

DIVISION OF CONSTRUCTION ENGINEERING AND MANAGEMENT

Engineering Faculty Document 50-18 April 17, 2019 Page 1 of 13

To: The Engineering Faculty

From: Division of Construction Engineering and Management

Re: CEM 42500 conversion to: CEM 42501 & CEM 42502

The Division of Construction Engineering and Management has approved the following revised undergraduate course from a single 3-credit hour course to two 2-credit hour courses offered in sequential semesters. The original course will be retired. This change is now submitted to the Engineering Faculty with a recommendation for approval.

- 1) Construction Engineering Capstone I & II
- 2) CEM 42501 & CEM 42502
- 3) Lecture & Lab
- 4) Change from: CEM 42500, 3 credit hours
- 5) Change to: CEM 42501, 1 credit hour lecture + 1 credit hour lab CEM 42502, 1 credit hour lecture + 1 credit hour lab
- 6) Rationale: A two-semester capstone course is superior to a one-semester format due to the large amount of material that must be introduced and synthesized for students to attain the learning objectives.

Supplemental Information:

1) Syllabus for each course – see attached

Makarand Hastak, Professor and Head Division of Construction Engineering & Mgmt.

CEM 42501 – Construction Engineering Capstone

Fall 20xx

Instructor:

Brandon M. Fulk, P.E., Director of Internships Construction Engineering & Management Office: Room 1259 Hampton Hall of Civil Engineering Phone: 765-494-2242 Email: <u>fulk@purdue.edu</u> Office hours: by appointment to secure your time (utilize Boiler Connect to sign-up)

Teaching Assistant

TBD Office: TBD Email: <u>TBD</u> Office hours: TBD

Classes:

LEC: TBD LAB: TBD

Credit:

2 credit hours (1 lecture and 1 lab)

Website:

Blackboard Learn

Prerequisites:

CEM 29100

Course Description, Overview and Purposes:

As Presented within myPurdue: The capstone senior design course for construction engineering and management majors. Working in teams in a realistic engineering practice environment, students use an actual construction project to accomplish open-ended project planning and systems design. Course covers construction project strategy, cost estimating and bidding, constructability analysis, project scheduling, contract conditions, project organization, site analysis and development, safety and quality management, and information systems design. Comprehensive written submittals and oral presentations require integration of knowledge gained in previous courses and in construction internships.

The students will experience in this class a set of game-based learning and project-based learning opportunities which will engage the student. The course will be collaborative, and apprentice based as constraints permit.

The students should expect that the instructor will maintain a high level of energy and bring his A-game to each session/module. The instructor has shed the historical approach to teaching and learning so the student should change his/her perception of an instructor. The instructor for this course will be your mentor and coach which you can depend upon year-round. The students should expect timely review and processing of deliverable items and if grading is delivered in a timely fashion, the students should petition the instructor for the material. The student should note that the instructor's style is to be inquisitive, so

you will find him answering your question with an additional question to invoke critical thinking and ownership of the work being completed.

Course Themes and Learning Objectives:

The Capstone course instructional outcome is that the student (learner) will become proficient in developing a successful project for integration into a comprehensive plan by a stakeholder. The enduring understanding that the student should take away from the course should be a catalyst for the development of the new-aged master builder. The student is expected to seize the opportunity to explore and grow relative to the following components of the construction engineer's responsibilities within project management and field operations:

- 1. Contract and Scope
 - a. Students should be able to read a contract and determine the scope of work to be provided and under what terms. Please note there are a number of contracts, delivery methods, so the course will only be able to focus on one or two of these.
 - b. Students should be able to meet with a client prior to the development of a contract to determine scope and provide guidance in the design and construction phases.
- 2. Plans and Specifications
 - a. Students should be able to assemble a schematic design and design development set of plans & specifications representative of the schedule and budget.
 - b. Students should be able to read and interpret different types of plans. The variation in plans can range from design stage (schematic design to construction documents) to type of construction (transportation construction to industrial construction).
 - c. Student should be able to read and interpret specifications because they complete the criteria for design intent.
- 3. Schedule
 - a. Student should able to construct a schedule for the specific work defined as part of the whole project assigning hours, resources and equipment within budget.
 - b. Student should be able to create appropriate types of schedules based on work composition using various scheduling programs.
- 4. Selections
 - a. Student should able to select the appropriate equipment to perform the work scheduled.
 - b. Student should be able to assign the appropriate crew (labor resources) to perform the work scheduled.
 - c. Student should be able to select the appropriate material to perform the work scheduled in conjunction with plans and specifications as well as adhering to the internal needs of necessary temporary constructed elements.
- 5. Finances
 - a. Student should be able to develop an estimate based on limited information from the client.
 - b. Student should be able to develop a budget based on plans and specifications in order to develop contracts and execute buy-outs.
 - c. Student should be able to incorporate the budget within their schedule

The course will provide the student with an opportunity to link the academic theoretical delivery method of subject matter with the experiential learning that occurs on the project jobsite during the internship period - a compilation of the student's experiences while at Purdue.

Required Texts:

None

Recommended (optional) Texts:

- Estimating in Building Construction / Frank R. Dagostino, Steven J. Peterson, Pearson, 8th ed., 2015. ISBN-10: 0-13-343110-X
- Construction Scheduling: Principles and Practices / Jay S. Newitt, Pearson, 2nd ed., 2009. ISBN-10: 0-13-513782-9
- Practical Concepts for Capstone Design Engineering / Bloetscher Meeroff, J.Ross Publishing

Assignments:

The student is expected to prepare for each class by review material previous to class posted to Blackboard. Students should not be afraid to work in groups outside of class and in fact this is encouraged to the point that joint ventures would be acceptable upon submittal of the students reasoning for the joint venture in memo format.

Students should understand that this course intended to develop your critical thinking skills and apply your engineering education. Student should thoroughly review and prepare for each session by obtaining material posted on Blackboard 24-48 hours prior to course meeting. Students should remain patient and begin to learn how to be a "problem finder".

Expected Time Commitment:

The student should expect a variety of time commitments based on the portion of the semester in question. Most class meetings will require preparation (reading) prior to attending based on the scheduled content. The in-class modules will result in less preparation effort but more work outside of class once the problem has been defined and explored in the classroom. In general, a student should expect 10 hours of work outside of the classroom meeting time per week.

Grading:

Students are expected to participate and attend class for exposure to a variety of educational opportunities. Each opportunity will be categorized as one of the following: Attendance, Class Participation, Quizzes, Session Assignments, Modules Assignments and Peer Evaluation. Opportunities will be outlined in the course schedule (Table 5) and it is imperative the students maintain pace with the course so that the relationship with material will be maintained as well as fundamentally supporting their peers with their educational experience. Blackboard will be exclusively utilized for submissions of assignments unless instructed to the contrary. The opportunities are further described as:

- Attendance & Participation Attendance is mandatory for class and students are expected to
 participate: in groups, quiz debriefs and general open discussion. The class is filled with in-class
 activities that require team collaboration as well as guest speakers. Guest speakers are special guests
 of Purdue University who come to class contributing their time and involvement, at personal and/or
 company cost; therefore, they are entitled to our sincere respect. The best way to respect our guests is
 by following this simple guideline:
 - a. Be on time. This means that the student must be in their seat and prepared for the assigned task when class starts.
 - b. Give the speaker your total attention through the class.
 - c. Take an active part in the speaker's question-and-answer period. Most guest speakers' subjects are listed in the course schedule, so the student can prepare ahead of time questions for the end of their presentation. Prepared questions will be submitted ahead of class, so the guest speaker can investigate answers when necessary.
 - d. Display name tents so guests can engage the student on a personal level.
 - e. Phones and electronic devices must be stored out of sight (unless it is being used for education purposes) during class. If you do not adhere to this policy, you may be asked to leave the classroom and it will be considered an unexcused absence for that day.

Excused and Unexcused Absences are described by the instructor as:

- i. Excused Only one is permitted per semester without penalty. No points will be counted against the student for a predetermined absence that is communicated via email with the instructor at least 48hrs in advance if it is for doctor visits, job interviews and similar activities. Any excused absence above and beyond one will require the student to provide the class with a "mini-presentation" as determined by the instructor.
- ii. Unexcused Each unexcused absence will result in a letter grade deduction from the grade determined at the end of the semester up to a maximum two unexcused absences at which point the student will receive a grade of "F". Unexcused absences are those that may have been excused prior to the 48hr deadline to notify the instructor as well as not showing up for the class without prior discussion, sleeping in class, reading the newspaper or doing homework for other classes.
- iii. Exempt The instructor reserves the right to exempt absence without penalty and/or without applying it to item i or ii.
- 2. Quizzes Students will be expected to take periodic quizzes at the start of class based on sessions they are expected to be prepared for on that given day. No make-up quizzes will be permitted.
- 3. Session Assignments Students will have the opportunity to exercise and demonstrate their knowledge gained from outside class material on weekly bases using a variety of session formats. The session exercises will be delivered in a variety of different formats aligned with the overall assessment approach using rubrics and an apprentice approach in developing: work plans, support documentation and class reflections while working in teams.
- 4. Module Assignments & Final Assignments Students will have the opportunity to exercise and demonstrate their knowledge gained from the deliberately practiced sessions. The module assignment will be robust and rigorous in an effort to encode the material consistent with the overall assessment approach using rubrics fulfilling the requirements of the multifaceted work plans with support documentation.
- 5. Peer Evaluation Throughout the semester the students will be provided the opportunity to evaluate their peers either on a specific session or module. In general, team members will assess the other members for overall participation and quality of work which will be a part of assigned final course grades. It is mandatory that all members evaluate their peers and points will be awarded for this participation. Basic peer evaluation will be in the form of a document provided by the instructor and/or the in the form of the CATME Smarter Teamwork system (<u>http://info.catme.org/</u>). Instructor will provide additional information at the appropriate time.

Students will have multiple opportunities to exercise the knowledge they have gained in a deliberate and distributed approach with activities. The grading structure is summarized below:

-	Attendance / Participation 200 pt.
-	Presentation 250 pt.
	• Shortlist interview (50 pt.)
	• Progress Presentation I (50 pt.)
	• Progress Presentation II (50 pt.)
	• Final Presentation (100 pt.)
-	Assignment / Quiz 200 pt.
-	Report / Deliverable 450 pt.

- Controlled Project Learning Module (150 pt.)
- Uncontrolled Project Deliverable (300 pt.)
 - Short-list Interview Deliverable (100 pt.)
 - Final Project Deliverable (200 pt.)

Total: 1,100 pt.

A rubric will be developed for assignments prior to the actual delivery of the course integrating guest lecturers and final content sequence (when applicable).

The approach of the rubrics is summarized as:

	Grading Standards					
Activities	Outstanding	Excellent	Acceptable	Unacceptable	Late	
	(100%)	(75%)	(50%)	(25%)	(0%)	
Daily Attendance & Daily Participation	Students are expected in lecturers with question participate in session r interaction will be re	No credit for missed class or no questions prepared				
Quiz	Scores will be calcula answers divided by the t	Missed quiz				
Session Assignments	Students will be expe deliverables that are de class for submission. E that is broken down int Components will be o ind	Late Assignment				
Module Assignments & Final Assignments	Students will be expected to provide specific "detail" within their deliverables that are developed in/out of class and then compiled for submission. Each assignment will have an individual worth that is broken down into the multiple components of the deliverable. Components will be clearly defined in the assignment rubric and individual points specified.				Late Assignment	

General Rubric for Course Activities - It should be noted that each activity will be worth different points and the percentages provided indicate the maximum amount of points that will be awarded.

Schedule:

The following schedule is subject to change depending upon guest lecture availability and/or content mastery by the student:

Please go to the below link for the course plan that is updating in real-time. https://docs.google.com/spreadsheets/d/1CiKNKbUYMdQRDDxqOfN2MzTNThVG9HZFxFUnykgNO7 0/edit?usp=sharing

Course Policies:

We will follow all standard campus policies on accommodations for disabilities and religious practices, academic integrity, student conduct, and nondiscrimination: <u>http://www.purdue.edu/studentsuccess/academic/drc/</u> <u>http://www.purdue.edu/studentregulations/regulations_procedures/classes.html</u> <u>https://www.purdue.edu/odos/osrr/academic-integrity-brochure/</u> <u>http://www.purdue.edu/studentregulations/student_conduct/index.html</u> <u>http://www.purdue.edu/purdue/ea_eou_statement.html</u>

Email communication - the instructor will communicate with students via email in a professional manner

Electronic Devices:

A laptop or tablet is required for class so that students can interact with industry, investigate material during modules and to interact with the instructor. It is the assumption of the instructor that the students will refrain from using the device for anything beyond the support of the classroom learning process.

Please silence cell phones and other non-essential electronic devices.

References and Supplemental Readings:

Postings will be made on Blackboard Learn throughout the semester relative to specific categories of construction.

Emergencies:

For any emergency, call 911. If we hear an indoor fire alarm, we will evacuate the HAMP building to Purdue Mall outside the HAMP building or to the atrium of ARMS (during inclement weather). If we hear an outdoor emergency siren, or if we receive an emergency notification to shelter in place, we will proceed as follows. For a tornado, we will move to the basement of the HAMP building. For a civil disturbance, we will remain in the classroom or in an interior hallway.

CEM 42502 – Construction Engineering Capstone

Spring 20xx

Instructor:

Brandon M. Fulk, P.E., Director of Internships Construction Engineering & Management Office: Room 1259 Hampton Hall of Civil Engineering Phone: 765-494-2242 Email: <u>fulk@purdue.edu</u> Office hours: by appointment to secure your time (utilize Boiler Connect to sign-up)

Teaching Assistant

TBD Office: TBD Email: <u>TBD</u> Office hours: TBD

Classes:

LEC: TBD LAB: TBD

Credit:

2 credit hours (1 lecture and 1 lab)

Website:

Blackboard Learn

Prerequisites:

CEM 29100

Course Description, Overview and Purposes:

As Presented within myPurdue: The capstone senior design course for construction engineering and management majors. Working in teams in a realistic engineering practice environment, students use an actual construction project to accomplish open-ended project planning and systems design. Course covers construction project strategy, cost estimating and bidding, constructability analysis, project scheduling, contract conditions, project organization, site analysis and development, safety and quality management, and information systems design. Comprehensive written submittals and oral presentations require integration of knowledge gained in previous courses and in construction internships.

The students will experience in this class a set of game-based learning and project-based learning opportunities which will engage the student. The course will be collaborative, and apprentice based as constraints permit.

The students should expect that the instructor will maintain a high level of energy and bring his A-game to each session/module. The instructor has shed the historical approach to teaching and learning so the student should change his/her perception of an instructor. The instructor for this course will be your mentor and coach which you can depend upon year-round. The students should expect timely review and processing of deliverable items and if grading is delivered in a timely fashion, the students should petition the instructor for the material. The student should note that the instructor's style is to be inquisitive, so

you will find him answering your question with an additional question to invoke critical thinking and ownership of the work being completed.

Course Themes and Learning Objectives:

The Capstone course instructional outcome is that the student (learner) will become proficient in developing a successful project for integration into a comprehensive plan by a stakeholder. The enduring understanding that the student should take away from the course should be a catalyst for the development of the new-aged master builder. The student is expected to seize the opportunity to explore and grow relative to the following components of the construction engineer's responsibilities within project management and field operations:

- 1. Contract and Scope
 - a. Students should be able to read a contract and determine the scope of work to be provided and under what terms. Please note there are a number of contracts, delivery methods, so the course will only be able to focus on one or two of these.
 - b. Students should be able to meet with a client prior to the development of a contract to determine scope and provide guidance in the design and construction phases.
- 2. Plans and Specifications
 - a. Students should be able to assemble a schematic design and design development set of plans & specifications representative of the schedule and budget.
 - b. Students should be able to read and interpret different types of plans. The variation in plans can range from design stage (schematic design to construction documents) to type of construction (transportation construction to industrial construction).
 - c. Student should be able to read and interpret specifications because they complete the criteria for design intent.
- 3. Schedule
 - a. Student should able to construct a schedule for the specific work defined as part of the whole project assigning hours, resources and equipment within budget.
 - b. Student should be able to create appropriate types of schedules based on work composition using various scheduling programs.
- 4. Selections
 - a. Student should able to select the appropriate equipment to perform the work scheduled.
 - b. Student should be able to assign the appropriate crew (labor resources) to perform the work scheduled.
 - c. Student should be able to select the appropriate material to perform the work scheduled in conjunction with plans and specifications as well as adhering to the internal needs of necessary temporary constructed elements.
- 5. Finances
 - a. Student should be able to develop an estimate based on limited information from the client.
 - b. Student should be able to develop a budget based on plans and specifications in order to develop contracts and execute buy-outs.
 - c. Student should be able to incorporate the budget within their schedule

The course will provide the student with an opportunity to link the academic theoretical delivery method of subject matter with the experiential learning that occurs on the project jobsite during the internship period - a compilation of the student's experiences while at Purdue.

Required Texts:

None

Recommended (optional) Texts:

- Estimating in Building Construction / Frank R. Dagostino, Steven J. Peterson, Pearson, 8th ed., 2015. ISBN-10: 0-13-343110-X
- Construction Scheduling: Principles and Practices / Jay S. Newitt, Pearson, 2nd ed., 2009. ISBN-10: 0-13-513782-9
- Practical Concepts for Capstone Design Engineering / Bloetscher Meeroff, J.Ross Publishing

Assignments:

The student is expected to prepare for each class by review material previous to class posted to Blackboard. Students should not be afraid to work in groups outside of class and in fact this is encouraged to the point that joint ventures would be acceptable upon submittal of the students reasoning for the joint venture in memo format.

Students should understand that this course intended to develop your critical thinking skills and apply your engineering education. Student should thoroughly review and prepare for each session by obtaining material posted on Blackboard 24-48 hours prior to course meeting. Students should remain patient and begin to learn how to be a "problem finder".

Expected Time Commitment:

The student should expect a variety of time commitments based on the portion of the semester in question. Most class meetings will require preparation (reading) prior to attending based on the scheduled content. The in-class modules will result in less preparation effort but more work outside of class once the problem has been defined and explored in the classroom. In general, a student should expect 10 hours of work outside of the classroom meeting time per week.

Grading:

Students are expected to participate and attend class for exposure to a variety of educational opportunities. Each opportunity will be categorized as one of the following: Attendance, Class Participation, Quizzes, Session Assignments, Modules Assignments and Peer Evaluation. Opportunities will be outlined in the course schedule (Table 5) and it is imperative the students maintain pace with the course so that the relationship with material will be maintained as well as fundamentally supporting their peers with their educational experience. Blackboard will be exclusively utilized for submissions of assignments unless instructed to the contrary. The opportunities are further described as:

- Attendance & Participation Attendance is mandatory for class and students are expected to
 participate: in groups, quiz debriefs and general open discussion. The class is filled with in-class
 activities that require team collaboration as well as guest speakers. Guest speakers are special guests
 of Purdue University who come to class contributing their time and involvement, at personal and/or
 company cost; therefore, they are entitled to our sincere respect. The best way to respect our guests is
 by following this simple guideline:
 - a. Be on time. This means that the student must be in their seat and prepared for the assigned task when class starts.
 - b. Give the speaker your total attention through the class.
 - c. Take an active part in the speaker's question-and-answer period. Most guest speakers' subjects are listed in the course schedule, so the student can prepare ahead of time questions for the end of their presentation. Prepared questions will be submitted ahead of class, so the guest speaker can investigate answers when necessary.
 - d. Display name tents so guests can engage the student on a personal level.
 - e. Phones and electronic devices must be stored out of sight (unless it is being used for education purposes) during class. If you do not adhere to this policy, you may be asked to leave the classroom and it will be considered an unexcused absence for that day.

Excused and Unexcused Absences are described by the instructor as:

- i. Excused Only one is permitted per semester without penalty. No points will be counted against the student for a predetermined absence that is communicated via email with the instructor at least 48hrs in advance if it is for doctor visits, job interviews and similar activities. Any excused absence above and beyond one will require the student to provide the class with a "mini-presentation" as determined by the instructor.
- ii. Unexcused Each unexcused absence will result in a letter grade deduction from the grade determined at the end of the semester up to a maximum two unexcused absences at which point the student will receive a grade of "F". Unexcused absences are those that may have been excused prior to the 48hr deadline to notify the instructor as well as not showing up for the class without prior discussion, sleeping in class, reading the newspaper or doing homework for other classes.
- iii. Exempt The instructor reserves the right to exempt absence without penalty and/or without applying it to item i or ii.
- 2. Quizzes Students will be expected to take periodic quizzes at the start of class based on sessions they are expected to be prepared for on that given day. No make-up quizzes will be permitted.
- 3. Session Assignments Students will have the opportunity to exercise and demonstrate their knowledge gained from outside class material on weekly bases using a variety of session formats. The session exercises will be delivered in a variety of different formats aligned with the overall assessment approach using rubrics and an apprentice approach in developing: work plans, support documentation and class reflections while working in teams.
- 4. Module Assignments & Final Assignments Students will have the opportunity to exercise and demonstrate their knowledge gained from the deliberately practiced sessions. The module assignment will be robust and rigorous in an effort to encode the material consistent with the overall assessment approach using rubrics fulfilling the requirements of the multifaceted work plans with support documentation.
- 5. Peer Evaluation Throughout the semester the students will be provided the opportunity to evaluate their peers either on a specific session or module. In general, team members will assess the other members for overall participation and quality of work which will be a part of assigned final course grades. It is mandatory that all members evaluate their peers and points will be awarded for this participation. Basic peer evaluation will be in the form of a document provided by the instructor and/or the in the form of the CATME Smarter Teamwork system (<u>http://info.catme.org/</u>). Instructor will provide additional information at the appropriate time.

Students will have multiple opportunities to exercise the knowledge they have gained in a deliberate and distributed approach with activities. The grading structure is summarized below:

-	Attendance / Participation 200 pt.
-	Presentation 250 pt.
	• Shortlist interview (50 pt.)
	• Progress Presentation I (50 pt.)
	• Progress Presentation II (50 pt.)
	• Final Presentation (100 pt.)
-	Assignment / Quiz 200 pt.
-	Report / Deliverable 450 pt.

- Controlled Project Learning Module (150 pt.)
- Uncontrolled Project Deliverable (300 pt.)
 - Short-list Interview Deliverable (100 pt.)
 - Final Project Deliverable (200 pt.)

Total: 1,100 pt.

A rubric will be developed for assignments prior to the actual delivery of the course integrating guest lecturers and final content sequence (when applicable).

The approach of the rubrics is summarized as:

	Grading Standards					
Activities	Outstanding	Excellent	Acceptable	Unacceptable	Late	
	(100%)	(75%)	(50%)	(25%)	(0%)	
Daily Attendance & Daily Participation	Students are expected in lecturers with question participate in session r interaction will be re	No credit for missed class or no questions prepared				
Quiz	Scores will be calcula answers divided by the t	Missed quiz				
Session Assignments	Students will be expe deliverables that are de class for submission. E that is broken down int Components will be o ind	Late Assignment				
Module Assignments & Final Assignments	Students will be expected to provide specific "detail" within their deliverables that are developed in/out of class and then compiled for submission. Each assignment will have an individual worth that is broken down into the multiple components of the deliverable. Components will be clearly defined in the assignment rubric and individual points specified.				Late Assignment	

General Rubric for Course Activities - It should be noted that each activity will be worth different points and the percentages provided indicate the maximum amount of points that will be awarded.

Schedule:

The following schedule is subject to change depending upon guest lecture availability and/or content mastery by the student:

Please go to the below link for the course plan that is updating in real-time. https://docs.google.com/spreadsheets/d/1CiKNKbUYMdQRDDxqOfN2MzTNThVG9HZFxFUnykgNO7 0/edit?usp=sharing

Course Policies:

We will follow all standard campus policies on accommodations for disabilities and religious practices, academic integrity, student conduct, and nondiscrimination: <u>http://www.purdue.edu/studentsuccess/academic/drc/</u> <u>http://www.purdue.edu/studentregulations/regulations_procedures/classes.html</u> <u>https://www.purdue.edu/odos/osrr/academic-integrity-brochure/</u> <u>http://www.purdue.edu/studentregulations/student_conduct/index.html</u> <u>http://www.purdue.edu/purdue/ea_eou_statement.html</u>

Email communication - the instructor will communicate with students via email in a professional manner

Electronic Devices:

A laptop or tablet is required for class so that students can interact with industry, investigate material during modules and to interact with the instructor. It is the assumption of the instructor that the students will refrain from using the device for anything beyond the support of the classroom learning process.

Please silence cell phones and other non-essential electronic devices.

References and Supplemental Readings:

Postings will be made on Blackboard Learn throughout the semester relative to specific categories of construction.

Emergencies:

For any emergency, call 911. If we hear an indoor fire alarm, we will evacuate the HAMP building to Purdue Mall outside the HAMP building or to the atrium of ARMS (during inclement weather). If we hear an outdoor emergency siren, or if we receive an emergency notification to shelter in place, we will proceed as follows. For a tornado, we will move to the basement of the HAMP building. For a civil disturbance, we will remain in the classroom or in an interior hallway.