outreach to high schools as well as graduate programs in an effort to help students to see the construction professions as full of limitless potential. She maintains regular contact with student graduates as part of their ongoing career counseling and to maintain industry ties.

II. Teaching Responsibilities

Prof. Sowder teaches in the Department of Construction Management and Civil Engineering technology (CMCE). One of the college's four original departments in 1947 (then the Structural Technology Department), CMCE has since clarified and expanded its offerings, including degree programs in Construction Management Technology unique in the City University of New York system. The department now offers an ABET-accredited Construction Engineering Technology Bachelor of Technology degree (CET).

CMCE currently offers the following programs:

1. In the Civil Engineering Technology associate degree program (CE AAS), our focus is on the fundamental concepts and technical skills required to create a wide range of career paths in the civil engineering profession. We balance practical knowledge with theory

and encourage a lifetime of learning and leadership. Students are made aware of their ethical, social, and legal responsibilities as practicing professionals in this people serving profession.

2. In the Construction Management associate degree program (CM AAS), we prepare students for success within the professional practice of construction management. This preparation includes an understanding of the design, engineering, business, and technical principles and practices used in the construction industry. As future leaders in the construction industry, students are made aware of their ethical, social, and legal responsibilities as practicing professionals.
3. In the Construction Engineering Technology bachelor degree program CET BTech), students are trained to enter a professional field which requires designing, planning, construction, and management of infrastructure. Construction engineers are a hybrid between civil engineers and construction managers. Coursework focuses on the design as well as the construction management of highways, bridges, airports, railroads, buildings, dams and utilities. This allows our graduates to understand both the design processes as well as the building requirements needed to design and build today's infrastructure, particularly in New York City.
4. Students in Construction Management Certificate are usually students from other programs or working professionals who are seeking a credential that reflects education in Construction Management.

Prof. Sowder has taught classes through all delivery methods including in-person, hybrid, and online. She has received training and certification in hybrid instruction.

A. Courses Taught

Prof. Sowder has taught the following courses:

1. **CMCE 1220 Construction Management I** (2 credits): Introduction to the basic practice of construction management in the erection and construction of a building project. The course is designed to give the student a thorough understanding of the construction process and the elements that comprise this process. Discussion of the design and construction process including types of contracts, zoning and building codes. Project jobsite safety is addressed as part of a ten (10) hour OSHA certification training course. Students must pass an examination administered by OSHA officials in order to obtain a certification card.
    1. 2015 Spring
    2. 2014 Fall (two sections)
    3. 2014 Spring
2. **CMCE 1221 Construction Management I** (3 credits): A thorough overview of the construction process from the planning phase to successful completion. Topics include formal and informal communication formats, the design and construction process, types of contracts, responsibilities of project participants, contract documents, schedules, payments, building codes, and safety. Formal and informal communication are addressed through a series of spoken and written assignments culminating in a written report. Project safety is addressed in a required 10-hour OSHA certification training course. Upon successful (exam) completion, the student earns a certification card from OSHA.

1. 2020 Spring
2. 2019 Fall
3. 2016 Spring

3. **CMCE 1224 Materials & Methods II** (2 credits): This course covers the fundamentals of the major categories of any building construction project: foundation & substructure, the superstructure (structural frame); the building enclosure and interior work; and the site work. Currently used methods and materials of construction are emphasized. Cast-in-place and precast concrete frame construction; masonry construction; steel frame construction; curtain wall construction systems; interior finishes as well as an overview of Sustainable Construction and Green Building Design including the LEED – Green Building Rating System are covered
    1. 2014 Spring (two sections)

4. **CMCE 2320 Construction Management II** (2 credits): The second in a three-course CM sequence, this course is designed to give the student a thorough understanding of the construction process and the issues concerning resident engineers, inspectors and project managers. This course addresses the responsibility and authority of the owner, engineer, and inspector. Design-build contracts (public and private); record keeping; digital imaging; CPM guide specs; measurement and payment, claims and disputes, liquidated damages are covered. Proper conduct of field personnel is stressed
    1. 2015 Spring
    2. 2014 Fall (two sections)
    3. 2014 Spring (two sections)

5. **CMCE 2321 Construction Management II** (3 credits): An introduction to advanced planning, management techniques and computer applications. Topics covered include an expanded knowledge of the pre-construction and construction processes; a further understanding of construction and labor law; risk allocation and safety; accounting principles; material testing and quality control techniques; and changes, claims and disputes as well as discussion of the role of the project manager and project superintendent during the entire process. Students also study the LEED rating system and take a LEED certification exam at the end of this course (if qualified).
    1. 2021 Spring
    2. 2020 Fall
    3. 2017 Fall
    4. 2016 Fall (two sections)
    5. 2016 Spring

6. **CMCE 2420 Construction Management III** (2 credits): The third course in the CM sequence. The students learn current practices in preparing a project schedule, including bar charts and the Critical Path Method (CPM). Industry standard computer scheduling software will be used. The use of value engineering (VE) workshop to reduce construction costs will be studied. Construction safety and tasks required for project closeout are covered
    1. 2015 Spring

7. **CMCE 2421 Construction Management III** (3 credits): Builds on the concepts developed in Construction Management II to give a thorough understanding of the current practices for planning, documenting, managing, and analyzing construction projects. Students use industry standard computer scheduling software in preparing a Critical Path Method (CPM) project schedule and study the use of value engineering (VE) workshop to reduce construction costs.
    1. 2021 Spring

2. 2020 Fall
3. 2017 Spring
4. 2016 Fall

8. **CMCE 2457 Construction Techniques in Civil Engineering** (2 credits): Construction project management and heavy construction techniques, including buildings and civil engineering type structures (highways & bridges). Topics include construction management, professional ethics, contracts, and CPM scheduling. Sustainable Construction and the LEED Green Building Rating System are also introduced. The fundamentals of any construction project are covered in detail, including concrete, steel, masonry, and wood construction methods. The New York City Building and Zoning Codes and A.A.S.H.T.O are references. Each student is required to submit a research paper at the end of the semester and must select a topic that is related to the construction of a reinforced concrete building, structural steel building or a civil engineering type structure.
    1. 2016 Summer

9. **CMCE 4401 Special Topics Professional Practice & Ethics** (pilot, now CMCE 4403) (3 credits): Professional Practice and Ethics is an elective focused on improving student understanding of professional practices and ethical concepts in the interrelations between the Architecture, Engineering, and Construction professions. A strong emphasis will be placed on problem solving, improving presentation skills, and using professional communication to achieve project goals. Students will be expected to write, speak, and present weekly, with regular formal presentations throughout the semester.
    1. 2019 Fall

10. **CMCE 4471 Quality Assurance** (3 credits): Topics include: the established quality elements of management responsibility; documented quality management system; design control; document control; purchasing; product identification and traceability; process control; inspection and testing; inspection, measuring, and test equipment; inspection and test status; nonconformance; corrective action; quality records; quality audits and training, documented in ISO 9000, 9001: 2000 FTA QA/QC Guidelines.
    1. 2020 Fall

11. **CMCE 4800 Senior Capstone** (3 credits, 5 hours): Integrates diverse elements of the curriculum and develops student competence using both technical and non-technical skills to solve problems. Students work in teams to solve a comprehensive problem from concept to final design, preparation of construction documents and cost estimates. Non-technical skills such as presentation skills, teamwork, accountability and ethics are emphasized. This course should be taken in the final semester of the Bachelor of Technology Degree.
    1. 2021 Spring
    2. 2020 Spring
    3. 2019 Fall
    4. 2019 Spring (two sections)
    5. 2018 Fall
    6. 2018 Spring (two sections)
    7. 2017 Fall
    8. 2017 Spring
    9. 2016 Fall

B. Course Coordination

Prof. Sowder serves or has served as Course Coordinator for the following courses:

1. CMCE 1220 Construction Management I (2014-2015)
2. CMCE 1221 Construction Management I (2016-present)
3. CMCE 2320 Construction Management II (2014-2015)
4. CMCE 2321 Construction Management II (2016-present)
5. CMCE 2420 Construction Management III (2014-2015)
6. CMCE 2421 Construction Management III (2016-present)
7. CMCE 2457 Construction Techniques in Civil Engineering (2016-present)
8. CMCE 3520 Construction Management for Civil Engineering Technologists (2016-present)
9. CMCE 4800 Senior Capstone (2016-present)

As Course Coordinator, she is responsible for Coordinating with adjuncts for each course to ensure uniformity across the sections, continuously working through the Department's curriculum and materials to ensure continuous improvement, and striving towards alignment with other similar programs and the unique needs of New York City-area professionals.

III. Teaching Philosophy

Educators in New York City are uniquely placed to use their surroundings as a teaching tool. Students are most successful when they can make connections between learned material and what they already know; by seeing the way the world around them works through the lens of instruction. Further, contextualizing learning through shared experience helps educators see their blind spots and map concepts more effectively to students who are active participants in the classroom experience. Sharing a classroom with traditional students fresh from high school and seasoned workers with their own experiences allows for great discussions and two-way learning. I thrive in that environment.

My teaching philosophy can be summarized through the following goals:

BUILDING CONFIDENCE. I encourage students to draw confidently from their experiences in work and life to make connections to class content. Wide ranging activities provide plenty of low impact opportunities to practice and engage. Comprehensive projects emulate high-stakes performance environments.

BUILDING SKILLS. Analysis, coordination, cooperation, problem-solving, and flexible thinking - all are skills that students can hone while gaining mastery of the management, budgeting, scheduling, technology literacy, and trade skills, specific to our industry.

BUILDING CONTEXT. I work with the resources available to us in New York City - the buildings, professionals, projects, communities, and cultural institutions. Students observe creative works, professional best practices, and ethical behaviors modeled in the world around them.

IV. Teaching Methodologies

The following teaching methodologies are employed in Prof. Sowder's courses:

Course Survey and Student Introductions – Students introduce themselves and their backgrounds as well as filling out an introductory survey that details what they hope to get out of the class and what jobs they are working towards in the next five years. I take notes and use that information to guide discussions and to make personal connections with students.

Class agenda – At the beginning of each class I go through the agenda for the lesson, referring back to the course syllabus. We discuss what has been completed so far and what is outstanding for the class. Students are often relieved to be able to ask questions about assignment submission without receiving judgment or negative feedback.

Questions as RFIS (Request for Information) – When I receive questions from students that may be relevant to the class as a whole, I post the question and answer on Blackboard in the style of an RFI, an industry-standard document for conveying information. This gets the word out to students and lets them practice with industry tools.

Scaffolding – I have updated my teaching sequence to include low-stakes introductions to pieces of concepts that build into more complex concepts. Students are now performing much better on tasks and give positive feedback on this process.

(Secret) Learning Objectives – I often use games, brief writing exercises, and discussion of current events to give students practice doing one thing while they think they are doing another. Students may be practicing writing professional correspondence unknowingly while they think they are learning about cost control or site management.

Concept mapping – I have created numerous concept maps and explainers. These are one page heavily visual documents that show students where a topic exists in the universe of information, how different industry terms are used, and how to analyze new material.

Class discussion – During discussion time, all students are encouraged to discuss their work experiences and ask questions. Conversations are lively, even in online sessions, and allow students to hear feedback on a topic from more than one perspective.

Iterative assignments – I regularly use assignments that are revisions of previous assignments or are compiled in a new way. This gives students opportunities to try again and improve certain skill sets.

Grading feedback – I often begin classes with samples of student assignment submissions. Students are encouraged to call out with what they think the sample works have done correctly or incorrectly. This gives students a chance to see how others are doing in class as well as to practice evaluating the work of others.

In-class assignments – Low stakes assignments are given every day in class to give students the opportunity to practice skills and receive feedback. The assignments also provide defacto participation points.

V. Course Syllabi and Assignments

A. Course Syllabi

All course syllabi include the course number, course name, meeting time, meeting room, professor, professor email address and office hours, course description, prerequisites, references, textbook, course learning outcomes, grading policy, technology expectations, academic integrity policy, class policies, and class schedule. *See appendix for examples of syllabi for CMCE 1221*

B. Course Syllabi for Hybrid and Online Courses

Course syllabi for Hybrid and Online Sections include additional sections including a description of the online component, minimum requirements for blackboard proficiency, technology resources, and tools.

See appendix for examples of syllabi for CMCE 2421 and CMCE 4800

C. Sample Assignment

Assignments include learning objectives, requirements, and specification on format.

See appendix for examples of assignments for CMCE 2421 and CMCE 4800

VI. Teaching Effectiveness

A. Peer Assessment of Teaching

The paper copies of Peer Assessment of Teaching reports have been difficult to access, but the following table provides an overview of teaching that has been consistently rated as "Excellent" across many different classes, types of classes, evaluators, and both in-person and online deliveries.

Semester	Evaluator	Course	Rating
Spring 2015	Tony Cioffi	CMCE 2320	Excellent
Fall 2019	Melanie Villatoro	CMCE 4401	Excellent
Fall 2020	Hamid Norouzi	CMCE 4471	Excellent
2021 Spring	Melanie Villatoro	CMCE 4800	Excellent

B. Student Assessment of Teaching

Feedback from SET scores and student written evaluations can be found below.

Course	2014 Sp	2014 Fa	2015 Sp	2016 Sp	2016 Fa	2017 Sp	2017 Fa	2018 Sp	2019 Fa	2020 Fa	Avg. by Course
CMCE 1220	4.60	4.41	4.54	-	-	-	-	-	-	-	**4.41**
	-	4.07	-	-	-	-	-	-	-	-	
CMCE 1221	-	-	-	4.85	-	-	-	-	4.72	-	**4.79**
CMCE 1224	4.50	-	-	-	-	-	-	-	-	-	**4.50**
CMCE 2320	4.35	4.52	4.72	-	-	-	-	-	-	-	**4.54**
	4.55	4.56	-	-	-	-	-	-	-	-	
CMCE 2321	-	-	-	4.49	4.79	-	4.70	-	-	4.62	**4.66**
	-	-	-	-	4.70	-	-	-	-	-	
CMCE 2420	-	-	4.74	-	-	-	-	-	-	-	**4.74**
CMCE 2421	-	-	-	-	4.84	4.81	-	-	-	4.81	**4.82**
CMCE 4401	-	-	-	-	-	-	-	-	3.87	-	**3.87**
CMCE 4471	-	-	-	-	-	-	-	-	-	4.86	**4.86**
CMCE 4800	-	-	-	-	-	4.88	4.21	4.88	3.30	-	**4.44**
	-	-	-	-	-	-	-	4.92	-	-	
Avg. by Semester	**4.50**	**4.39**	**4.67**	**4.67**	**4.78**	**4.85**	**4.46**	**4.90**	**3.96**	**4.76**	**4.59**

* 2015 Fa on FMLA leave

** 2018 Fa no observations were collected during co-taught classes shared with Prof. Lallani

*** 2019 Sp on leave with permission for PhD studies

Some samples of student feedback from evaluations:

CMCE 2421 2017 Spring

Q01 - Extremely knowledgeable, well experience on scheduling.

Q05 - Great discussions.

Q11 - Learned a lot.

CMCE 4800 2017 Spring
Q01 - Amazing!
Q02 - Felt like I was valued.
Q03 - Always gave extra help.
Q04 - Yes! Feedback was amazing.
Q05 - Students were greatly encouraged.
Q06 - Always professional.
Q07 - Always gave help when needed.
Q08 - Always! Very professional.
Q09 - Yes!
Q10 - Yes!
Q11 - Amazing! Allowed students to show what they've learned.

CMCE 1221 2019 Fall
Q07 - Clear on everything.
Q09 - Amazing professor.

CMCE 4471 2020 Fall
She's a pretty cool professor and she makes the class interesting. I'd definitely take another class with her.
Professor Sowder is a very effective professor. She is fair, holds the interest of the class by asking questions often to engage the students. She is the best professor I have head thus far at City Tech.
The teaching style was effective.

CMCE 2421 2020 Fall
I used to have her as professor also during Fall 2019 and I can say that the online courses didn't effect at all the way she organize the class. She is always on top when it comes to have the students attention during all the session even though it is online. I learned too much things in this class that I really needed for my profession and all thanks to her. I can just say that she is another level of professors. She is a full package. I love her.
Although a tough year, and learning online was difficult in general, Professor Sowder did an excellent job going through the material on this class!
The world needs more people like professor Sowder!
great professor!
Great professor. Gives good feedback and teaches the material in a fun and effective way. Will defiantly take her again!

C. Messages from Alumni and Students

Prof. Sowder has received thanks and feedback from students and alumni through various channels.

1. “Thanks for a great semester professor. When i am not drowning in schoolwork I will be sending you an email to ask for some advice and recommendations about the future. I am finally in my

last stages of school and a bit confused about how to move forward from here, so I thought I would reach out to you to see what thoughts/advise you could offer. First I gotta finish the semester though. I think you should teach a seminar to the other professors on how to conduct an online class, this was by far the best one I had." – student, CMCE 4471 Quality Assurance, BlackBoard chat

2. "This has been my second time taking a class where you were the Professor, and I actually am really happy to have had you for both of the classes. The way you teach and care for us students I believe is really nice. You deliver the topics amazing. One topic that I enjoyed in this class was the topic on Meetings and Negotiations, I really enjoyed learning that topic because that's something I want to do. There need to be more Professors in the construction department like you." – student, CMCE 2321, informal class feedback on topics covered
3. "I just wanted to thank you for all the hard work you put into the AGC club, and Construction Management Department this year. Thank you for your dedication. If it was not for your persistence, the department wouldn't have benefited from a great networking event like the mentoring dinner at the River Cafe, or be able to participate at this year's ASC student competition. Your persistent commitment speaks volumes, because events like this allows me and student like me to step foot inside the construction industry." – student, AGC member, formal thank you letter
4. "She's a great professor. You have to show up to her classes and actually participate. Also she give an assignment almost every class based on what was just taught, so if you space out, you may be confused on what to do! If you're ready to work a little in class, and do her HW, take her. No complaints about her personality, she's very helpful." – student, CMCE 2421 Construction Management III, RateMyProfessor.com
5. "Despite the class being online, Professor Sowder did a great job keeping the students engaged by consistently asking for questions and comments throughout the lectures. Not only that, but a great thing for me was making the lectures interactive by asking students questions to answer based on the lectures and any pictures we saw as well ask asking for our general thoughts. I also like how most assignments were in class instead of for homework since I don't have much time outside of class to complete homework. To me personally, everything was clear from the start of the semester and if anything was unclear, Professor Sowder always did her best to clear things up for the students. Flexibility for assignments, although not required by the professor, was very much appreciated since I have been very busy this semester keeping up with my own life due to the pandemic as well as my family." – student, CMCE 2321, informal class feedback on topics covered
6. "I want to thank you for allowing me to be a part of such a prestigious opportunity that further enhanced my research skills and knowledge in the subject matter. I am honored to have received the award for the best STEM research poster. I could not have done it without the proper guidance, mentorship, and feedback from participating facilities and staff. I look forward to participating in similar exciting opportunities in the future." – Aalaa Mohammed, ESP Researcher (Mentee), Winner Best STEM Poster, 33rd Semi-Annual Dr. Janet Liou-Mark Honors and Undergraduate Research Scholars Poster Presentation, email thank you

7. For more evidence of alumni engagement, please refer to the CMCE Career page, created and maintained by Prof. Sowder: CMCE Career – Career Information and Opportunities for Construction Management and Civil Engineering Students and Graduates (cuny.edu)

D. Awards and Recognition

As evidence of her ongoing contributions to teaching, learning, and our industry, Pro. Sowder has received the following awards and recognitions:

1. **Rinker Fellowship**. Rinker Scholar. University of Florida, Gainesville, FL. Recipient. 2018 – 2022 Fellowship award covers tuition for PhD studies and $30,000 stipend for related research.
2. **SGA Awards, AGC Student Chapter**. City Tech, Brooklyn, NY. Club Recipient (Chapter Advisor). May 25, 2018 Club Award from SGA, a tribute to the leadership and service of the Apollo Slate, honoring Student Government members, clubs, and those who have helped students get the job done.
3. **AGC Student Chapter Award of Recognition for Faculty Advisor**. Received at the AEC Industry Mentor Dinner hosted by CMCE and AGC. May 15, 2018 - Award of Recognition.
4. **Awarded New Chapter of Sigma Lambda Chi, the International Construction Honor Society**. January 2018- New Chapter awarded based on application, department credentials, participation in ASC (Associated School of Construction – I am the Faculty Advisor for this work), and ABET credentials.
5. **Recipient of Design-Build Educator Workshop Scholarship**. August 7-10, 2017. Hosted by the Design Build Institute of America (DBIA) and the University of Denver. Scholarship covered travel, hotel, and meals as well as one week of training.
6. **Named National Chair representing New York, United States Green Building Council** (USBGC) Green Schools. Spring 2014.

E. Student Research and Publications

As evidence of her ongoing contributions to student mentoring, output from undergraduate student researchers and honors students can be found below.

CUNY Research Scholars Faculty Mentor: Supervised undergraduate research in the CRSP program.

1. “Selection of Materials and Techniques for Construction Under Extreme Heat Conditions.” Harold Saquicela, Participant in the 25th Semi-Annual Honors and Research Scholars Poster Presentation (2016)

Faculty Mentor, Emerging Scholars Program: The Emerging Scholars Program provides a $500 stipend for a student researcher assisting you with your research or other scholarly endeavors. The purpose of the program is to help students develop a close relationship with a faculty member and promote a practical understanding of material learned in courses. As a faculty mentor, responsible for meeting with students on a weekly basis and monitoring their project progress. Assist in Abstract and Final Poster Preparation. Students participate in the Semi Annual Poster Presentation at City Tech.

2. “Benefits of Pre-Construction Analysis: CET Senior Capstone Expands Understanding of an Urban Refuge at GallopNYC Sunrise Stables.” Aalaa Mohamammed, award winner for Best STEM poster at the 33rd Semi-Annual Dr. Janet Liou-Mark Honors and Undergraduate Research Scholars Poster Presentation (2020)

3. “The 1935 Hurricane Houses of Islamorada: A Case of Successful and Rapidly Deployed Post-Disaster Housing.” Kendra Gibbs (2020)
4. “Selection of Materials and Techniques for Construction Under Extreme Heat Conditions.” Harold Saquicela (2016)

Honors in a Regular Course Faculty Mentor: Developed and delivered honors coursework in regular courses. Information can be found on the City Tech website: 34th Semi-Annual Dr. Janet Liou-Mark Honors and Undergraduate Research Scholars Poster Presentation – Honors Scholars Program (cuny.edu)

5. Honors project CMCE 4800 during the spring 2021 semester: "Building Green Through Material Evaluation and Selection: Case Study in the Bahamas." Ulugbek Abdulkhasanov (2021)
6. Honors project CMCE 2321 during the spring 2021 semester: "Understanding Time, Cost, Quality, and Risk Trade-Off in Construction Projects Through a Review of Literature & Survey Distribution." Aalaa Mohammed (2021)

VII. Teaching Improvement Activities

As evidence of her commitment to excellence in teaching throughout her academic career, Prof. Sowder has participated in the following activities:

Faculty Commons Workshops

1. "Faculty Friday – Research, Writing & Creative Work: Strategies for a Productive Summer" (5/21/21)
2. "NEH Humanities Connections proposal development" (5/14/21)
3. "Faculty Friday – Images, copyright, and "fair use" in the academic setting" (4/30/21)
4. Grant-Writing Workshop #3: Introduction to City Tech’s Office of Sponsored Programs (OSP) (4/23/21)
5. "Faculty Friday – Avoiding Hidden Bias Reflection & Follow-up Discussion" (4/16/21)
6. "Grant-Writing Workshop #1 – The National Endowment for the Humanities " (3/26/21)
7. "The Burn-Out Challenge: Resources for a Year of Pandemic (and beyond)" (3/19/21)
8. "Faculty Friday - Avoiding Hidden Bias & Creating an Inclusive Classroom" (3/12/21)
9. "Faculty Friday - Advisement Refresher " (3/5/21)
10. "Facilitating Effective Group Work & Team Projects" (2/5/21)
11. "Avoiding Plagiarism" (10/18/17)

Faculty Commons Workshop Presenter

12. "Engaging Students in Collaborative Work Using MIRO." Hosted by Faculty Commons as part of Faculty Fridays. (5/7/21)
13. "Your OER and Creative Commons Licensing." Hosted by Writing Accross the Curriculum (WAC). (2017)

NEH Fellow

14. Fellow in the National Endowment for the Humanities “Making Connections: Engaging the Humanities at a College of Technology” program. From Project Director, Geoff Zylstra: "Your participation in this program will enrich the curriculum at the New York City College of Technology and expand our college’s national presence. In the 2014-2015 year we met over a dozen times. These meetings included seminars with external scholars and field trips off campus. I particularly want to thank you for the curriculum development you did in your Construction Management course and the efforts you put into making our meetings enjoyable occasions. Thanks again for the pumpkin pie! It has been a pleasure to work with you this past year." Developed new course material connecting humanities to technical currciula. (2014-2015)

Bridging the Gap Participant

15. Through my participation in Bridging the Gap training, I worked to improve consistency and comprehensiveness of the Construction Management curriculum by ensuring consistent instructional materials (same assignments and exams throughout all sections); improving materials to improve student learning outcomes (more responsive, more legible, more relevant, more engaging, better retention); and developing learning outcomes for the program that are scaffolded to each course. Faculty can now see the learning goals for each course they teach in the CM sequence as well as the overall student learning goals and the learning goals for all other courses in the sequence. (2017)

Integration of ABET Continuous Improvement Plan

16. Integrated continuous improvement recommendations in CMCE offerings as author of CMCE BTech ABET accreditation Self Study Report (2016-2020)

Honors and Research Scholars Poster Presentation Judge

17. Viewed and evaluated student research at the semi-annual college-wide poster presentation (2017)

iTEC Hybrid Blackboard Workshop

18. Online training to prepare courses for online delivery

Bridging the Gap and Metacognition Training Seminars

19. To improve student learning outcomes through development of new learning modules

OER Faculty Fellow

20. Developed and Implemented OER materials in Construction Management courses. CMCE 2321, CMCE 2421, and CMCE 4800. I replaced outdated text with materials developed under my OER Fellowship work (Refer to Section 21 for more details). Online texts are free, contain samples of industry documents as well as video, visuals, and materials from industry experts. (2017-2018)

VIII. Future Teaching Goals

It is my goal to continue to expand and develop coursework for all of our students, with special attention to the needs of the CM and CET track students. We continue to update the courses to better reflect industry needs, ethical responsibilities of professionals, and emerging technology trends.

Goals for the upcoming year:

1. Currently our department is working on a Major Curriculum Change Proposal and I am leading the efforts to develop a realignment of the CM coursework. Anticipated changes include changes to pre-requisites and topics covered to better address industry safety requirements and to better develop student understanding of the construction industry.
2. I am also beginning development of an ID course on the Art and Materiality of Glass, something that I have discussed with Amanda L. Almond, Interdisciplinary Studies Course Coordinator.
3. Once I have completed my PhD I look forward to involving more undergraduate researchers in ongoing projects related to Geo-BIM and project analysis.

Addenda

NEW YORK CITY COLLEGE OF TECHNOLOGY
of the City University of New York

The Department of Construction Management &
Civil Engineering Technology

CMCE 1221 CONSTRUCTION MANAGEMENT I
COURSE SYLLABUS
SPRING 2020

Time Thurs 6:00 – 8:30 pm V425 **Office**
Instructor Anne Marie Sowder amsowder@citytech.cuny.edu **Email**

Classroom Midway 404
Textbook: Construction Project Management, F. E. Gould, 2009, Third Edition Pearson
Materials: You will need lined notebook paper and a blue/black pen at EVERY class.

Course Description

This is the first course in a three course CM sequence. It is designed to give the student a thorough understanding of the construction industry and the construction process from the planning phase through to a successful project completion. Topics covered will include formal and informal communication formats, the design and construction process, types of contracts, bonds and insurance, responsibilities of project participants, contract documents, schedules, payments, building codes, and safety. Formal and informal communication will be addressed through a series of spoken and written assignments culminating in a term project. Project safety will be addressed in a 10 (Ten) hour OSHA certification training course. Upon successful completion, the student will be awarded a certification card from OSHA.

Course Learning Objectives

During the semester, each student is expected to achieve mastery of the following:

1. Industry description and sectors of the construction industry
2. Project participants and responsibilities
3. Organizing and leading the construction project including legal forms of organization
4. Project delivery methods with discussion on risk management and contract types
5. Project chronology: feasibility, financing, design, procurement, construction, & operations.
6. Construction services during design, tasks and responsibilities of the Construction Manager
7. An understanding of codes, plans and specifications as they relate to the process
8. Project jobsite safety.

Program Outcomes:

Upon graduation, each student is expected to demonstrate the ability to do the following:

1. Evaluate the construction process and participants
2. Recognize the importance of building codes, safety, project documentation, and ethics
3. Discuss the role of key players: owners, contractors, architects, engineers, and vendors
4. Compare and contrast the difference between private developers and public agencies
5. Communicate clearly and effectively in both formal and informal documents
6. Address project safety issues and understand OSHA compliance.

Grading		PTS	% (approx.)
Homework	15 x 7	105	22%
Participation	5 x 15	75	15%
Term Project	100 x 1	100	21%
Midterm Exam	100 x 1	100	21%
Final Exam	100 x 1	100	21%
Final Grade		**480**	**100%**

Attendance & Absences Participation, Attendance & Absences

- Class Participation will be graded during each class period through quizzes, assignments, and presentations.
- Quizzes or anything else you hand in will follow the same format as submissions.
- Students arriving more than five minutes after the start of class will be marked late.
- Absences, classes missed entirely, are governed by the attendance policy as outlined in the Student Handbook.
- If you have a problem, please come to my office ASAP to discuss it with me in private.

In addition to real-time class discussion, you are expected to occasionally seek feedback and contribute to the conversations on the class Blackboard site.

- Check the Discussion Board area of our Blackboard site after each class and when deliverables are due. Respond to the discussion questions with solid, thoughtful posts (not just "ok" or "I agree").

Tech Help

It is imperative that you (1) have and use a CityTech email account, and (2) create a BlackBoard account. Significant amounts of course material are hosted on and submitted via Blackboard.

1. You should have access to and be able to use the Chrome, Firefox, Safari, or Internet Explorer browsers. A complete list of versions supported is found here: https://en-us.help.blackboard.com/Learn/Student/Getting_Started/Browser_Support
2. If you do not know your CityTech email login information:
    a. Visit http://mail.citytech.cuny.edu/UserIdLookupA/.
    b. From there, retrieve your login information and log into your account.
3. If you need additional help with your CityTech email, or do not have an account:
    a. contact the CityTech Help Desk at 718-260-4900 OR
    b. Go to the Atrium, First Floor A-114 OR
    c. Email HelpDesk at studenthelpdesk@citytech.cuny.edu
4. For BlackBoard training and support on all tools required to fully participate in the interactive component of the course:
    a. Access the "Beginners Guide to BlackBoard Course Info" training at http://websupport1.citytech.cuny.edu/studentworkshops.html AND/OR
    b. Visit the open student lab in the General Building, sixth floor, room G600 or email them at itec@citytech.cuny.edu for BlackBoard help AND/OR
    c. Call (718) 254-8565 for BlackBoard help
    d. Attend workshops hosted by the student lab

Using Blackboard for Class

Once you have navigated to the CMCE 4800 Blackboard page, you will find the materials needed for the class in the following links:

ANNOUNCEMENTS is the entry point. I will post notices, assignments, and updates so please check these announcements daily on Blackboard and through your City Tech email.

CONTENT > 00 INFORMATION is where you will find information about me (phone, email, office location and so on). Our online classroom is open 24 hours a day, 7 days a week. If you have questions, email me at any time and I'll try to respond within 24 hours. If you want to discuss something with the entire class, please write your message on our Discussion Board.

CONTENT > 01 SYLLABUS is where you'll find all the information that is usually given out on the first day of a course including the course syllabus, grading policies, key dates, and other requirements for the course.

CONTENT > 02 LECTURES & COURSE MATERIALS is where you will find all assigned readings, presentations, references, and information needed for deliverables.

CONTENT > 03 ASSIGNMENTS is where assignments and due dates will be posted.

CONTENT > 05 DISCUSSIONS is where you'll be writing questions and comments and replying to your classmates' questions and comments. When responding to a post or thread, take care to respond in the same post or thread.

Course Resources

The following resources will help you with Construction Management I:

1. City Tech Library. Stop quoting Google and Wikipedia. Access real academic sources.
   - Start here: https://library.citytech.cuny.edu/
2. CM OER. This resource hosts many resources on project management, industry training, and job opportunities. Subscribe to this page.
   - Start here: https://openlab.citytech.cuny.edu/cmcesowder/
3. NYC Department of Buildings. Refer to NYC for your Term Project.
   - Start here: https://www1.nyc.gov/site/buildings

Submissions

- All submissions will be graded for content AND format.
- All written submissions must include your full name, the date, and course number to receive full credit. (Does not apply to email).
- Submissions may be neatly hand written on standard sized lined paper or typed. If submitting multiple pages, they must be stapled. DO NOT include a cover page except for the Term Project.
- All submissions are due at the beginning of class. Submissions turned in more than five minutes after the start of class will be considered late and will be marked off 50%. Submissions turned in after class will not be accepted without a valid excuse.
- Instructions for submission must be followed (whether emailed, turned in in class, etc.)

Exams

- All exams will begin at the start of class time. Many Class Participation activities will also begin at the start of class. Additional time will not be available for late arrivals. Arriving more than 20 minutes after the start of an exam will not be allowed.
- Make up exams will not be given unless the student has a valid reason (emergency, illness) and contacts me by email the day of the exam. If you do not contact me, no makeup will be given and you will receive a Grade of ZERO (0) for the missed Exam. In all cases you should come to my office the first day you return to class.

Term Project

- Students will complete a written Term Project. Refer to the Course Outline for project deadlines.

OSHA

- The OSHA Certification Course requires ten (10) hours of contact time. OSHA training will be held on dates overlapping with scheduled class times. Refer to schedule below.
- Students who have a current OSHA 10 hour or greater certification *and* wish to opt out of this segment must (1) submit a copy of their current OSHA card on Blackboard by Week 5 (2) complete the alternate assignments posted to Blackboard.

Extra Credit

- Extra credit (1 point) is available for catching any written mistake made in distributed documents.
- Extra credit will be made available throughout the course at the discretion of the Professor.

Email

- All email to the Professor must include CMCE 1221 – [Email Subject] in the subject line. Do not expect me to respond to emails that do not follow this rule.
- All email must be professional.
- Include your full name, email address, and school affiliation as a signature.

Phones

- All devices capable of phone or audio must be silenced and put away during class. No answering calls or texts in class.
- Students using phones or audio devices during class will be asked to leave the room.
- No use of phones or devices during exams unless stated otherwise.

Academic Integrity Policy

Students and all other who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. **Accordingly, academic dishonestly is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, or expulsion.**

Course Outline:

Session	Topic	Assignment	Due Date
1 – 1/30	• Introduction to CM I • Communicating Through Project Email	• Read Ch1 • HW01	2/6
2 – 2/6	• The Construction Industry & Project Delivery	• Read Ch2-3, 12 • HW02	2/13
3 – 2/13	• Construction Services During Design, Construction, & On Site	• Read Ch5, 10 • HW03	2/20
4 –2/20	• Project Chronology & Scheduling	• Read Ch7	2/27
5 – 2/27	• Estimates, Bids, Requests for Proposals		
6 – 3/5	• Award & Contracts		
7 – 3/12	**MIDTERM EXAM**		
8 – 3/19	• Billing & Progress Payments (or OSHA)	• HW04	3/26
9 – 3/26	• Safety & Responsible Management	• HW05	4/2
	MIDTERM GRADES POSTED – 3/26		
10 – 4/2	• Insurance & EMT, Bonds	• Read Ch14	4/23
	SPRING BREAK 4/8 – 4/16		
11 – 4/23	• Final Exam Review	• Term Project	4/30
12 –4/30	• **OSHA 10 Training** | 6:00 – 9:30 pm • 186 Jay St, Voorhees 401A		
13 – 5/7	• **OSHA 10 Training** | 6:00 – 9:30 pm • 186 Jay St, Voorhees 401A		
14 – 5/14	• **OSHA 10 Training** | 6:00 – 9:30 pm • 186 Jay St, Voorhees 401A		
15 – 5/21	**FINAL EXAM**		

OSHA 10 Schedule & Makeup

The final OSHA Schedule will be verified and posted to Blackboard.

- OSHA Makeup assignments are described below and posted to Blackboard.

OSHA Makeup Assignment 01 (out of 2)

BD+C material

If you have your OSHA 10 or higher card, submitted it via Blackboard, AND have opted out of taking the OSHA 10 class , complete this assignment.

If you are taking the OSHA 10 courses but have missed a session, complete this assignment.

If you are taking the OSHA 10 classes, you do not need to complete this assignment.

You will need to start a free BD+C account to complete this coursework. Once open, you will have access to many AEC industry training materials. All students are encouraged to open an account.

OSHA Makeup Assignment 02 (out of 2)

Gould Chapter 14 – Construction Health and Safety

If you have your OSHA 10 or higher card, submitted it via Blackboard, AND have opted out of taking the OSHA 10 class , complete this assignment.

If you are taking the OSHA 10 courses but have missed a session, complete this assignment.

If you are taking the OSHA 10 classes, you do not need to complete this assignment.

\

CMCE 1221 Construction Management I Intro Survey

Name (Last, First): _____
Preferred Name: _____
E Mail Address: _____
Phone Number: _____

What degree do you expect to obtain? _____

Do you work? No Yes: Full Time Part Time
Have you worked in the construction industry? No Yes: Where? _____
What is the highest job title you have held in the industry? _____
What job do you expect to have in five years? _____
What do you hope to get out of this class? _____
_____
_____
_____

What is your favorite blog or online news source? _____

Are you able to attend the OSHA training as scheduled? (circle) Y / N

Student Responsibilities

1. Students are responsible for attending all classes, submitting all assignments, and contacting the Professor by email or in person as soon as possible to address any problems. Students are responsible for following up on all questions or issues.
2. Students are responsible for reading material before class.
3. If absent, students are responsible for obtaining the missed notes and assignments from their classmates. No extensions will be given for assignments given while a student was absent. Class slides, when used, may not be distributed.
4. Students should be prepared to participate in class.
5. Students are responsible for abiding by the policies above.
6. Students are responsible for keeping track of their syllabus.

Course Agreement

I have received the course syllabus. We reviewed the policies and student requirements in class. I understand my responsibilities and I agree to abide by this syllabus.

Student Signature: _____

Date: _____

NEW YORK CITY COLLEGE OF TECHNOLOGY
of the City University of New York

The Department of Construction Management &
Civil Engineering Technology

CMCE 2421 CONSTRUCTION MANAGEMENT III

SYNCHRONOUS | OL50 (34901)
COURSE SYLLABUS
SPRING 2021 | FULLY ONLINE

Time	Mon 6:00 – 8:30 pm | OL50	online only	**Office**
Instructor	Prof. Anne Marie Sowder	amsowder@citytech.cuny.edu	**Email**

Class location Online only. Refer to Course Session Schedule.
Online Class dates: Refer to Course Session Schedule.
Online Office Hours: Mon 1:00 - 2:30 Zoom(details below)
Textbook N/A. Refer to Blackboard & Instructor notes.
Pre-requisite: CMCE 2321

3 Class hours, 3 credits

Course Description

Builds on the concepts developed in Construction Management II to give a thorough understanding of the current practices for planning, documenting, managing, and analyzing construction projects. Students use industry standard computer scheduling software in preparing a Critical Path Method (CPM) project schedule and study the use of value engineering (VE) workshop to reduce construction costs.

Program Criteria

ABET, Inc. is the nationally recognized accrediting body for engineering technology programs. The CMCE department has adopted the most current ABET Program Criteria. Graduates of baccalaureate degree programs typically specify project methods and materials, perform cost estimates and analyses, and manage construction activities. The CMCE 2421 curriculum provides instruction in the following areas:

- Utilization of techniques that are appropriate to administer and evaluate construction contracts, documents, and codes (Criterion a);
- Estimation of costs, estimation of quantities, and evaluation of materials for construction projects (Criterion b);
- Demonstrate utilization of measuring methods, hardware, and software that are appropriate for field, laboratory, and office processes related to construction (Criterion c);
- Production and utilization of documents related to design, construction, and operations (Criterion e);
- Selection of appropriate construction materials and practices (Criterion g);
- Application of appropriate principles of construction management, law, and ethics (Criterion h);
- Performance of standard analysis and design in at least one sub-discipline related to construction engineering (Criterion i).

Student Outcomes

The CMCE department has adopted the most current ABET student outcomes criteria. Student performance in this course will be assessed based on the following learned capabilities:

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline (Criterion 1);
- An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline (Criterion 2);
- An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature (Criterion 3);

Additionally, students should be able to do the following by the end of the semester:

- **Understand** planning for safe work sites, including site logistics, management, and record keeping.
- Identify the key elements of construction project planning.
- Read a site logistics plan and produce its components.
- Read and develop a simple two week look ahead schedule.
- Read and develop a simple product submission schedule, including submittals, approvals, fabrication and lead time, and delivery.
- Read a Gantt Chart Schedule for item sequence, duration, and interrelationship.
- Understand schedule logic and predecessor-successor relationships (including Start-Start, Finish-Finish, Start-Finish, and Finish-Start).
- Understand the Critical Path Method.
- Read schedules in other formats, including 3D, 4D, and map layout.
- Use Suretrak or similar software to produce a simple (30-50 item) schedule for a building construction project.
- Understand the sequencing of building construction projects, from foundations to finishes.
- Cooperate with a team to produce project deliverable in a professional and timely manner**.**

General Education Learning Outcomes

The pedagogical strategies applied in lecture will encourage the development of the following:

1. Knowledge by engaging in inquiry-based learning;
2. Inquiry/analysis skills by employing both quantitative and qualitative analysis to describe and solve problems;
3. Understand and navigate systems (Gen Ed).
4. 4. Discern consequences of decisions and actions (Gen Ed).

Grading

Work Type	#	x	Point value	Total Points
In Class Assignments	12	x	10	120
HW Assignments	4	x	25	100
Labs	3	x	50	150
Midterm Exam	1	x	100	100
Final Exam	1	x	100	100
Final Grade				**570**

Points are unweighted. The (total number of points you earn) / (total available points) will determine your final grade.

Refer to the Course Session Schedule for further details on assignment timing and submission.
Refer to the Sample Assignment & Grading Rubric section for information about assignment types and grading.

- Assignments turned in more than five minutes after the deadline will be considered late and will be marked off 50%.
- Make up extensions will not be given unless the student has a valid reason (emergency, illness) and contacts faculty by email the day of the class. If you do not contact me, no make up will be given and you will receive a Grade of ZERO (0).

Refer to the Department Standards for submission formatting information.

Extra Credit

- Extra credit (1 point) is available for catching any written mistake made in distributed documents. Bring your extra credit to office hours.
- Extra credit will be made available throughout the course at the discretion of the Professor.

Email

- All email to the Professor **must start with the subject line CMCE 2421 – [Email Subject].** Do not expect a response to emails that do not follow this rule. Typically emails generated from Blackboard do not meet this requirement.
- Include your full name as a signature and title block as shown in Department Standards.

Attendance & Participation

Attendance and participation is required for this synchronous class. Attendance will be verified by Blackboard login during class time. For your reference, student Blackboard login can be viewed by faculty via the Performance Dashboard

- Absences, classes missed entirely, are governed by the attendance policy as outlined in the Student Handbook.

In Class Assignments will be due by the end of class (or earlier, as required by your instructor). These may consist of writing, quizzes, short presentations or discussions, or contributions to the Discussion Board.

Tech Help

Information regarding City Tech's **Device Loan Program**
A link to **Virtual City Tech**, a hub of resources to assist students created by CIS

When participating in virtual learning courses, it is vital to consider the technology needed in order to have a successful course. We recommend that you meet the technical requirements below.

- A computer (desktop/laptop) or mobile device (tablet). If you need to borrow a device, **click here**.
- Speakers/headphones/earbuds for listening to audio or videos presented in courses.
- Webcam for interacting in course activities that require video feedback from students.
- High speed internet access

It is imperative that you (1) have and use a CityTech email account, and (2) create a BlackBoard account. Significant amounts of course material are hosted on and submitted via Blackboard.

1. You should have access to and be able to use the Chrome, Firefox, Safari, or Internet Explorer browsers.
2. If you do not know your CityTech email login information:
    a. Visit http://cis.citytech.cuny.edu/Student/it_student_findemail.aspx
    b. From there, retrieve your login information and log into your account.
3. If you need additional help with your CityTech email, or do not have an account:
    a. contact the CityTech Help Desk at 718-260-4900 OR
    b. Email HelpDesk at studenthelpdesk@citytech.cuny.edu
4. For BlackBoard training and support on all tools required to fully participate in the interactive component of the course:
    a. Access the "Beginners Guide to BlackBoard Course Info" training at http://websupport1.citytech.cuny.edu/studentworkshops.html AND/OR
    b. Email the open student lab at itec@citytech.cuny.edu for BlackBoard help AND/OR
    c. Call (718) 254-8565 for BlackBoard help
    d. Visit their website: http://websupport1.citytech.cuny.edu/studentbb.html.

Using Blackboard for Class

Once you have navigated to the CMCE 2421 Blackboard page, you will find the materials needed for the class in the following links:

ANNOUNCEMENTS is the entry point. I will post notices, assignments, and updates so please check these announcements daily on Blackboard and through your City Tech email.

CONTENT > 00 INFORMATION is where you will find information about me (email, office hours and so on). Our online classroom is open 24 hours a day, 7 days a week. If you have questions, email me at any time and I'll try to respond within 24 hours. If your question pertains to the entire class, I will share the response via Announcements.

CONTENT > 01 SYLLABUS is where you'll find all the information that is usually given out on the first day of a course including the course syllabus, grading policies, key dates, and other requirements for the course.

CONTENT > 02 LECTURES & COURSE MATERIALS is where you will find all assigned readings, presentations, references, and information needed for deliverables.

CONTENT > 03 ASSIGNMENTS is where assignments and due dates will be posted.

CONTENT > 04 DISCUSSIONS or the Discussions tab is where you'll be writing questions and comments and replying to your classmates' questions and comments. When responding to a post or thread, take care to respond in the same post or thread.

CONTENT > 05 EXAMS is where exams will be posted.

COLLABORATE ULTRA > COURSE SESSIONS 02-15 is where you will meet and login for all class sessions after the first week. Refer to Course Session Schedule.

ZOOM is where office hours will be held. Link.
Meeting ID: 860 8146 8290; Passcode: 766790

Course Resources

The following resources will help you with class:

1. City Tech Library. Stop quoting Google and Wikipedia. Access real academic sources. Start here: https://library.citytech.cuny.edu/
2. CM OER. This resource hosts many resources on project management and presentation. Subscribe to this page: https://openlab.citytech.cuny.edu/cmcesowder/
3. Oracle Academy. Create your student membership for access to Primavera. Create your member account and link to "**City University Of New York New York City Technical College**." Start here: https://academy.oracle.com/en/membership-join-oracle-academy.html
4. NYC Department of Buildings: https://www1.nyc.gov/site/buildings
5. NYC Open Data. GIS and information for mapping: https://opendata.cityofnewyork.us/
5. Autodesk Academy. Start a free student account to access many professional, step-by-step video tutorials on using Revit and other Autodesk products. Start here: https://academy.autodesk.com/explore-and-learn

Academic Integrity Policy

Students and all other who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity.

Accordingly, **academic dishonesty is prohibited** in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, or expulsion.

Course Session Schedule

Session	Meeting location / format	Topic	Deliverables
1 – 2/1	BB Collaborate	• Introduction to Construction Management III • Planning for Construction.	• InClass01
2 – 2/8	BB Collaborate	Planning for Construction Cont'd	• InClass02 • Complete after class: HW01
3 – 2/22	BB Collaborate	• Planning for Construction Cont'd • Site Logistics Planning	• InClass03 • Complete after class: HW02
4 – 3/1	BB Collaborate	Reading & Understanding Schedules	• InClass04 • Complete after class: LAB01
5 – 3/8	BB Collaborate	Fundamentals of CPM Construction Scheduling	• InClass05
		MIDTERM GRADES POSTED – 3/11	
6 – 3/15	BB Collaborate	MIDTERM EXAM	• Midterm • Complete after class: HW03
7 – 3/22	BB Collaborate	Fundamentals of CPM Construction Scheduling, cont.	• InClass06
		SPRING BREAK	
8 – 4/5	BB Collaborate	Fundamentals of CPM Construction Scheduling, cont.	• InClass07
+ 9 – 4/12	BB Collaborate	Planning & Scheduling Technology	• InClass08 • Complete after class: LAB02
10 – 4/19	BB Collaborate	Primavera P6	• InClass09 • Complete after class: HW04
11 – 4/26	BB Collaborate	Primavera P6	• InClass10
12 – 5/3	BB Collaborate	Primavera P6	• InClass11 • Complete after class: LAB03
13 – 5/10	BB Collaborate	Primavera P6	• InClass12
14 – 5/17	BB Collaborate	Planning & Scheduling Technology	
15 – 5/24	BB Collaborate	FINAL EXAM	• Final

Sample Assignment & Grading Rubric

Sample Assignment: LAB02

50points.

Assignment:

Part 1 (25 points) Schedule

Schedule:
Submit Part 1 as a single PDF. Size to 11x17. No cover page but include your full names, class information, date, and project title in the title block.

Create a schedule building a fence, 5 miles long, any material, any location. Assume no local signoffs are required. Your schedule must include:

- 30 construction activities, 6 milestones.
- 3 section headings: material approval/procurement, construction, closeout.
- All dates, labels.

The total schedule duration will be determined by your group based on materials and installation.

Part 2 (25 points) Drawings

Drawings:
Submit Part 2 as a single PDF. Size to 11x17. No cover page but include your full names, class information, date, and project title in the title block.
Provide the following:

- One section through the fence. Show foundation and attachment details.
- One elevation of the fence.

Drawings should be neat, labeled, to scale. Include a title block on each page. Each drawing should be on its own page.

Sample Rubric: LAB02

Grading / 50 TOTAL:

5 pts Schedule Format (1 point each):
Single, compiled PDF
Sized 11 x 17
No cover page
Include your full names, class information, date, and project title in the title block
Section headings

20 pts Schedule Content:
(4) 30 construction activities,
(2) 6 milestones
(2) Activity Start Dates
(2) Activity Durations
(2) Timescale at top of schedule

(2) Appropriate waterfall shape
(3) Reflects materials from drawings
(3) Logical construction sequence

5 pts Drawings Format (1 point each):
Single, compiled PDF
Sized 11 x 17
No cover page
Include your full names, class information, date, and project title in the title block
Each drawing maxed out on its own page

20 pts Drawings Content:
(8) One section through the fence. Show foundation and attachment details.
(8) One elevation of the fence.
(2) Materials labeled
(2) To scale

Department Standards

Introduction
The purpose of these standards is to create a uniform expectation of professionalism across the disciplines represented by our department. This document contains submission requirements, sample documents, and guidelines for implementation.

Course content must reflect these expectations and be delivered evenly across all course sections to reinforce the total learning experience for our students.

Goals & Outcomes

1. Alert students to Standards of Professional Practice.
2. Reinforce Professional Standards through all coursework.
3. Update uniform requirements for all classes and all disciplines.
4. Distribution of this document to all students and faculty.

All Email

Must include-

1. Course number in email subject line
2. Greeting
3. Content
4. Student signature block containing:
    a. Full name
    b. CMCE Department
    c. Email address

Sample

Subject Line: CMCE 1221 - Monday Night

Dear Prof. Sowder,

I will be absent on Monday, 5/14/18, due to a doctor's appointment. I have looked at the syllabus but I'm not sure what to do to make up the in class assignment. Can we discuss this during office hours?

Sincerely,
Jan

_____
Jan Student
Department of Construction Management & Civil Engineering
Jan.student@mail.citytech.cuny.edu

All Software-Originated Submissions (CAD, Microsoft Project, Primavera, Suretrak, Revit, etc.)

Submissions must include-

1. Title Block containing
    a. Students' full names
    b. Course number
    c. Project name/info
    d. Date of submission

Management Classes (CMCE 1221, 2319, 2321, 2421, 2457, 2520, 4471, 4701, 4702, 4800)

Submissions must include-

1. Students' full names
2. Course number
3. Project name/info
4. Date of submission

Points will be deducted for:

1. Failure to follow submission instructions
2. Pages out of order
3. Incomplete submissions
4. Late submissions (see class policies)
5. Unstapled multi-page reports
6. Sloppy submissions
7. Fringed paper out of notebook pads
8. Incomplete submission info
9. Incorrect submission format

CMCE 2421 CMIII - Intro Survey

Name (Last, First): _____
Preferred Name: _____
E Mail Address: _____
Phone Number: _____
What degree do you expect to obtain? _____

Do you work? No Yes: Full Time Part Time
If so, where? _____

Have you worked in the construction industry? No Yes: Where? _____

What is the highest construction industry job title you have attained? _____

What job do you expect to have in five years? _____

What do you hope to get out of this class? _____
_____
_____
_____

What is your favorite blog or online news source? _____

Student Responsibilities

1. Students are responsible for attending all classes, submitting all assignments, and contacting the Professor by email or in person as soon as possible to address any problems. Students are responsible for following up on all questions or issues.
2. Students are responsible for completing assignments before class.
3. If absent, students are responsible for obtaining the missed notes and assignments from their classmates. No extensions will be given for assignments given while a student was absent. Class slides, when used, may not be distributed.
4. Students should be prepared to participate in class.
5. Students are responsible for abiding by the policies above.
6. Students are responsible for keeping track of their syllabus.

Course Agreement

I have received the course syllabus. We reviewed the policies and student requirements in class. I understand my responsibilities and I agree to abide by this syllabus.

Student Signature: _____

Date: _____

NEW YORK CITY COLLEGE OF TECHNOLOGY
of the City University of New York

The Department of Construction Management &
Civil Engineering Technology

CMCE 4800 SENIOR CAPSTONE

SYNCHRONOUS | HE84 (15861)
SPRING 2021 | HYBRID
COURSE SYLLABUS

Time	Wed 6:00 – 10:10 pm | OL87
Instructor	Prof. Anne Marie Sowder
Office	online only
Email	amsowder@citytech.cuny.edu

Class location	Online only. Refer to Course Session Schedule.
Online Class dates:	Refer to Course Session Schedule.
In Person Class dates:	August 25 and December 15
Online Office Hours:	Wed 5:00 – 6:00 Zoom ZOOM is where office hours will be held. Link to zoom**:** https://us02web.zoom.us/my/amsowder
Textbook	N/A. Refer to Blackboard & Instructor notes.
Pre-requisite:	CMCE 4700, CMCE 4701, CMCE 4702

1 Class hour, 4 Lab hours, 3 credits

Course Description:
The senior capstone project is an integrating experience that draws together diverse elements of the curriculum and develops student competence by focusing on both technical and non-technical skills to solve problems. Students work in teams to solve a comprehensive problem beginning with conceptual design all the way through to preparation of construction documents, scheduling, and cost estimation. Nontechnical skills such as presentation skills, teamwork, accountability and ethics are emphasized.

Program Criteria

ABET, Inc. is the nationally recognized accrediting body for engineering technology programs. The CMCE department has adopted the most current ABET Program Criteria. Graduates of baccalaureate degree programs typically specify project methods and materials, perform cost estimates and analyses, and manage construction activities. The CMCE curriculum provides instruction in the following areas:

- Utilization of techniques that are appropriate to administer and evaluate construction contracts, documents, and codes (Criterion a);
- Estimation of costs, estimation of quantities, and evaluation of materials for construction projects (Criterion b);
- Demonstrate utilization of measuring methods, hardware, and software that are appropriate for field, laboratory, and office processes related to construction (Criterion c);

- Apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to construction engineering; (Criterion d);
- Production and utilization of documents related to design, construction, and operations (Criterion e);
- Performance of economic analyses and cost estimates related to design, construction, and maintenance of systems associated with construction engineering; (Criterion f);
- Selection of appropriate construction materials and practices (Criterion g);
- Application of appropriate principles of construction management, law, and ethics (Criterion h);
- Performance of standard analysis and design in at least one sub-discipline related to construction engineering (Criterion i).

Student Outcomes

The CMCE department has adopted the most current ABET student outcomes criteria. Student performance in this course will be assessed based on the following learned capabilities:

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline (Criterion 1);
- An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline (Criterion 2);
- An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature (Criterion 3);
- An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; (Criterion 4);
- An ability to function effectively as a member as well as a leader on technical teams (Criterion 5);

Additionally, students should be able to do the following by the end of the semester:

- Work with client specifications or RFP to develop a complete project using interdisciplinary methods.
- Conduct independent research related to project development.
- Develop construction design documents according to client needs for use as part of a complete project.
- Apply the key elements of construction project planning.
- Develop a site logistics plan and produce its components.
- Apply knowledge of schedules and other project visualizations in other formats, including 3D, 4D, and map layout.
- Use P6 or similar software to produce a schedule reflective of various aspects of a building construction project.
- Understand the implications of project sequencing, from foundations to finishes, including planning and site logistics.
- Develop a project budget that is responsive to stated client needs and reflective of the complete project.
- Receive and incorporate real-time feedback on project.
- Lead and cooperate with a team to produce project deliverables in a professional and timely manner.

General Education Learning Outcomes

The pedagogical strategies applied in lecture will encourage the development of the following:

1. Knowledge by engaging in inquiry-based learning;

2. Inquiry/analysis skills by employing both quantitative and qualitative analysis to describe and solve problems;
3. Understand and navigate systems (Gen Ed).
4. Discern consequences of decisions and actions (Gen Ed).

Grading

Work Type	#	x	Point value	Total Points
In Class Assignments	12	x	25	300
Midterm Submission	1	x	100	100
Final Submission	1	x	150	150
Final Presentation	1	x	100	100
Final Grade				**650**

Points are unweighted. The (total number of points you earn) / (total available points) will determine your final grade.

Grades Earned

Your grade will be based on the total percentage of points accumulated for the course, as follows:

93 - 100	A
90 – 92.9	A-
87 – 89.9	B+
83 – 86.9	B
80 – 82.9	B-
77 – 79.9	C+
70 – 76.9	C
60 – 69.9	D
59.9 and below	F
WU	Unofficial Withdrawal (attended at least once)
WF	Withdrew Failing
WN	Unofficial Withdrawal (never attended)

Refer to the Course Session Schedule for further details on assignment timing and submission.
Refer to the Sample Assignment & Grading Rubric section for information about assignment types and grading.

- Assignments turned in more than five minutes after the deadline will be considered late and will be marked off 50%.
- Make up extensions will not be given unless the student has a valid reason (emergency, illness) and contacts faculty by email the day of the class. If you do not contact me, no make up will be given and you will receive a Grade of ZERO (0).

Refer to the Department Standards for submission formatting information.

Extra Credit

- Extra credit (1 point) is available for catching any written mistake made in distributed documents. Bring your extra credit to office hours.

- Extra credit will be made available throughout the course at the discretion of the Professor.

Email

- All email to the Professor **must start with the subject line CMCE 4800 – [Email Subject].** Do not expect a response to emails that do not follow this rule. Typically emails generated from Blackboard do not meet this requirement.
- Include your full name as a signature and title block as shown in Department Standards.

Attendance & Participation

Attendance and participation is required for this synchronous class. Attendance will be verified by Blackboard login during class time. For your reference, student Blackboard login can be viewed by faculty via the Performance Dashboard

- Absences, classes missed entirely, are governed by the attendance policy as outlined in the Student Handbook.

In Class Assignments will be due by the end of class (or earlier, as required by your instructor). These may consist of writing, quizzes, short presentations or discussions, or contributions to the Discussion Board.

Course Session Schedule

Session	In-Person / Online Meeting	Topic	DELIVERABLES
1 – 2/3	**In person**	Introduction to hybrid Senior Capstone Group placement	InClass01
2 – 2/10	BB Collaborate	Project development	InClass02
3 – 2/17	BB Collaborate	Site logistics planning	InClass03
4 – 2/24	BB Collaborate	Scheduling	InClass04
5 – 3/3	BB Collaborate	Preliminary budget	InClass05
6 – 3/10	BB Collaborate	Lab class	InClass06
7 – 3/17	BB Collaborate	Lab class	InClass07
8 – 3/24	BB Collaborate	SD Package midterm presentation	**Midterm presentation**
9 – 4/7	BB Collaborate	Packaging and presenting to clients	InClass08
10 – 4/14	BB Collaborate	Project analysis & cost planning	InClass09
11 – 4/21	BB Collaborate	Final budget	InClass10
12 – 4/28	BB Collaborate	Lab class	InClasss11
13 – 5/5	BB Collaborate	Lab class	InClass12
14 – 5/12	BB Collaborate	Lab class	Final Submission
15 – 5/19	**In person**	Final Presentation Day	**FINAL PRESENTATION**

Academic Integrity Policy

Students and all other who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity.

Accordingly, **academic dishonesty is prohibited** in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, or expulsion.

Tech Help

Information regarding City Tech's **Device Loan Program**
A link to **Virtual City Tech**, a hub of resources to assist students created by CIS

When participating in virtual learning courses, it is vital to consider the technology needed in order to have a successful course. We recommend that you meet the technical requirements below.

- A computer (desktop/laptop) or mobile device (tablet). If you need to borrow a device, **click here**.
- Speakers/headphones/earbuds for listening to audio or videos presented in courses.
- Webcam for interacting in course activities that require video feedback from students.
- High speed internet access

It is imperative that you (1) have and use a CityTech email account, and (2) create a BlackBoard account. Significant amounts of course material are hosted on and submitted via Blackboard.

1. You should have access to and be able to use the Chrome, Firefox, Safari, or Internet Explorer browsers.
2. If you do not know your CityTech email login information:
    a. Visit http://cis.citytech.cuny.edu/Student/it_student_findemail.aspx
    b. From there, retrieve your login information and log into your account.
3. If you need additional help with your CityTech email, or do not have an account:
    a. contact the CityTech Help Desk at 718-260-4900 OR
    b. Email HelpDesk at studenthelpdesk@citytech.cuny.edu
4. For BlackBoard training and support on all tools required to fully participate in the interactive component of the course:
    a. Access the "Beginners Guide to BlackBoard Course Info" training at http://websupport1.citytech.cuny.edu/studentworkshops.html AND/OR
    b. Email the open student lab at itec@citytech.cuny.edu for BlackBoard help AND/OR
    c. Call (718) 254-8565 for BlackBoard help
    d. Visit their website: http://websupport1.citytech.cuny.edu/studentbb.html.

Using Blackboard for Class

Once you have navigated to the CMCE 4800 Blackboard page, you will find the materials needed for the class in the following links:

ANNOUNCEMENTS is the entry point. I will post notices, assignments, and updates so please check these announcements daily on Blackboard and through your City Tech email.

INFORMATION is where you will find information about me (phone, email, office hours and so on). Our online classroom is open 24 hours a day, 7 days a week. If you have questions, email me at any time and I'll try to respond within 24 hours. If your pertains to the entire class, I will share the response via Announcements.

CONTENT > 01 SYLLABUS is where you'll find all the information that is usually given out on the first day of a course including the course syllabus, grading policies, key dates, and other requirements for the course.

CONTENT > 02 LECTURES & COURSE MATERIALS is where you will find all assigned readings, presentations, references, and information needed for deliverables.

CONTENT > 03 ASSIGNMENTS is where assignments and due dates will be posted.

CONTENT > 04 DISCUSSIONS or the Discussions tab is where you'll be writing questions and comments and replying to your classmates' questions and comments. When responding to a post or thread, take care to respond in the same post or thread.

COLLABORATE ULTRA > COURSE SESSIONS 01-15 is where you will meet and login for all class sessions. Refer to Course Session Schedule.

Course Resources

The following resources will help you with class:

1. City Tech Library. Stop quoting Google and Wikipedia. Access real academic sources.
   Start here: https://library.citytech.cuny.edu/
2. CM OER. This resource hosts many resources on project management and presentation.
   Subscribe to this page: https://openlab.citytech.cuny.edu/cmcesowder/
3. NYC Department of Buildings: Information on building, NYC codes, permitting, and construction violations.
   Start here: https://www1.nyc.gov/site/buildings
4. NYC Open Data. GIS and information for mapping.
   Start here: https://opendata.cityofnewyork.us/
5. NYC Geology at AMNH. Find overview and many additional resources for city site history studies.
   Start here: https://www.amnh.org/research/physical-sciences/earth-and-planetary-sciences/public-outreach/new-york-city-geology

6. Oracle Academy. Create your student membership for access to Primavera. Create your member account and link to "City University Of New York New York City Technical College."
   Start here: https://academy.oracle.com/en/membership-join-oracle-academy.html
7. Autodesk Academy. Start a free student account to access many professional, step-by-step video tutorials on using Revit and other Autodesk products.
   Start here: https://academy.autodesk.com/explore-and-learn
8. ArcGIS student. Activate your ESRI student trial.
   Start here: https://www.esri.com/en-us/arcgis/products/arcgis-desktop-student-trial
9. Procore Certification. Train and earn Procore Certification, free.
   Start here: https://www.procore.com/certification
10. On Center Software. Activate your trial of On Screen Takeoff for quantity takeoffs and budgeting.
    Start here: https://www.oncenter.com/products/on-screen-takeoff

Sample Assignment: HW01 Precedent Analysis & Site History Report

30 points.

Deliverables

Be prepared to discuss and present in class. No formal presentation materials required. Each individual student is responsible for one submission via Blackboard.

The purpose of this assignment is to view, analyze, and reflect on the site location and history as well as other projects that may contain relevant or inspirational forms, materials, or themes.

Submissions must include the following content:

(1) Precedent Analysis. See below.
(2) Site History Report. See below.

Specifics:

- Individual submissions only. Not group work.
- Submission should be in a single, compiled Word file or PDF. We grade only the last submission before due date, so feel free to resubmit, but your last submission must be complete.
- No cover page but submissions must contain name, date, and assignment title.
- Caption all images.
- Edit the document header to include first and last name and assignment title.

(1) Precedent Analysis Report

Instructions

- Select one precedent project from the list on your class discussion board.
- You must be the first to select and post the project to the discussion board to reserve it.
- Do not select a project if it is already claimed.
- Look for a professor to confirm your selection.
- Put together a 1-2 page write up of the project that mixes visuals with text to convey the following:
- Name and date of project
- Project use
- Materials/building systems incorporated
- Themes and inspirations taken from the project.

(2) Site History Report Report

- Put together a 1-2 page write up of our class site project that mixes visuals with text to convey the following:

- Location, ownership, and occupants of the site; past and present. Go as far back as research permits.
- Geographical and geological details.
- Connection to surrounding neighborhoods, utilities, greenways, and transit corridors.

Sample Rubric: HW01 Site History & Precedent Project

Grading / 30 TOTAL:

5 pts Format (1 point each):
Single, compiled Word file or PDF
Should not have cover page
Name, date, and assignment title
Caption all images
Header including first and last name and assignment title

10pts Precedent Analysis (point values noted below):
(1) 1-2 pages, Contains text and images
(2) Project use
(5) Materials/building systems incorporated
(2) Themes and inspirations taken from the project.

15pts Site History Report (point values noted below):
(1) 1-2 pages, Contains text and images
(5) Location, ownership, and occupants of the site; past and present. Go as far back as research permits.
(5) Geographical and geological details.
(4) Connection to surrounding neighborhoods, utilities, greenways, and transit corridors.

Department Standards

Introduction
The purpose of these standards is to create a uniform expectation of professionalism across the disciplines represented by our department. This document contains submission requirements, sample documents, and guidelines for implementation.

Course content must reflect these expectations and be delivered evenly across all course sections to reinforce the total learning experience for our students.

Goals & Outcomes

1. Alert students to Standards of Professional Practice.
2. Reinforce Professional Standards through all coursework.
3. Update uniform requirements for all classes and all disciplines.
4. Distribution of this document to all students and faculty.

All Email

Must include-

1. Course number in email subject line
2. Greeting
3. Content
4. Student signature block containing:
    a. Full name
    b. CMCE Department
    c. Email address

Sample

Subject Line: CMCE 4800 - Monday Night

Dear Prof. Sowder,

I will be absent on Monday, 5/14/18, due to a doctor's appointment. I have looked at the syllabus but I'm not sure what to do to make up the in class assignment. Can we discuss this during office hours?

Sincerely,
Jan

_____
Jan Student
Department of Construction Management & Civil Engineering
Jan.student@mail.citytech.cuny.edu

All Software-Originated Submissions (CAD, Microsoft Project, Primavera, Suretrak, Revit, etc.)

Submissions must include-

1. Title Block containing
    a. Students' full names
    b. Course number
    c. Project name/info
    d. Date of submission

Management Classes (CMCE 1221, 2319, 2321, 2421, 2457, 2520, 4471, 4701, 4702, 4800)

Submissions must include-

1. Students' full names
2. Course number
3. Project name/info
4. Date of submission

Points will be deducted for:

1. Failure to follow submission instructions
2. Pages out of order
3. Incomplete submissions
4. Late submissions (see class policies)
5. Unstapled multi-page reports
6. Sloppy submissions
7. Fringed paper out of notebook pads
8. Incomplete submission info
9. Incorrect submission format

CMCE 4800 - Intro Survey

Name (Last, First): _____
Preferred Name: _____
E Mail Address: _____
Phone Number: _____
What degree do you expect to obtain? _____

Do you work? No Yes: Full Time Part Time
If so, where? _____

Have you worked in the construction industry? No Yes: Where? _____

What is the highest construction industry job title you have attained? _____

What job do you expect to have in five years? _____

What do you hope to get out of this class? _____
_____
_____
_____

What is your favorite blog or online news source? _____

Student Responsibilities

1. Students are responsible for attending all classes, submitting all assignments, and contacting the Professor by email or in person as soon as possible to address any problems. Students are responsible for following up on all questions or issues.
2. Students are responsible for completing assignments before class.
3. If absent, students are responsible for obtaining the missed notes and assignments from their classmates. No extensions will be given for assignments given while a student was absent. Class slides, when used, may not be distributed.
4. Students should be prepared to participate in class.
5. Students are responsible for abiding by the policies above.
6. Students are responsible for keeping track of their syllabus.

Course Agreement

I have received the course syllabus. We reviewed the policies and student requirements in class. I understand my responsibilities and I agree to abide by this syllabus.

Student Signature: _____

Date: _____

NEW YORK CITY COLLEGE OF TECHNOLOGY
of the City University of New York

The Department of Construction Management &
Civil Engineering Technology

LAB02
CMCE 2421

50 points | **Value**
4-21-21 at noon via Blackboard | **Due**

Part 1 (25 points) Schedule

Submit Part 1 as a single PDF. Size to 11x17. No cover page but include your full names, class information, date, and project title in the title block.

Create a schedule in P6. The project is building a road, 5 miles long, any material, any location. Assume no local signoffs are required. Your schedule must include:

- 30 construction activities, 6 milestones.
- 3 WBS section headings (all same level): project phases based on performing similar activities in a repeated sequence.
- All dates, labels.

Your schedule MUST reflect the materials and details shown in your drawings.
The total schedule duration will be determined based on materials and installation.

Part 2 (25 points) Drawings

Submit Part 2 as a single PDF. Size to 11x17. No cover page but include your full names, class information, date, and project title in the title block.
Provide the following:

- One section through the road. Show foundation and attachment details.
- One plan of the road (show a short length, between 5-10 feet).
- Both drawings must have dimensions and material labels. See samples below, Fig 1.
- Both drawings must be on drawing sheets with title block. See sample below, Fig 2.

Drawings should be neat, labeled, to scale. Include a title block on each page.

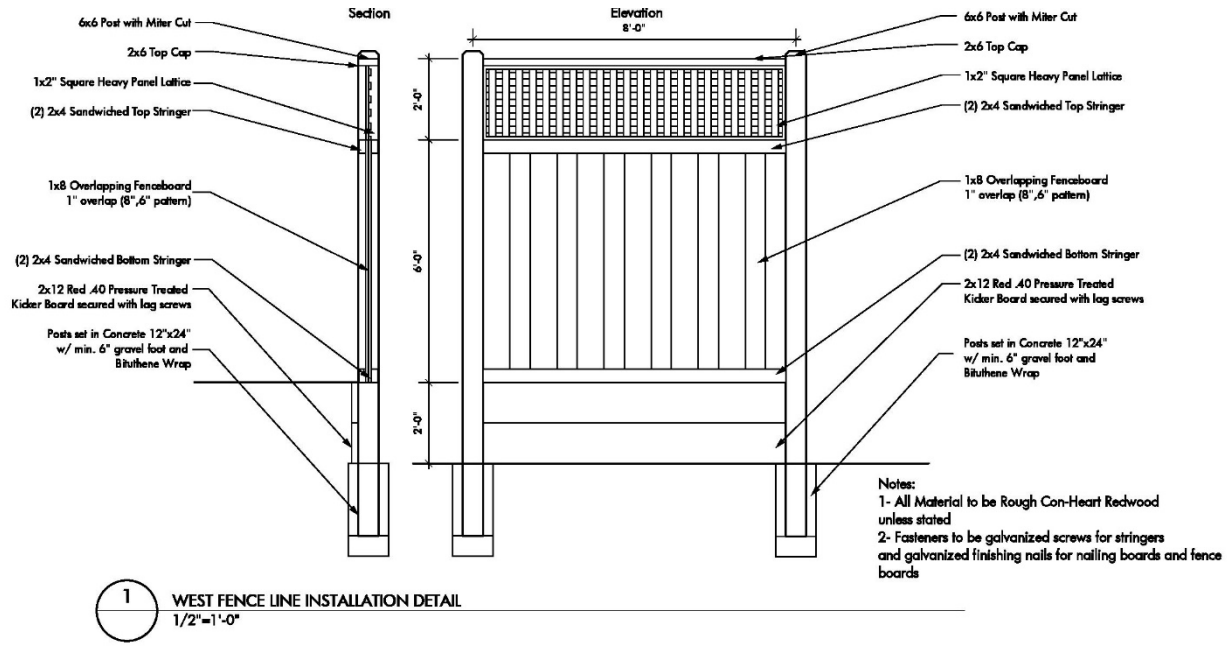

Figure 1: Sample drawing showing dimensions and labels

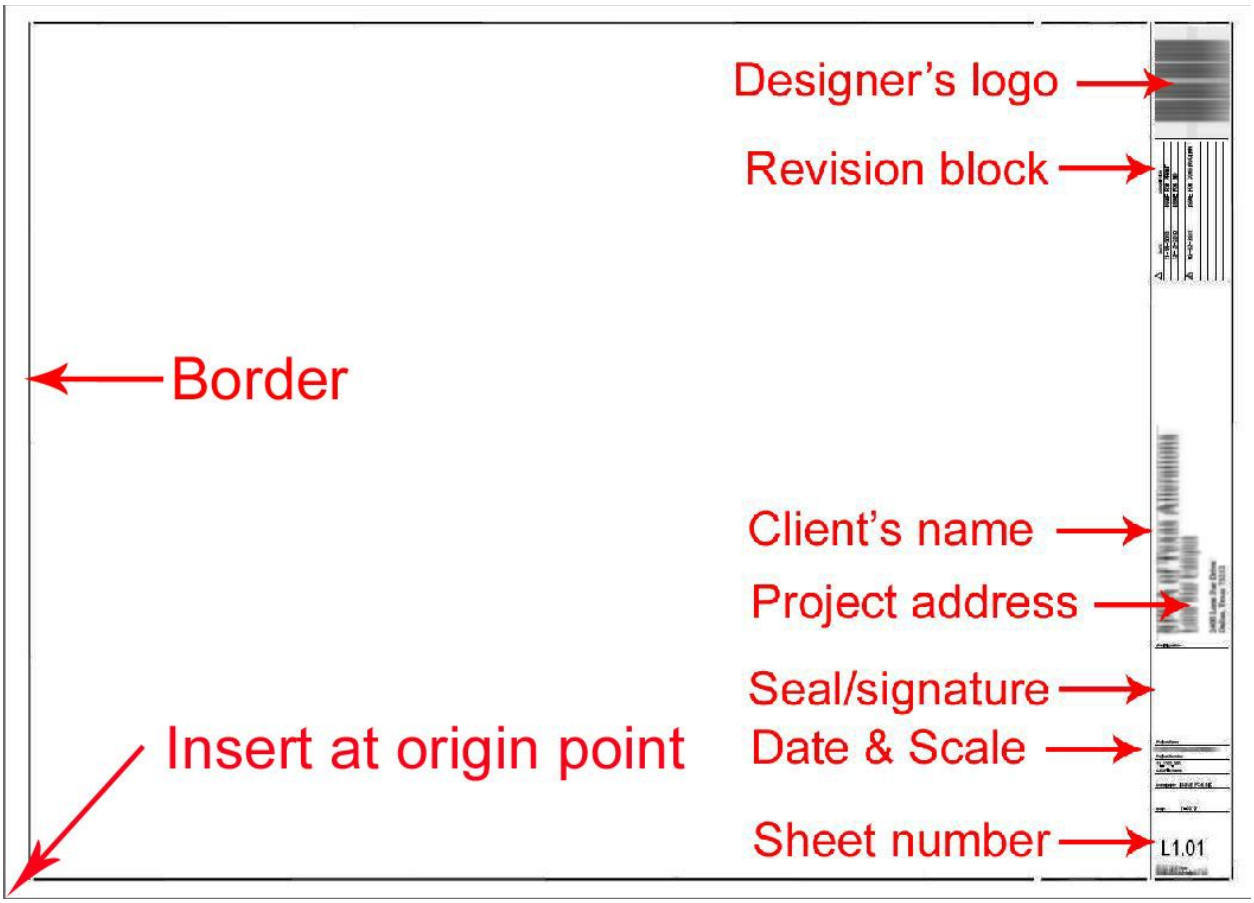

Figure 2: Sample blank drawing sheet with title block

CMCE 4800 Senior Capstone
See Blackboard | **Due**

Fyre Festival Design-Build RFP **150 points**

Proposal Format: One PDF file uploaded to Blackboard. Proposing teams will also post a copy of their submission and/or any additional materials to Miro for presentation. No late submissions will be reviewed.

Instructions: We look forward to receiving your final design-build proposal for the Fyre Festival Site in the Bahamas. The Fyre Festival will take place in 2017 (April and May preferred) and will require sufficient housing, recreation, dining, and staff/back-of-house spaces to support all of the expected attendees and staff. The proposing teams are responsible for incorporating their own site analysis and programming research to provide appropriate types and numbers of facilities, and available utility/transportation connections. The proposing teams are not responsible for specifying or hiring caterers or festival entertainers but should plan to accommodate them on the site.

This document clarifies the requirements for your proposal. Please include the following five sections:

I. Final Proposal
Include your *revised* problem statement, *revised* overview of client needs, *current* dates of festival, *revised* design considerations, and *revised* constructability analysis.

II. Drawing Package
Include the following (all digitally drafted in the appropriate format with completed title blocks):

1. Elevation and plan for each on site residence type
2. Elevation and plan for on-site food prep and dining spaces
3. Elevation and plan for staff spaces
4. Elevation and plan for event welcome area
5. Preliminary MEP plan showing best known tie in points for electrical and water, toilet/sewage sites, and facilities requiring electrical and plumbing connections
6. *Revised* site plan showing locations of all residential, staff, parking, and entertainment facilities
7. Regional plan showing transportation routes to airport/ferry and relevant local amenities

III. Budget
Include a DD-level budget with executive summary page. The budget should account for all project scope elements. You may include an additional 20% of trade costs for design fee and 10/5 for overhead and profit.

IV. Schedule
Include a preliminary schedule accounting for all design, approval and purchase, and construction activities. The schedule may begin at the point at which the festival was announced and must achieve substantial completion by the festival date.

V. Design Renderings & Visualizations
Each team member must include an original 3D rendering, site fly through, or other multi-component visualization of the site or project. If you have questions about the appropriateness of a certain visual, please contact me as noted below.

All sections should be laid out on one or more sheets, 11 x 17. All drawings and major visuals should have their own sheet and should fill that sheet to its boundaries. Include team first and last names, project name, and section title on all sheets. Aside from drawing title blocks, do not include any large, non-productive logos. All text should be single spaced. Use footnotes for referenced materials in the following format: see below.[1]

Project Contact

If you have any questions, please email them to:
Prof. Anne Marie Sowder
amsowder@citytech.cuny.edu

Proposal Presentation **100 points**

Presentation Format: One organized presentation uploaded to Miro. Teams must arrive at the presentation with all materials ready in the sequence that you intend to present and presentation speaking roles rehearsed or assigned.

[1] Author last name, first name. Date. Article title. Article source name. Article source url.