

**PURDUE UNIVERSITY**  
REQUEST FOR ADDITION, EXPIRATION,  
OR REVISION OF AN UNDERGRADUATE COURSE  
(10000-40000 LEVEL)

*EFD 22-10*

DEPARTMENT Division of Construction Engineering and Management EFFECTIVE SESSION: Spring 2010 (201020) 2011

**INSTRUCTIONS:** Please check the items below which describe the purpose of this request.

<input checked="" type="checkbox"/> 1. New course with supporting documents	<input type="checkbox"/> 7. Change in course attributes (department head signature only)
<input type="checkbox"/> 2. Add existing course offered at another campus	<input type="checkbox"/> 8. Change in instructional hours
<input type="checkbox"/> 3. Expiration of a course	<input type="checkbox"/> 9. Change in course description
<input type="checkbox"/> 4. Change in course number	<input type="checkbox"/> 10. Change in course requisites
<input type="checkbox"/> 5. Change in course title	<input type="checkbox"/> 11. Change in semesters offered (department head signature only)
<input type="checkbox"/> 6. Change in course credit/type	<input type="checkbox"/> 12. Transfer from one department to another

<b>PROPOSED:</b> Subject Abbreviation <u>CEM</u>	<b>EXISTING:</b> Subject Abbreviation _____	<b>TERMS OFFERED</b> Check All That Apply: <input type="checkbox"/> Summer <input checked="" type="checkbox"/> Fall <input type="checkbox"/> Spring
Course Number <u>32400</u>	Course Number _____	<b>CAMPUS(ES) INVOLVED</b>
Long Title <u>Human Resource Management in Construction</u>		<input type="checkbox"/> Calumet <input type="checkbox"/> N. Central <input type="checkbox"/> Cont Ed <input type="checkbox"/> Tech Statewide <input type="checkbox"/> Ft. Wayne <input checked="" type="checkbox"/> W. Lafayette <input type="checkbox"/> Indianapolis
Short Title <u>Human Resource Mgmt in Constr</u>		

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

<b>CREDIT TYPE</b>	<b>COURSE ATTRIBUTES:</b> Check All That Apply
1. Fixed Credit Cr. Hrs. <u>3.0</u>	1. Pass/Not Pass Only <input type="checkbox"/>
2. Variable Credit Range: Minimum Cr. Hrs. _____ (Check One) To <input type="checkbox"/> Or <input type="checkbox"/> Maximum Cr. Hrs. _____	2. Satisfactory/Unsatisfactory Only <input type="checkbox"/>
3. Equivalent Credit Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	3. Repeatable <input type="checkbox"/>
	4. Credit by Examination <input type="checkbox"/>
	5. Special Fees <input type="checkbox"/>
	6. Registration Approval Type <input type="checkbox"/>
	7. Variable Title <input type="checkbox"/>
	8. Honors <input type="checkbox"/>
	9. Full Time Privilege <input type="checkbox"/>
	10. Off Campus Experience <input type="checkbox"/>

Schedule Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated	Cross-Listed Courses
Lecture	50	3	16	100	
Recitation					
Presentation					
Laboratory					
Lab Prep					
Studio					
Distance					
Clinic					
Experiential					
Research					
Ind. Study					
Pract/Observ					

**COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):**

**Prerequisite:** CEM 29100 Construction Internship II

Introduce a broad set of fundamental topics regarding management of people in engineering and construction organizations in the U.S. Subjects include labor-management relations; worker motivation, productivity, and training; roles and practices of managers; construction safety; management of quality.

**\*COURSE LEARNING OUTCOMES**

Students will enhance communication skills and understand managerial aspects of the engineering and construction industry. Upon successful completion of this course, students will gain knowledge in:

- \* the background, principal laws and practices concerning labor-management relations for union and nonunion jobs.
- \* current management practices involving worker supply and demand, workforce training, EEO and workforce diversity, professional ethics and construction safety.
- \* how to become an effective manager in engineering and construction organizations.

Calumet Department Head _____ Date _____	Calumet School Dean _____ Date _____
Fort Wayne Department Head _____ Date _____	Fort Wayne School Dean _____ Date _____
Indianapolis Department Head _____ Date _____	Indianapolis School Dean _____ Date _____
North Central School Dean _____ Date _____	North Central Vice Chancellor for Academic Affairs _____ Date _____
West Lafayette Department Head _____ Date _____	West Lafayette College/School Dean _____ Date _____
	West Lafayette Registrar <i>[Signature]</i> _____ Date <u>9/26/10</u>

OFFICE OF THE REGISTRAR

*File ✓*  
*9-9-10 dtw*



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	4. Credit by Examination <input type="checkbox"/>
	5. Special Fees <input type="checkbox"/>
	6. Registration Approval Type Department <input checked="" type="checkbox"/> Instructor <input type="checkbox"/>
	7. Variable Title <input type="checkbox"/>
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Schedule Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated	Cross-Listed Courses
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Recitation	_____	_____	_____	_____	
Presentation	_____	_____	_____	_____	
Laboratory	_____	_____	_____	_____	
Lab Prep	_____	_____	_____	_____	
Studio	_____	_____	_____	_____	
Distance	_____	_____	_____	_____	
Clinic	_____	_____	_____	_____	
Experiential	_____	_____	_____	_____	
Research	_____	_____	_____	_____	
Ind. Study	_____	_____	_____	_____	
Pract/Observ	_____	_____	_____	_____	

**COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):**

**Prerequisite:** CEM 29100 Construction Internship II

Introduce a broad set of fundamental topics regarding management of people in engineering and construction organizations in the U.S. Subjects include labor-management relations; worker motivation, productivity, and training; roles and practices of managers; construction safety; management of quality.

**\*COURSE LEARNING OUTCOMES**

Students will enhance communication skills and understand managerial aspects of the engineering and construction industry.

Upon successful completion of this course, students will gain knowledge in:

- \* the background, principal laws and practices concerning labor-management relations for union and nonunion jobs.
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- \* how to become an effective manager in engineering and construction organizations.

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Fort Wayne Department Head _____	Date _____	Fort Wayne School Dean _____	Date _____
Indianapolis Department Head _____	Date _____	Indianapolis School Dean _____	Date _____
North Central School Dean _____	Date _____	North Central Vice Chancellor for Academic Affairs _____	Date _____
West Lafayette Department Head _____	Date <u>12/29/09</u>	West Lafayette College/School Dean _____	Date <u>4/10/10</u>
		West Lafayette Registrar _____	Date _____



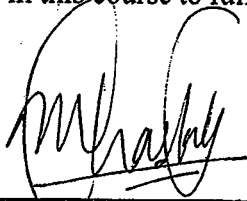
**TO:** The Faculty of the College of Engineering  
**FROM:** Division of Construction Engineering and Management  
**RE:** New Undergraduate Course CEM 32400  
Human Resource Management in Construction

The Faculty of the Division of Construction Engineering and Management (CEM) has approved the following new course listed below. This action is now submitted to the Engineering Faculty with recommendation for approval.

**CEM 32400 Human Resource Management in Construction**  
Sem. 1, Lecture 3, cr.3.  
Prerequisite: CEM 29100 - Construction Internship II and  
CEM 30100 - Project Control & Life Cycle Execution of Constructed Facilities  
or Department Permission

**Description:** Introduce a broad set of fundamental topics regarding management of people in engineering and construction organizations in the U.S. Subjects include labor-management relations (laws, regulations and practices affecting construction workers and organizations); worker motivation, productivity, and training; roles and practices of managers; construction safety; management of quality.

**Reason:** This course will be taught in fulfillment of the Construction Engineering (CNE) degree requirements and will serve as a key component of the Construction Engineering undergraduate curriculum. This course is being taught as CEM 49700 and will continue to be offered in the Fall semester. The syllabus for the proposed course is attached. CEM majors must enroll in this course to fulfill degree requirements.



Makarand Hastak, Professor and Head  
Division of Construction Engineering and Management

APPROVED FOR THE FACULTY  
OF THE SCHOOLS OF ENGINEERING  
BY THE ENGINEERING  
CURRICULUM COMMITTEE

ECC Minutes #21  
Date 3/30/10  
Chairman ECC R. Cipra



**CEM 497 -005: HUMAN RESOURCE MANAGEMENT IN CONSTRUCTION  
COURSE SYLLABUS, FALL 2009**

Class at 12:30-1:20 P.M. Civil 3153 Monday, Wednesday, Friday

Instructor: **Victor Gervais , P.E.**

Office: Rm. CIVL 1233 ; Ph: 494-0642; email: [vgervais@purdue.edu](mailto:vgervais@purdue.edu)

Office hours: by appointment, schedule on office door

Teaching Assistant: **Eun Ho (Daniel) Oh**

Office: Rm. CIVL 1255 ; Ph: 494-0696; Email: [oh@purdue.edu](mailto:oh@purdue.edu)

Office Hours: TBA

**A. COURSE DESCRIPTION, CEM 497 -005**

Introduce a broad set of fundamental topics regarding management of people in engineering and construction organizations in the U.S. Subjects include labor-management relations (laws, regulations and practices affecting construction workers and organizations); worker motivation, productivity, and training; roles and practices of managers; construction safety; management of quality.

**B. REQUIRED TEXTS**

1. Sloan, Arthur and Witney, Fred - Labor Relations, **13<sup>th</sup> Edition** (2010), Prentice Hall, Upper Saddle River, N.J.
2. Carpenter, Mason - Managing Effectively Through Tough Times, (2010), Prentice Hall, Upper Saddle River, N.J.
3. Kouzes, James and Posner, Barry – The Leadership Challenge, **4<sup>th</sup> Edition** (2007), John Wiley, San Francisco, C.A.

Note: Textbooks 1 and 2 are bundled together for a single price.

**C. Supplementary References**

1. Mincks, William R. and Johnston, Hal, **2<sup>nd</sup> Edition** (2004), Delmar Learning, Clifton Park, N.Y.

D. Vista Blackboard section CEM 497-005 is set up for this course. Lecture notes are available there.

**E. OBJECTIVES FOR THE COURSE**

1. Understand managerial aspects of the engineering and construction industry.
2. Know the background and the principal laws and practices concerning labor-management relations for union and nonunion jobs.
3. Know current management practices involving worker supply and demand, workforce training, EEO and workforce diversity, professional ethics and construction safety.





4. Gain basic knowledge to help you become an effective manager in engineering and construction organizations.
5. Enhance communication skills.

#### F. STUDENT REQUIREMENTS -- ATTENDANCE AND CONDUCT

Attendance: Students are expected to be present for every meeting of class. In CEM 497 -005 attendance will be taken. You are expected to have **NO MORE THAN TWO UNEXCUSED ABSENCES**. Three unexcused absences will result in a course grade reduction of one letter grade. Four unexcused absences will result in a grade of "F" or "I".

**You must request my approval in advance for any excused absence from class**, except in case of a bona fide emergency. To gain approval for an excused absence, submit to me a written or e-mailed memorandum. The request should state the day of and the reason for the absence and attach any supporting information. If you will be absent, you must arrange to obtain any handouts distributed in class on the day of absence.

Quizzes, team assignments, exams and other graded work, which is missed due to unexcused absence, cannot be made up.

#### G. GRADING

	<u>Percentage</u>
Homework	15
Quizzes	15
Exam I	20
Exam II	20
Exam III	20
Leadership Project	10
<b>TOTAL</b>	<b>100</b>

Grade requirements:

A = 90 and above  
 80 <= B < 90  
 70 <= C < 80  
 60 <= D < 70  
 F < 60

#### H. LEADERSHIP PROJECT

Teams will be assigned to represent management.

Teams will be assigned to represent the a Local of an International Union.



Each management team and each Local negotiating committee will negotiate a project collective bargaining agreement.

## I. HOMEWORK

**Timeliness:** Homework is due at the beginning of class on the date due. Late homework not turned in by class period but by 5:00 p.m. that same day will receive up to 80 percent of the assigned value. Homework turned in within three class days of the due date will be further devalued at 10 percent per day. Homework more than three days late will receive a maximum of 50 percent of assigned value. Homework will be given a zero after 1 week.

**Formats:** A written homework paper must constitute an independent, "stand-alone" document when submitted. A statement of the problem or question should appear first, followed by the student's complete response or answer. Properly written homework papers can be read by a third party, for analysis or grading, without reference to any text, assignment sheet or other information. Paper torn from spiral-bound notebooks will not be accepted at any time.

\* Essay-type papers: see Attachment A.

\* Point Papers: see Attachment B.

**Word processing:** Students are expected to be competent at word processing, including spell-checks. Thorough proofreading of each hand-in assignment is expected.

**References:** Your written work, where not your original work, must be referenced. Example of a CORRECT reference:

"...the Court concluded, 'We think there is no question that the charges were adequately supported.' [Boilermakers vs. Hardeman, 123 U.S. 516 (1971)]" (1)

References:

(1) Mills, Daniel Q. (1994) Labor-Management Relations, McGraw-Hill, New York, NY.  
p. 193.

Example of an incorrect reference: "...according to the text, the charges were adequately supported."



**ATTACHMENT A. FORMAT FOR ESSAY-TYPE WRITTEN ASSIGNMENTS,  
CEM 497 -005**

Written, essay-type assignments will be submitted with a memorandum heading. This format is commonly practiced in the engineering and construction industry. Use the format below in this course.

**MEMORANDUM**

**TO:** Victor P. Gervais  
**FROM:** Constant A. Lerner, CEM 497 -005 (initialed)  
**DATE:** November 15, 2009  
**SUBJECT:** Current Events in Construction Labor Activities

**ALWAYS STATE THE QUESTION OR PROBLEM FIRST.**

The **SUBJECT** statement (above) should be concise – use the fewest words needed to identify the subject clearly.

The student should format the body of the memorandum (the essay) according to good writing practice and to the nature of the subject and the problem statement. Avoid the common error of excessively lengthy paragraphs.

For most essay assignments, a summary and conclusion paragraph is appropriate and necessary.

To produce a written essay of the best quality, I encourage you to ask someone to review your draft or proposed final text and recommend improvements. From a “second set of eyes” you can improve the content, analysis, and logic of your writing, as well as your presentation (grammar, syntax, etc.)



## **ATTACHMENT B. POINT PAPERS**

The Point Paper is used for a specific purpose: to convey concisely (always one page in this course) the facts and the writer's conclusion about a single issue or topic. Usually the Point Paper is a condensation of considerably more information and analysis known by the writer. It provides a means of communicating to the busy reader a credible, logically supported conclusion with concise supporting background and rationale.

The format for Point Papers in this course follows:

SUBJECT: Format for Point Papers  
FROM: Constant A. Lerner (initialed)  
DATE: November 15, 2009

### **BACKGROUND**

- "Bullet format" (very short sentences, one thought per point) is used in a Point Paper.
- Background includes all salient facts necessary for understanding the issue.
- Writer provides the most efficient written communication possible; no relevant facts are omitted, no excessive words are used.
- Background normally requires 1/4 to 1/3 page.

### **DISCUSSION**

- Discussion provides writer's analysis of the facts.
- A cogent, logical series of concise observations that support the conclusion should be provided.
- Discussion normally requires 1/3 to 1/2 page.
- After Conclusion is written, check that it is fully supported in Discussion.

### **CONCLUSION(S)**

- Normally a single subject; rarely more than one sentence.
- More than one line may be used if more than one independent conclusion is appropriate.

### **RECOMMENDATION**

- For CEM 497 -005, normally NO "Recommendation" will be appropriate.
- In "Real world" Point Papers, a "Recommendation" is essential.





<b>WEEK</b>	<b>LECTURE TOPIC</b>	<b>ASSIGNED READINGS/IMPORTANT DATES</b>
<b>WEEK 1</b>	Course introduction & administration Organized labor, U.S. industrial relations system	Sloane & Whitney  Chapter 1
<b>WEEK 2</b>	History of Unions Introduction to labor law	Chapter 2,3
<b>WEEK 3</b>	Union structure Union organization, NLRB	Chapter 3,4 <b>Quiz 1</b>
<b>WEEK 4</b>	Labor contracts  Collective bargaining	Chapter 5 Labor-Management Relations (PDF)
<b>WEEK 5</b>	Grievances, arbitration Workforce motivation & incentives	Chapter 6 <b>Quiz 2</b>
<b>WEEK 6</b>	Workforce motivation	<b>EXAM 1</b>
<b>WEEK 7</b>	Nonunion employers, wages, benefits	Chapter 7 Making Davis-Bacon Work (PDF)
<b>WEEK 8</b>	Benefits and administrating the agreement	Chapter 8,9 <b>Quiz 3</b>
<b>WEEK 9</b>	Collective Bargaining Exercise (Leadership Project)	
<b>WEEK 10</b>	Diversity, Hiring rules	Chapter 10
<b>WEEK 11</b>	Leadership, management skills	Kouzes & Posner Chapter 1 - 4 <b>Quiz 4</b>
<b>WEEK 12</b>	Leadership, management skills	Chapter 5 - 9 <b>EXAM 2</b>
<b>WEEK 13</b>	Leadership, management skills	Chapter 10 - 13
<b>WEEK 14</b>	Management of Construction safety	Safety and Health Instructional Module (PDF) <b>Quiz 5</b>
<b>WEEK 15</b>	Quality Management in construction	
<b>WEEK 16</b>	Guest Speaker (Construction CEO) Ethics in engineering	Ethics Handout (PDF)

