

Washtenaw Community College Comprehensive Report

CMG 150 Introduction to Construction Management Effective Term: Fall 2022

Course Cover

College: Advanced Technologies and Public Service Careers

Division: Advanced Technologies and Public Service Careers

Department: Heating, Ventilation and A/C

Discipline: Construction Management

Course Number: 150

Org Number: 14750

Full Course Title: Introduction to Construction Management

Transcript Title: Intro to Const Management

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission:

Change Information:

Objectives/Evaluation

Rationale: Course needs to be approved and in the system to be properly assessed

Proposed Start Semester: Fall 2022

Course Description: In this course students will learn basic concepts of construction site management. The course will focus on effective project development, planning, and scheduling. Topics will include site development, material usage and specifications, cost estimates and management, contract compliance, and task scheduling.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 45 **Student:** 45

Lab: Instructor: 0 **Student:** 0

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 45 **Student:** 45

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

No Level Required

Requisites

Prerequisite

Academic Reading and Writing Levels of 6

General Education

Request Course Transfer

Proposed For:

Eastern Michigan University
Ferris State University
Grand Valley State University
Jackson Community College
Lawrence Tech
Michigan State University
Oakland University
University of Detroit - Mercy
University of Michigan
Wayne State University
Western Michigan University

Student Learning Outcomes

1. Recognize methods, materials and equipment used by subcontractors.

Assessment 1

Assessment Tool: Outcome-related exam questions
Assessment Date: Winter 2022
Assessment Cycle: Every Three Years
Course section(s)/other population: All
Number students to be assessed: All
How the assessment will be scored: Answer key
Standard of success to be used for this assessment: 75% of students will score 80% or higher
Who will score and analyze the data: Departmental faculty

2. Work with a team to develop a construction job portfolio.

Assessment 1

Assessment Tool: Portfolio
Assessment Date: Winter 2022
Assessment Cycle: Every Three Years
Course section(s)/other population: All
Number students to be assessed: All
How the assessment will be scored: Departmentally-developed rubric
Standard of success to be used for this assessment: 75% of students will score 80% or higher
Who will score and analyze the data: Departmental faculty

3. List and describe construction documents.

Assessment 1

Assessment Tool: Outcome-related multiple-choice and short-answer exam questions
Assessment Date: Winter 2022
Assessment Cycle: Every Three Years
Course section(s)/other population: All
Number students to be assessed: All
How the assessment will be scored: Departmentally-developed rubric and answer key
Standard of success to be used for this assessment: 75% of students will score 80% or higher
Who will score and analyze the data: Departmental faculty

Course Objectives

1. Establish a contract between a client and a builder.
2. Explain different construction deliverables.
3. Establish job site requirements.
4. Estimate the required quantity of construction materials.

5. Identify items on a critical path schedule.
6. Identify methods of controlling construction costs.
7. Identify materials needed on a construction project.
8. Identify the equipment needed on a construction project.
9. Organize each task of a construction project into a detailed schedule.
10. Describe construction close out procedures.
11. Determine construction quality required per contract.
12. List construction documents used on site.
13. Describe construction sustainability.
14. Define construction contractual terms.
15. Differentiate between construction and any other industry.
16. Describe time saving techniques used in construction.
17. Define types of submittals.
18. Identify types of construction changes.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Level III classroom
Computer workstations/lab

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Cristy Lindemann</i>	<i>Faculty Preparer</i>	<i>Aug 14, 2019</i>
Department Chair/Area Director: <i>Brian Martindale</i>	<i>Recommend Approval</i>	<i>Aug 24, 2019</i>
Dean: <i>Brandon Tucker</i>	<i>Recommend Approval</i>	<i>Aug 29, 2019</i>
Curriculum Committee Chair: <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Feb 22, 2022</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Feb 23, 2022</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Feb 23, 2022</i>

COURSE AND SYLLABUS FORM

Syllabus Cover Sheet

Course Discipline Code & No: CMG 150 Title: Intro. to Construction Management Effective Term W04

Division Code: HAT Department Code: CIND Org #: 14725

Don't publish: College Catalog Time Schedule Web Page

Reason for Submission. Check all that apply.

New course approval Minor change (Corrections, editing, clarification)

Five-year syllabus review (Attach assessment results.) Reactivation of inactive course

Major change Inactivation (Submit this page only.)

Change information:

Minor changes

Course discipline code & number (was _____) (when changing course number, select "inactivation" to discontinue the old course.)

Course title (was _____)

Course description

Course objectives (minor changes)

Major changes (reviewed by Curriculum Committee.)

Credit hours (credits were: 2)

Total Contact Hours (total contact hours were: _____)

Distribution of contact hours (contact hours were: lecture: _____ lab _____ clinical _____ other _____)

Pre or co-requisites

Distance Learning section approval

General Education Distribution Course: Add Remove

Honors section approval

Change in Grading Method

Objectives

Other _____

For major changes, consultation with all departments affected by this course is required. Attach "course use in programs" report from Curriculum Database for Faculty.

Rationale for course or course change

1. **Assessment-based:**

2. **Non-assessment-based:** To bring this course into the same instructional contact and credit hours as the other three courses.

Approvals Department and divisional signatures indicate that all departments affected by the course have been consulted.

Department Review by Chairperson New resources needed All relevant departments consulted

Print: LE. PIERCE Signature: [Signature] Date: 01-03-04

Faculty/Preparer

Print: LE. PIERCE Signature: [Signature] Date: 01-07-04

Department Chair

Division Review by Dean Request for conditional approval

Recommendation Yes No _____

Dean's/Administrator's Signature _____ Date _____

Curriculum Committee Review

Recommendation _____

Tabled Yes No _____

Curriculum Committee Chair's Signature _____ Date _____

Vice President of Instruction Approval

Approval Yes No _____

Vice President's Signature [Signature] Date 1/12/04

Do not write in shaded area.

ACS Code _____ Entered in: Banner 1/12 C&A Database 1/12 Log File 1/12/04 fm

Approved for General Education Area/Group _____ Syllabus Date _____ Basic skills table updated

Contact fee

Please return completed form to the Office of Curriculum & Articulation Services.

... AND SYLLABUS FORM

Course Discipline & No.: _____ Title: _____

Credit hours: <u> 3 </u> If variable credit, give range: _____ to _____ credits	Instructor contact hours per semester: Lecture: <u> 30 </u> Lab: <u> 15 </u> Clinical: _____ Practicum: _____ Other: _____ Total contact hours: <u> 45 </u>	Class capacity: _____ Standard capacity is 30 students unless otherwise specified in the Master Agreement.	Grading options: <input type="checkbox"/> P/NP (limited to clinical & practica) <input type="checkbox"/> S/U (for courses numbered below 100) <input checked="" type="checkbox"/> Letter grades
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Prerequisites. Select one: <input checked="" type="checkbox"/> College-level Reading & Writing <input type="checkbox"/> Reduced Reading/Writing Scores COMPASS Reading _____ COMPASS Writing _____ <input type="checkbox"/> No Basic Skills Prerequisite (College-level Reading and Writing is <u>not</u> required.) Corequisites (<u>must</u> be enrolled in this class also during the same semester): _____ _____	In addition to Basic Skills in Reading/Writing: Level I (enforced in Banner) <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Course/Test</th> <th style="text-align: center;">Grade/Score</th> <th style="text-align: center;">Concurrent Enrollment</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">_____ MTH 169</td> <td style="text-align: center;">_____</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> and <input checked="" type="checkbox"/> or _____ COMP ALG</td> <td style="text-align: center;">66</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> and <input type="checkbox"/> or _____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> and <input type="checkbox"/> or _____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table> Level II (enforced by instructor on first day of class) <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Course</th> <th style="text-align: center;">Grade/Score</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> and <input type="checkbox"/> or _____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> and <input type="checkbox"/> or _____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> and <input type="checkbox"/> or _____</td> <td style="text-align: center;">_____</td> </tr> </tbody> </table>	Course/Test	Grade/Score	Concurrent Enrollment	_____ MTH 169	_____	<input type="checkbox"/>	<input type="checkbox"/> and <input checked="" type="checkbox"/> or _____ COMP ALG	66	<input type="checkbox"/>	<input type="checkbox"/> and <input type="checkbox"/> or _____	_____	<input type="checkbox"/>	<input type="checkbox"/> and <input type="checkbox"/> or _____	_____	<input type="checkbox"/>	Course	Grade/Score	_____	_____	<input type="checkbox"/> and <input type="checkbox"/> or _____	_____	<input type="checkbox"/> and <input type="checkbox"/> or _____	_____	<input type="checkbox"/> and <input type="checkbox"/> or _____	_____
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Enrollment restrictions (In addition to prerequisites, if applicable.) <input type="checkbox"/> and <input type="checkbox"/> or <input type="checkbox"/> Instructor consent required <input type="checkbox"/> and <input type="checkbox"/> or <input type="checkbox"/> Admission to program required Program _____ <input type="checkbox"/> and <input type="checkbox"/> or <input type="checkbox"/> Other (please specify): _____	Please send syllabus for transfer evaluation to: <input type="checkbox"/> EMU <input type="checkbox"/> UM <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	Instructional mode <input type="checkbox"/> On campus <input type="checkbox"/> Online <input type="checkbox"/> Blended (online and on-campus combined) <input type="checkbox"/> ITV <input type="checkbox"/> Other
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Course Options General Education Group I (Select one area) <input type="checkbox"/> Writing <input type="checkbox"/> Nat. Sci. <input type="checkbox"/> Speech <input type="checkbox"/> Soc./Behav/ Sci. <input type="checkbox"/> Math <input type="checkbox"/> Arts/Hum. Courses must meet all criteria. <input type="checkbox"/> 1. Is a standard introductory course in the discipline <input type="checkbox"/> 2. Has a verified transfer acceptance <input type="checkbox"/> 3. Meets the critical thinking requirement <input type="checkbox"/> 4. Assesses academic achievement <input type="checkbox"/> 5. Covers minimum knowledge/skills	Honors section. Not all criteria are required. Check relevant items. <input type="checkbox"/> 1. Emphasis on primary source materials <input type="checkbox"/> 2. Emphasis on independent study/research <input type="checkbox"/> 3. Greater rigor of course materials <input type="checkbox"/> 4. Interdisciplinary approach <input type="checkbox"/> 5. Development of critical thinking skills <input type="checkbox"/> 6. Additional course objectives <input type="checkbox"/> 7. Additional instructional methods <input type="checkbox"/> 8. Satisfaction of the service component
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List all new resources needed for course, including library materials.

**WASHTENAW COMMUNITY COLLEGE
COURSE-SYLLABUS APPROVAL FORM (CSAF)**

CMG 150

SECTION III. COURSE SYLLABUS

A. COURSE DETAILS

Discipline & No.: CMG 150 **Title:** Introduction to Construction Management

1. Description:

This course covers an introduction to developing, planning, and scheduling construction projects. Additional topics include: site development, material usage, specifications, estimating and managing cost control.

2. Credit Hours: <u> 2 </u> If Variable credit. Give Range: _____ to _____ credits If repeatable for credit, how many times _____	3. Contact Hours per Semester: Lecture: <u> 30 </u> Lab: _____ Clinical: _____ Other: _____ Total Contact Hours: <u> 30 </u>	4. Class Capacity: <u> 24 </u>	5. Course Options: <input type="checkbox"/> Distance learning <input type="checkbox"/> Honors <input type="checkbox"/> P/NP Grading
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6. Prerequisite(s) and/or "C" Course	Min Grade	*Concurrent Enrollment	Test Name	Min. Score	**Level "I" "II"	Other Prerequisites
<input type="checkbox"/> _____	_____	<input type="checkbox"/>	_____	_____	<input type="checkbox"/> <input type="checkbox"/>	_____
<input checked="" type="checkbox"/> _____	_____	<input type="checkbox"/>	COMPASS Algebra=66	_____	<input checked="" type="checkbox"/> <input type="checkbox"/>	_____
<input checked="" type="checkbox"/> _____	_____	<input type="checkbox"/>	College Level Reading	_____	<input checked="" type="checkbox"/> <input type="checkbox"/>	_____
<input checked="" type="checkbox"/> _____	_____	<input type="checkbox"/>	College Level Writing	_____	<input checked="" type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/> _____	_____	<input type="checkbox"/>	_____	_____	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/> _____	_____	<input type="checkbox"/>	_____	_____	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/> _____	_____	<input type="checkbox"/>	_____	_____	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/> _____	_____	<input type="checkbox"/>	_____	_____	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/> _____	_____	<input type="checkbox"/>	_____	_____	<input type="checkbox"/> <input type="checkbox"/>	_____

Consent Required

8. Course Purpose: <input checked="" type="checkbox"/> Program Requirement <input type="checkbox"/> General Education <input type="checkbox"/> Program Support <input type="checkbox"/> Basic Skills/Developmental <input checked="" type="checkbox"/> Transfer <input type="checkbox"/> Industry/Professional Dev <input type="checkbox"/> Enrichment	If a program requirement, specify the program(s) <u>Construction Project Management</u>	Please send syllabus for Transfer evaluation to: <input checked="" type="checkbox"/> EMU <input type="checkbox"/> UM <input checked="" type="checkbox"/> Ferris State <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	Accepted for transfer: <input type="checkbox"/> EMU <input type="checkbox"/> UM <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
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9. Terms Course will be offered:				Even years	Odd years
Terms	Session Length (e.g. 15 weeks, 1 st 7½ weeks, etc.)	Day	Even	only	only
<input checked="" type="checkbox"/> Fall	<u>10/15/71/2</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Winter	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Spr/Summer	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B. MAJOR INSTRUCTIONAL UNITS

1. Introduction to Construction
2. Types of Construction
3. Planning Construction Projects
4. Scheduling
5. Site Development
6. Materials and Their Uses

**WASHTENAW COMMUNITY COLLEGE
COURSE-SYLLABUS APPROVAL FORM (CSAF)**

CMG 150

SECTION I. SUBMISSION INFORMATION

1. Course:
Discipline/No: CMG 150 **Title:** Introduction to Construction Management **Start Term:** F02

Division Code: HAT Department Code: CIND Org #: 14725 Don't publish: in College Catalog
 in Time Schedule on Web Page

<p>2. Type of Approval:</p> <input type="checkbox"/> Full Approval <input checked="" type="checkbox"/> Conditional Approval <hr/> <input type="checkbox"/> This proposal previously received conditional approval for the term: _____	<p>3. Reason for Submission: This Course is being submitted for: (check all that apply)</p> <input checked="" type="checkbox"/> New Course Approval <input type="checkbox"/> Five-year Syllabus Review <input type="checkbox"/> No changes to course <input type="checkbox"/> Major Change(s) <input type="checkbox"/> Minor Change(s)* <input type="checkbox"/> Reactivation of Inactive Course <input type="checkbox"/> Inactivation
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*If requesting a change to a course that has conditional approval, please submit a complete syllabus.

4. Change Information:

<p>Minor Changes</p> <input type="checkbox"/> Course Discipline/Number (was _____) <input type="checkbox"/> Course Title (was _____) <input type="checkbox"/> Course Description <input type="checkbox"/> Class Capacity (was: ____) <input type="checkbox"/> Pre or Co-requisites <input type="checkbox"/> Course Objectives (minor changes) <input type="checkbox"/> Distribution of Contact Hours (contact hours were: lect: _____ lab _____ clin _____ other _____) <input type="checkbox"/> Other _____	<p>Major Changes</p> <input type="checkbox"/> Credit hours (credits were: _____) <input type="checkbox"/> Change in Grading Method <input type="checkbox"/> Total Contact Hours (total contact hours were: _____) <input type="checkbox"/> Approval for offering an Honors Section <input type="checkbox"/> Approval for offering Distance Learning Sections <input type="checkbox"/> General Education Distribution Course: Add <input type="checkbox"/> Remove <input type="checkbox"/> <input type="checkbox"/> Pre or Co-requisites (that affect other departments)
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5. Rationale Changes are being made in response to data from Assessment: yes no
 This course is designed to meet the needs of ACCE accreditation and transfer requirements for Baccalaureate programs.

SECTION II. SIGNATURES

1. Department Review

Will any new resources be required? No, none anticipated Yes
 You must consult all departments that may be affected by this course. List departments contacted below and attach relevant documents.
Residential Construction and the Business Division

Does the department support approval of this course? yes no

Print: Patricia Crider Faculty/Preparer Signature: Patricia Crider Date: 3-26-02

Print: Patricia Crider Department Chair Signature: Patricia Crider Date: 3-26-02

2. Division Review

Is this a curricular priority for your division? yes no (Comment _____)

What is the estimated enrollment? 25-50 per year

Recommendation Yes No [Signature]
 Dean's Signature Date: 3/27/02

3. Curriculum Committee Review

Recommendation Yes No _____
 Curriculum Committee Chair's Signature Date

4. Vice President for Instruction and Student Services Approval

Approval Yes No _____
 Executive Vice President's Signature Date: 4/10/02

ACS Code _____ Entered in Banner: 4/19/02 jr Entered in Access: 4/19/02 jr Log File: 4/19/02 jr
 Approved for General Education Area/Group _____ Syllabus Date _____

Title: **Introduction to Construction Management**

Course Description:

This course covers an introduction to developing, planning, and scheduling construction projects additional topics include: Site developments, material usage, specifications, estimating, and managing cost control.

Outline:

- I. Introduction to Construction
- II. Types of Construction
- III. Planning Construction Projects
- IV. Scheduling
- V. Site Development
- VI. Materials and their Uses
- VII. Construction Specifications
- VIII. Introduction to estimating
- IX. Managing Cost Control