Construction Management Department  
California State University, Chico  

CMGT 335 – Construction Equipment  
Course Syllabus - Holman

A. **Prerequisites**
   CMGT 330 – Principles of Soil Mechanics and Foundations

B. **Meeting Time & Location**
   CMGT 335-1     Class #3101   Monday  4:00 PM – 5:50 PM  Siskyou 120  
                   Wednesday  4:00 PM – 4:50 PM

C. **Instructor**
   Rich Holman  
   rholman@csuchico.edu  
   (530) 519-7424 (cell)  
   Office Hours:  Monday and Wednesday  2:00 PM – 3:50 PM  
   Office Location:  O’Connell Technology Center, Room 328  
   Office Phone:  530-898-5669 – recommend cell phone (see above)

D. **Catalog Description:**
   A study of the equipment used in the construction industry. Included are the types, capabilities, selection, purchase/lease/rent options and balancing of equipment.

E. **Course Learning Outcomes (CLO):**
   **Upon successful completion of this course, the student will:**
   1. Analyze methods, material, and equipment used to construct projects.
   2. Be able to balance a load and haul operation using the correct number of haul units and calculate the production rate.  **(Direct Assess: ACCE SLO #8)**
   3. Determine production rates using various types of equipment.
   4. Analyze a typical grade stake as related to construction surveying industry norms.  **(Direct Assess: ACCE-SLO #11)**
   5. Be able to calculate ownership costs (depreciation) as well as operating expenses such as fuel, oil, and grease usage.
   6. Be able to calculate safe rigging size for a given crane hoisting situation.  **(Reinforce: ACCE SLO #3)**

**Student Learning Outcomes (SLO):**
The American Council for Construction Education (ACCE) prescribes 20 Student Learning Outcomes (SLO) as Educational Objectives for an undergraduate degree program in Construction Management. For a list of these 20 SLOs visit the Chico State Department of Construction Managements website [www.csuchico.edu/cm](http://www.csuchico.edu/cm) and the SLO link under the ACCE Accreditation drop down menu.
The following SLOs are supported by this course in the form of I=Introduction, R=Reinforced, or DA= Direct Assessment:

- SLO 3 – Create a construction safety plan (R).
- SLO 8 – Analyze methods, materials, and equipment used to construct projects (DA).
- SLO 11 – Apply basic surveying techniques for construction layout and control (DA).

ACCE Assessment Mapping:

<table>
<thead>
<tr>
<th>SLO</th>
<th>CLO</th>
<th>Assessment Type / When</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2</td>
<td>Quiz Number 4</td>
<td>70% will earn 70% or better</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>Quiz Number 7</td>
<td>70% will earn 70% or better</td>
</tr>
</tbody>
</table>

F. **Course Resource Materials Requirements:**


G. **Course Requirements:**

**Honesty in the Classroom**
You are expected to be familiar with the University's policy on academic integrity. As such, there will be no tolerance for dishonesty, sharing of work, or copied work. Ethical standards as established by the university will be strictly upheld as defined in the University Catalog.

**Tobacco Products**
The use of any type of tobacco product (smokeless, chewable or otherwise) is not permitted in any building at California State University, Chico. If you chew tobacco products, please refrain during class time.

**Electronic Devices**
The use of phones, and other electronic devices (excluding laptops) is not permitted in class. If you must take a call (work or emergency), please EXIT the classroom before answering the call.

H. **Instructional Methods:**
This course is designed around the following methods of presenting material to the student:
1. Class discussions and assigned readings reinforced by in class quizzes
2. Assessment Quizzes
3. Cumulative Final Exam

I. **Assignments:**
Out of class work will be assigned on a regular basis. *Completed assignments will not be collected however solutions will be posted on Blackboard.*

**Readings**
Chapter reading assignments will be maintained on the 2 week look-ahead course schedule maintained on Blackboard.
Group Work
You are encouraged to study and work in groups, however all submitted work must be your own.

J. Assessments:
Assessments are the basis of determining your ability to create, analyze, apply, and understand the Course Learning Outcomes (CLO) and Student Learning Outcomes (SLO) provided by ACCE. Instructional target goals have been established (as noted above) and the results of the assessment in these areas will be used to determine the success of the student and instructor for this course.

Quizzes
There will be approximately 6-7 Quizzes. The quizzes will be given based upon the class discussion, assigned readings, and homework assignments.

There will be NO make-up quizzes, unless prior arrangements have been made.

Exams
There will be one cumulative final exam.

Participation, Attitude, and Attendance
A portion of your course grade will be based on participation, attitude and attendance.

K. Grading/Evaluation:
All point totals shown are approximate and subject to revision during the course of the semester.

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Quizzes - *</td>
<td>65%</td>
</tr>
<tr>
<td>Attendance</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

* - The lowest quiz grade will be eliminated for each student

Grades are generally assigned by the following distribution, although the professor reserves the right to modify the distribution.

\[
\begin{align*}
\text{A} &= 94 -100\% \text{ (Exceptional)} \\
\text{A} &= 90 - 93\% \text{ (Excellent)} \\
\text{B+} &= 87 - 89\% \text{ (Very Good)} \\
\text{B} &= 83 - 86\% \text{ (Good)} \\
\text{B-} &= 80 - 82\% \text{ (Adequate)} \\
\text{C+} &= 77 - 79\% \text{ (Above Average)} \\
\text{C} &= 73 - 76\% \text{ (Average)} \\
\text{C-} &= 70 - 72\% \text{ (Below Average)} \\
\text{D} &= 60 - 69\% \text{ (Inadequate)} \\
\text{F} &= < 60\% \text{ (Failing)}
\end{align*}
\]

L. Topical Outline
Refer to the 2-week look-ahead course schedule that will be updated on Blackboard each week.
M. University Policies and Campus Resources

Academic integrity
Students are expected to be familiar with the University's Academic Integrity Policy. Be familiar with the University's policy on academic honesty. I take this issue very seriously, and will not tolerate any form of dishonesty such as plagiarism or cheating. Your own commitment to learning, as evidenced by your enrollment at California State University, Chico, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Judicial Affairs. The policy on academic integrity and other resources related to student conduct can be found at: http://www.csuchico.edu/sjd/sja.shtml

Campus Policy in Compliance with the American Disabilities Act
If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Students with disabilities requesting accommodations must register with the ARC Office (Accessibility Resource Center).

Special accommodations for exams require ample notice to the testing office and must be submitted to the instructor well in advance of the exam date.

Student Computing
Computer labs for student use are available http://www.csuchico.edu/stcp located on the 1st floor of the Merriam Library Rm 116 and 450, Tehama Hall Rm.131 and the BMU Rm 301.

Student Learning Center
The mission of the Student Learning Center (SLC) is to provide services that will assist CSU, Chico students to become independent learners. The SLC prepares and supports students in their college course work by offering a variety of programs and resources to meet student needs. The SLC facilitates the academic transition and retention of students from high schools and community colleges by providing study strategy information, content subject tutoring, and supplemental instruction. The SLC is online at http://www.csuchico.edu/slc/. The University Writing Center has been combined with the Student Learning Center.

N. Other

This course will study the important units of construction equipment used in the industry. For each major equipment type, the distinguishing features, usage, size ranges, and analytical basis for estimating productive capability will be presented.
Disruptive Behavior

Students are required to adhere to the behavior standards articulated in the Campus Policies and Code of Student Conduct, and to refrain from disrupting classes and other academic settings. "Disruptive behavior" means conduct that materially and substantially interferes with or obstructs the teaching or learning process in the context of a classroom or educational setting. Disruptive behavior includes conduct that distracts or intimidates others in a manner that interferes with instructional activities, fails to adhere to an instructor's appropriate classroom rules or instructions, or interferes with the normal operations of the University.

Disruption in the classroom may include:

- Persistent speaking without permission
- Side conversations
- Excessive talking
- Engaging in activities not related to the class, or other overt inattentiveness including but not limited to sleeping, talking to others, doing work for another class, checking e-mail, and exploring the Internet
- Ringing cell phones or using a cell phone
- Using mobile devices or laptop computers in the classroom for non-course related purposes
- Eating/drinking in class without permission
- Monopolizing class discussion and refusing to defer to instructor, or listen to others; persisting when the instructor has indicated that the student's remarks are off topic and it is time to move on
- Chronically entering late/leaving early, moving about the classroom when not appropriate for the classroom activity
- Filming, photographing, or taping the class without the instructor's prior permission
- Disputing authority or arguing with faculty and other students
- Yelling, arguing, swearing, bullying, or other harassing or intimidating behavior
- Inappropriate, disrespectful, or uncivil responses to the comments, opinions, presentations, etc. of others in the classroom
- Physically or verbally abusive conduct
- Failure to adhere to the instructor's rules or instructions
- Vulgar or obscene language, slurs or other forms of intimidation
- Threats of any kind
- Improper use of equipment, materials or resources
- Destruction of property
- Coming to class under the influence of alcohol or another controlled substance
- Bringing individuals to class who are not enrolled, including infants/children
- Any behavior that puts the health or safety of the instructor or other students in the classroom in jeopardy