

# Hudson County Community College

## Project Planning & Control, CNM 230

**Course:** CNM – 230

**Course Title:** Project Planning & Control

**Credits:** 3

**Instructor:**

**Day(s) and Time (s):**

**Location**

**Office Hours:**

**Office Location:**

**Email:**

**Course Description:** This is a core course for the students who intend to pursue a career in Construction Management or in the field of Civil Engineering. This course develops an understanding to manage a construction project and students learn the application of techniques that are utilized to manage a construction project. Course provides an opportunity to the students to learn most effective tools available in the construction industry for efficient way of utilizing available resources.

**Homework:** Homework assignments are given every week.

**Course Prerequisite:** CSC – 100, ENG - 103

### **Student Learning**

#### **Outcome:**

Upon completion of this course you should be able to:

- Apply different methods of planning and scheduling for a construction project
- Develop project schedules
- Select the appropriate scheduling technique for a project
- Estimate risk for a construction project

**Instructor will provide access to open source material.**

## Lectures will be uploaded on the Canvas

**Text Book:** “Construction Project Management” 6<sup>th</sup> Edition, Publisher McCraw Hill

**Author(s):** [S. Keoki Sears](#) (Author), [Glenn A. Sears](#) (Author), [Richard H. Clough](#) (Author), [Jerald L. Rounds](#) (Author), [Robert O. Segner](#)

**ISBN#:** 978-1118745052

**Book Purchase:** These are the reference books only and will not be recommended to purchase; class notes and assignments will prepare the students to fulfill the intent of the course. Any student who has true financial need is eligible to apply for a book scholarship through the Office of the Dean of Students located at 70 Sip Avenue.

**Attendance:** The college policy is generally that a student may fail a course due to lack of attendance if s/he missed more than 6 hours of instructional time for a 3-credit course.

<b>Grading Policy:</b>	Final Exam	40 points
	Midterm	30 points
	HomeWorks	10 points
	Attendance	10 points
	Class Participation	10 points

You are required to attend all classes even if you get A in first two tests.

### Breakdown of Grading:

100 - 94 = A	69 - 64 = C+
93 - 90 = A-	63 - 54 = C
89 - 84 = B+	53 - 50 = D
83 - 75 = B	Below 50 = F
74 - 70 = B-	

### Cell Phone Use Policy:

Cell phones should be on manner mode. In case of emergency, notify me and then leave. Leaving classroom for non-emergency calls will result a zero grade in one test. **NO texting during lectures or exams!** Cell phones may NOT be used during exams

### Mandatory Use of

**HCCC Email Address:** Members of the HCCC community are required to check their official HCCC email address in order to stay current with College and course communications. All college business communication

between faculty, students, and staff must be sent via an official HCCC email address. If an employer or student elects to forward or link his/her HCCC email to a separate and private account, that individual remains responsible for all material transmitted to that account. Employees of HCCC shall not be responsible for any material that remains undelivered, due to defects in the private non-HCCC accounts. Failure in the operations of private email accounts shall not be cause for excuse from communications between the students and the employee. Students that encounter difficulty with HCCC email should view the FAQ's section on the Portal.

**Incomplete:**

An INCOMPLETE grade for the course is given under specific conditions when a student, because of serious and unexpected reasons, cannot complete the requirements of the course. For example, if a student did not attend the final because of illness his or her excuse must be verified by a physician. Other absences from other assigned activities must be made up at another appointed time. To arrange for an incomplete grade, the student must see the instructor before final exam, so proper documentations could establish and submitted to Division and The office of Academic Affairs.

**Disability Support Services:**

Students with disabilities who believe that they might need accommodations in this class are encouraged to contact Disability Support Services at (201) 360-4157, as soon as possible to better ensure that such accommodations are implemented in a timely fashion. All disabilities must be documented by a qualified professional such as a Physician, Licensed Learning Disabilities Teacher Consultant (LDTC), Psychiatrist, Psychologist, Psychiatric Nurse, Licensed Social Worker or Licensed Professional Counselor, who is qualified to assess the disability that the student claims to have and make recommendations on accommodations for the student. All information provided to the Disability Support Services Program will be confidential between the program, professors involved with the student, and individual student.

**Academic Integrity Standards:**

Academic integrity is central to pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students earn college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

**Violations of the principals of academic integrity include:**

- Cheating on exams
- Reporting false research data or experimental results

- Allowing other students to copy one's work to submit to instructors
- Communicating the contents of an exam to other students who will be taking the same test
- Submitting the same project in more than one course, without discussing this first with instructor
- Submitting *plagiarized* work. *Plagiarism* is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work.

**Violation of Academic Integrity:**

When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Student who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. In some cases, serious or repeated instances of academic integrity violations may warrant further disciplinary action.

Detailed information on the College's Academic Integrity policy may be found in the *HCCC Student Handbook*. The handbook also contains useful information for students on completing research projects and avoiding plagiarism.

## Classroom Recording Policy at HCCC

### Student Classroom Recording Policy

- Hudson County Community College prohibits the audio-visual recording, transmission, and distribution of classroom sessions. Classes may only be recorded with the advance written permission of the instructor. The Hudson County Community College classroom recording policy must be listed in all syllabi.
- All classroom recordings can only be used for academic purposes by students enrolled in that class. Recordings may not be shared, reproduced, or uploaded to public websites or other mediums, and these recordings may contain copyrighted material and are prohibited from any form of commercial use.
- All students and guests must be informed that the class may be recorded. Due to issues related to privacy and the possible inhibition of student participation, instructors should be mindful of the effects of permitting classroom recording.
- Instructors should retain electronic or paper copies of their written consent to grant classroom recordings.
- Students must destroy their recordings at the end of the semester.
- Students who are granted permission to record their class by the office of Disability Support Services should inform the instructor beforehand and are subject to the policies outlined in this document.

- Violation of this policy is subject to disciplinary action listed under the code of conduct as included in the Student Handbook.

### **Instructor Classroom Recording Policy**

- Instructors may record their classes if students are informed in writing in advance that recording will take place. Instructors may distribute their own lectures, but this must be limited to the lecture portion of the class. Recordings of student presentations or activities may be used in the class if the students are notified in advance of the recording. Recordings of student presentations or activities may not be distributed in any way without the advance written consent of the students.

Successful people access support from others when needed. Hudson County Community College has many supportive services available to help you meet your goals. You are encouraged to contact your instructors or other professionals on campus. Below are resources available to you.

**IN AN EMERGENCY, PLEASE CONTACT SECURITY or 911.**

	Journal Square Campus	North Hudson Campus
<u>Counseling Services</u> <a href="mailto:counseling@hccc.edu">counseling@hccc.edu</a>	201-360-4150 A Building, Floor 2 <a href="https://myhudson.hccc.edu/advisement">https://myhudson.hccc.edu/advisement</a>	201-360-4150 Enrollment Center, Floor 1 <a href="https://myhudson.hccc.edu/advisement">https://myhudson.hccc.edu/advisement</a>
<b>The National Suicide Prevention Lifeline: 1-800-273-8255</b> <b>Crisis Text Line: Text HELLO to 741-741</b>		
<u>Advising Services</u> <a href="mailto:advising@live.hccc.edu">advising@live.hccc.edu</a>	201-360-4150 A Building, Floor 2 <a href="https://myhudson.hccc.edu/advisement">https://myhudson.hccc.edu/advisement</a>	201-360-4150 Enrollment Center, Floor 1 <a href="https://myhudson.hccc.edu/advisement">https://myhudson.hccc.edu/advisement</a>
<u>Career Development</u> <a href="mailto:career@hccc.edu">career@hccc.edu</a>	201-360-4181 A Building, Floor 3 <a href="https://myhudson.hccc.edu/career-development">https://myhudson.hccc.edu/career-development</a>	201-360-4181 Floor 2, Room 204 <a href="https://myhudson.hccc.edu/career-development">https://myhudson.hccc.edu/career-development</a>
<u>Disability Support Services</u> <a href="mailto:dss@hccc.edu">dss@hccc.edu</a>	201-360-4157/4163 A Building, Floor 2 <a href="https://myhudson.hccc.edu/dss">https://myhudson.hccc.edu/dss</a>	201-360-4157/4163 Enrollment Services, Floor 1 <a href="https://myhudson.hccc.edu/dss">https://myhudson.hccc.edu/dss</a>
<u>Library</u> Journal Square <a href="mailto:librarian@hccc.edu">librarian@hccc.edu</a> North Hudson <a href="mailto:librarynhc@hccc.edu">librarynhc@hccc.edu</a>	201-360-4360 L Building, Floor 1 <a href="http://www.hccclibrary.net/">http://www.hccclibrary.net/</a>	201-360-4605 Floor 3 <a href="http://www.hccclibrary.net/">http://www.hccclibrary.net/</a>
<u>Tutoring Center</u> <a href="mailto:tc@hccc.edu">tc@hccc.edu</a>	201-360-4187 Lower Level of Library Building <a href="https://myhudson.hccc.edu/tutoring">https://myhudson.hccc.edu/tutoring</a>	201-360-4623 Floor 5, Room 511 <a href="https://myhudson.hccc.edu/tutoring">https://myhudson.hccc.edu/tutoring</a>
<u>Writing Center</u> <a href="mailto:wc@hccc.edu">wc@hccc.edu</a>	201-360-4370 J Building, Room 204 <a href="https://myhudson.hccc.edu/tutoring">https://myhudson.hccc.edu/tutoring</a>	201-360-4779 Floor 7, Room 703A <a href="https://myhudson.hccc.edu/tutoring/">https://myhudson.hccc.edu/tutoring/</a>

# Project, Planning & Control (CNM 230)

## *Tentative Course Schedule*

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1. **Introduction to the course**, grading policy, course requirements. Introduction to Project, Planning and Control concept in construction, project organization, importance of planning, scheduling and controls, work scope planning, work scope procurement options, work construction method statement, work scope integration planning, role of chief planner.
2. Brief discussion on the last lecture, general discussion on the mistakes identified in the submitted HW#1. Illustrative examples of the real-life project and conception application
3. **Define project activities**, WBS, activities identification, duration estimation, establishing the correlation between activities on basis of cost and quantities, fundamentals of CPM Network Analysis, PERT Network Modeling Analysis, PERT/CPM, plotting the cost time function, time crashing.
4. Brief discussion on the last lecture, general discussion on the mistakes identified in the submitted HW#2.
5. **Precedence Network Analysis** fundamentals, network development procedure, classification of network, guidelines for drawing precedence network, precedence network analysis Vs CPM, work scheduling fundamentals, Bar Chart Method for work scheduling of simple projects, resource scheduling consideration, schedule Hierarchy, HW#3
6. Numerical Problems to prepare Students for Mid-Term Test
7. **Midterm Test**
8. *General discussion on the Midterm Test, general discussion on the test.* **Planning Construction Materials**, material classification, wastage standard and provisioning process and inventory, inventory planning process, application of Value Engineering in procurement materials, classification of major equipment, Earth excavating, cutting and hauling equipment, earth compaction and grading equipment, concrete plant, cranes for material handling, task cost and engineering consideration.

9.                   **Planning Construction Cost & Budget Allocation**  
Method of estimating project cost, planning resources unit rate, planning work package standard cost and earned value of work package, project Time-Phase Baseline development, cost control approach & project direct and indirect cost control, budget cost control, earned value management system.
10.                   Relationship of construction management with construction engineering, Common issues of construction management, general discussion on HW#4
11.                   **Time progress monitoring methods**, risk analysis, time reduction techniques, critical project chain management, guideline for reviewing time progress, risk definition, project risk management strategy development, risk identification and assessment approach, quantifying the risk, risk mitigation and allocation, human side of risk management, benefits of managing project risk
12.                   Metropolitan Avenue Bridge over English Kills Construction, steps from project inception to completion, problems encountered and their resolution. General discussion on HW#5
13.                   **Importance of information in project context**, software use in PMIS, benefit of project information system, tools and techniques used in PMIS, project document management,
14.                   **Course Review**
15.                   **Final Test**