

Capstone Design (ENGN 379): Grading and Team Member Evaluations

There are two types of evaluations that must be submitted:

1) Joint Team Statement: Each team must submit a joint statement specifying each team member's contributions. For instance "Person X was the lead on soil mechanics and developing _____. Person Y was the lead on topological data integration and rainfall simulation." Note that such a statement is now fairly standard practice/required in many professional and academic publications.

2) Confidential Assessments of Individual Team Members: Each student is to provide the instructor a confidential evaluation of all team members as well as an assessment of his/her own performance. This assessment should candidly as possible address the merit of contributions from all other team members, including yourself. The purpose of this assessment is to provide greater detail in evaluating each students' contributions to the project over the entire semester. If one of your team members went above and beyond the call of the duty, be sure to make a note of that and provide details about specific instances. You are being asked for this individual statement because it is the only means by which the instructor can attempt to parse out individual contributions. These evaluations will also be considered when determining final course grades. Thank you in advance for your candid and fair assessments.

Grading

The final design implementation accounts for 30% of your final grade, and the final reporting (oral + written) counts for 20% of your total grade in the course (per course syllabus). The grading scheme will be as follows: The final report will be assigned an overall grade, max being 100 pts. The total number of points to be distributed amongst your team members is equal to Final Report Points x Number of Group Members. *Each team must submit a joint statement of each team member's contributions (see above) and apportion the points as deemed fit.* For example, let's say you write an awesome report which receives a score of 100. And let's say you have 3 group members. Then you have 300 points to divvy up. If you all agree you did an equal amount of work, everyone gets a 100, hooray! Another example: Let's say one group member was really outstanding and went out of his/her way to make the project really happen. The 2 types of

assessments above may clearly indicate one team member should be awarded a bonus 10 points, sacrificing 5 points from other team members, so the scores would be $[1.1, 0.95, 0.95] \times 100 = [110, 95, 95]$. If the final report of this group had received a score of, say, 90, then the final points awarded to each student would be $[1.1, 0.95, 0.95] \times 90 = [99, 85.5, 85.5]$.

Grading Criteria:

- Design problem and real-world importance is clearly explicated.
- Were the stakeholders properly identified? Was the need clearly and properly identified, and was it put into proper social and economic/market context?
- Engineering design: Was the final design developed using appropriate and correctly applied principles? Did the team clearly state the design elements and justifying rationale for including those elements? Were theoretical principles/math models/simulations performed and applied accurately? Are construction/fabrication techniques clearly explained?
- Construction/execution: Was the final system/solution well-designed, well-built and properly function?
- Were testing and validation experiments properly designed and implemented? Was an adequate amount of data acquired to address the original problem statement and demonstrate proof-of-concept?
- Were results reported in clear and concise fashion? Were they properly interpreted?
- Does the discussion properly interpret and contextualize the current design project within the larger body of engineering designs? Does it properly describe and weight the benefits and known limitations?
- General communication – does the report clearly, completely and concisely document all aspects of the project?