

APR 251: Safe Rigging Practices

Winter 2022 – IA 232

Instructor:

Joel Wheeler
IA-231C – Office Hours 1700-1800 Tuesday
wheelej@linnbenton.edu
541.497.3160

Textbooks:

[Bob's Overhead Crane & Rigging handbook for industrial operations](#)

Course Expectations:

1. Ask Questions: No one knows everything, and many times if you have a question there is someone else who is afraid to ask. Train yourself to never be afraid to be the idiot in the room.
2. Be polite and punctual. Class will start at 1800 unless otherwise noted.
3. Breaks: Class decision: break at 90 minutes, or power through?
4. Electronics: Bring your phones, calculators, and/or laptops to class. Please silence them.
5. Be Proactive: Waiting until the last minute creates headaches for everyone.

Accessibility: If you have a documented disability and need reasonable accommodations, or need the instructor to know medical or emergency action information for you, please meet with the instructor during the first week of class and work through the Center for Accessibility Resources (CFAR) website or by calling 541.917.4789.

Attendance: As part of the program through which your classes are being offered, attendance is mandatory and it will be recorded and reported. At the third absence, this will be escalated back to the apprenticeship board and your employer. You are responsible to inform your employer and instructor if you are unable to attend.

Absences which are communicated prior to the start of class will be excused and receive half credit for attendance. Class will start at either 1800 or when all class members known to be attending that day have arrived (i.e. if everyone is there early, we'll start early).

Academic Honesty (Cheating): We are here to develop skills deemed necessary for the roles that we've been selected to fill. It is in your best interest to fully understand the material being presented. Human behavior is largely a matter of habits. If you get into a habit of taking short cuts, it will become a problem for you sooner or later – especially as you begin your career in a field where you do not actually understand what you are doing.

The homework and exams are intended for you to complete on your own. If you need help, seek it out – either from me, or each other – and use that as a flag to indicate more study is needed on that specific topic. I am willing to help you work more deeply with a topic if asked. This class is structured such that cheating is limited to allowing others to do your work for you.

Grading Scale: 90% - A; 80% - B; 70% - C; 60% - D; <60% - F

The grades shall be normalized against the highest scoring student – but shall not be curved. Here's an example of how that will work: For a certain week's homework assignment, 25 points is the maximum score available. However, the highest score on the homework happened to be 20 points. So to normalize the grading, I will add 5 points to everyone's score.

Grading Breakdown:

Attendance – 20%

Homework – 40%

Mid-Term and Final – 20% each

Each week's attendance is worth 10 points (5 points per day); each week's homework assignment is worth 25 points; and each exam is worth 100 points. Extra Credit may be offered to everyone, but is not guaranteed and not offered individually. It will be clearly identified.

Homework: Homework will be assigned and due the following Tuesday prior to the end of class. It is expected that you will show your work on each problem. Partial credit will be given on questions, and it is in your best interest to share your process to get the most credit. When unable to attend, please contact the instructor as soon as possible to receive assignments or arrange to turn them in. Late assignments without prior agreement will receive zero credit.

Exams: Exams will contain more complicated problems that I believe you are capable of solving. Exams will also be take home.

Schedule: There are no holidays or prearranged absences currently on the schedule for this class.

Dates		Topics	Due
Week 1	4 Jan	Introductions and Math Review	
Week 2	11 Jan	Weights	HW 1
Week 3	18 Jan	Center of Gravity	HW 2
Week 4	25 Jan	Slings and Hitches	HW 3
Week 5	1 Feb	Sling Loading	HW 4
Week 6	8 Feb	Review	Mid-Term
Week 7	15 Feb	Hardware	HW 5
Week 8	22 Feb	Inspections	HW 6
Week 9	1 Mar	Tables	HW 7
Week 10	8 Mar	Review	HW 8
Finals Week	None		Final