INSTRUCTOR INFORMATION

Instructor: Dr. Dan Baker
Email: dan.baker@colostate.edu
Office location: ENGR A207i
Office hours: Monday & Wednesday: 3:30-4:30pm

Teaching Assistants
TA: Christian Chavez  christian.chavez@rams.colostate.edu
TA: Ellen Bailey  ejbailey@rams.colostate.edu

SECTION INFORMATION

Section 001  Section 002  Section 801
Time: MWF 12-12:50pm  Time: T & Th 3:30-4:45pm  Time: Online
Location: Scott 101  Location: Engineering 100

Exam Times and Locations:

Exam  Date/Time  Campus Location
Exam 1  October 7, 5:00-6:50pm  Johnson 222
Exam 2  November 18, 5:00-6:50pm  Johnson 222
Final Exam – Section 001  Wednesday, December 16, 7:30-9:30am  Scott 101*
Final Exam – Section 002  Monday, December 14, 6:20-8:20p  Engineering 100*

* Any changes to these locations will be announced in class and on Canvas

COURSE MATERIALS

Website: https://canvas.colostate.edu/
All course materials presented in class will also be posted on the Canvas and Echo360 websites, including lecture recordings, reading and homework assignments, additional instructional materials, announcements, and more. If you need technical assistance with the Canvas either (1) visit the Canvas Student Resources page to troubleshoot common issues, (2) email help@colostate.edu or (3) call 970-491-7276.

Lecture Videos
The lecture videos for the course are posted every course day to CSU’s Echo360 Server at the website:
https://echo.colostate.edu/ess/portal/section/44846439-15f5-4f9a-8d77-fedcd20dfd43
Feel free to bookmark this website as it will stay constant. This will be the primary means for online students to view the lectures and a secondary opportunity for on-campus students to review or makeup lectures.
Textbook
The textbook for this course is:


Reading will be assigned daily to complement lectures. You are responsible for the assigned readings as well as for what is presented in lectures.

Calculators
Only FE permitted calculators will be allowed for use on Exams (for more information see [http://ncees.org/exams/calculator-policy/](http://ncees.org/exams/calculator-policy/)). No cell phones, laptops or any other electronic device may be used.

- **Casio**
  - All fx-115 models. Any Casio calculator must contain *fx-115* in its model name
- **Hewlett Packard**
  - The HP 33s and HP 35s models, but no others
- **Texas Instruments**
  - All TI-30X and TI-36X models. Any Texas Instruments calculator must contain either *TI-30X* or *TI-36X* in its model name

Overview
Statics is the branch of engineering mechanics that is concerned with the analysis of forces on physical systems in static equilibrium. It will also help you interpret the forces supporting objects we encounter in our daily lives. This is a 3 credit hour course. The expected workload outside of class is expected to be 3 hours for every credit hour, thus the weekly workload is \(3 + 9 = 12\) hours.

Upon completion of this course you will be able to:

- Understand the basic principles that govern the static equilibrium of bodies under the action of forces and
- Apply the knowledge and tools of statics to solve engineering problems.

You should also expect to:

- Take responsibility for your learning (1) read textbook on your own and (2) ask questions of yourself, your classmates, and your instructor,
- Turn in excellent assignments demonstrating your knowledge of the solution
- Tap into your existing intuition, strengths, and passion to learn statics
- Become an active participant in your statics education, taking full advantage of lectures, texts, homework, office hours and everyday life!

In this course you will be asked for your attention, hard work, and most of all respect. In return, I will endeavor to meet your academic needs, create an atmosphere of learning, and respect and appreciate you as individuals. This course will not be easy, but your efforts will be rewarded as positive feedback, representative grades, and the understanding of the engineering mechanics that are all around us.
ACADEMIC INTEGRITY

All students will turn in their own work, or face serious consequences. University rules including academic penalty and further investigation by the university authorities will be strictly enforced in this course. Please review the CSU Student Code for details regarding these rules.

I know that solutions manuals are available for many textbooks on the internet; copying from them will not only prevent you from learning anything from the homework, but also lose the trust of Dr. Baker, earn you no-credit on assignments, and possibly get you kicked out of class or even the university.

While copying of assignments is prohibited, I encourage you to work alongside your peers on homework assignments. The interaction of teaching and learning among a group is a powerful way to learn, but each student is responsible for doing and turning in their own assignments.

COURSE GRADING

Assignments and exams will be weighted as follows:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Exercises</td>
<td>10%</td>
</tr>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>2 Mid-term Exams (25% each)</td>
<td>50%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

Letter grades will be assigned on the traditional grade scale, i.e. A ≥ 90%, 80% ≤ B < 90%, 70% ≤ C < 80%, 60% ≤ D < 70%, and F < 60%, with pluses and minuses used as necessary, (A+, A-, B+, B-, C+ but no C-, D+, nor D-). Individual exams/assignments may be curved, but the class will not be curved overall. Your current weighted grade will always be available on Canvas.

Learning Exercises

Learning Exercises will bring active learning into this course. They will be given either in class or as a take-home assignment on an approximately weekly basis. Examples of learning exercise activities could include:

- Mastery learning quizzes via Canvas
- Write to learn (e.g. fuzziest point, define the process, short summaries) submitted to Canvas
- Responses to real world problems

For all students (on-campus and online), learning exercises will be posted to Canvas and are due two school days after they are first assigned. Hence, a learning exercise assigned at 3:30pm on a Thursday is due by 3:30pm on the following Monday. Your lowest learning assignment grade will be dropped.
Homework

- Homework assignments will be posted to Canvas on Fridays with the assignment due the following Friday by 1pm.
- Your lowest homework grade will be dropped.
- **No late homework assignments will be accepted without prior instructor approval.**

<table>
<thead>
<tr>
<th>Homework Grading Breakdown</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two problems thoroughly graded</td>
<td>0 through 8</td>
</tr>
<tr>
<td>Remaining problems checked for completeness</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

Your homework sets will meet the following guidelines (*the seven fingers of homework)*:

- **Paper**: Engineering, problems (max 2 per page) on one side.
- **Name**: Name, course #, and assignment written on every page.
- **Problem**: Define the problem, including a list of known / unknown parameters.
- **Sketch**: Sketch the object and/or a free body diagram (not an exact replica of image, instead focus on the appropriate dimensions, forces, and layout).
- **Work**: Show each step explicitly so that the grader can easily understand your work.
- **Answer**: Put a box around your answer and attach the correct units.
- **Clasp**: Staple the homework set before turning in.

Exams

There will be two midterm exams and a final. Exam material will be drawn from lectures and the textbook. Handwritten equation sheet(s) are allowed:

- **Midterms**: one (1) side of an 8.5” x 11” page
- **Final**: two (2) sides of an 8.5” x 11” page.

For students who cannot attend regular exams due to university related activities, serious illness, or family emergency (all with written proof), a makeup exam may be arranged. The instructor must be notified prior to the exam and no exceptions will be made without a legitimate reason and a timely arrangement.
**Holistic Grading**

The grading approach we will take in CIVE 260 on all homework sets and exams we call Holistic Grading. Essentially you’ll be graded on how close you came to (1) using the correct method, (2) showing all required work, (3) keeping work legible and organized, and finally (4) getting the correct answer. The rubric for this scoring is as follows (based on a 8 point scale):

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>8/8</td>
<td>Everything is correct — Including answers, units, steps, and sketches.</td>
</tr>
<tr>
<td>7/8</td>
<td>Everything essentially correct —The right idea on all parts of the problem. Only small missteps resulting in small errors (even wrong final answers).</td>
</tr>
<tr>
<td>6/8</td>
<td>The student had generally the right idea, but made a notable misstep at one point. — Knowledge of overall process, but had a small conceptual error or a minor computational error.</td>
</tr>
<tr>
<td>5/8</td>
<td>The student had some sense of what they were up to, but missed a key piece. Much of the work is good, but there’s a big piece wrong or missing.</td>
</tr>
<tr>
<td>4/8</td>
<td>There is some evidence of understanding, but the work, overall, isn’t correct. An idea of where to start, or how to handle such a problem, but not followed through very well.</td>
</tr>
<tr>
<td>3/8</td>
<td>Most of the work is wrong, but there is something that is correct or insightful. Some work that correct, but the problem, overall, isn’t correct.</td>
</tr>
<tr>
<td>2/8</td>
<td>The student may have started the problem, but either went way off base or only finished ¼ of the problem — Needs to be at least a section of correct work.</td>
</tr>
<tr>
<td>1/8</td>
<td>Something of value — Something correct—a formula, a vector... something!</td>
</tr>
<tr>
<td>0/8</td>
<td>Blank or completely off base — A solution and process which is completely wrong.</td>
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</tbody>
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