32296 : ME 4300 - Mechanical Systems Design (Summer Semester 2019)

Instructor : Michael Latcha
Survey : SECS Survey
26 student response(s) gathered between Wed, Jun 12, 2019 12:00 AM - Wed, Jun 19, 2019 11:59 PM

SUMMARY FOR QUESTIONS USING A NUMERIC RESPONSE SET

| Seq. | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 | Q19 |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1    | 5  | 5  | 5  | 5  | 5  | 4  | 4  | 4  | 5  | 5   | 5   | 3   | O*  | 1   | O*  | 3   | 4   | 4   |     |
| 2    | 5  | 5  | 5  | 4  | 5  | 5  | 4  | 3  | 5  | 5   | 5   | 4   | O*  | O*  | O*  | 4   | 3   | 2   |     |
| 3    | 5  | 5  | 5  | 5  | 5  | 4  | 5  | 5  | 5  | 5   | 5   | 4   | O*  | O*  | O*  | 5   | 4   | 3   |     |
| 4    | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 4   | 4   | O*  | O*  | O*  | 4   | 5   | 5   |     |
| 5    | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 4   | 4   | O*  | O*  | O*  | 4   | 4   | 4   | 2   |
| 6    | 3  | 2  | 1  | 1  | 2  | 1  | 3  | 1  | 3  | 3   | 5   | 2   | 2   | O*  | O*  | O*  | 2   | 4   | 5   |     |
| 7    | 4  | 5  | 4  | 5  | 4  | N* | 5  | 5  | 5  | 5   | 5   | 5   | O*  | O*  | 5   | 5   | 4   | 1   |
| 8    | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |     |
| 9    | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 4   | 3   | O*  | O*  | O*  | 5   | 4   | 3   |     |
| 10   | 4  | 4  | 4  | 4  | 4  | 4  | N* | 5  | 5  | 5   | 4   | 4   | 3   | 3   | 4   | 4   | 3   |     |
| 11   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |     |
| 12   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |     |
| 13   | 4  | 5  | 3  | 4  | 4  | 4  | 5  | 5  | 5   | 5   | 5   | 4   | 3   | 2   | O*  | O*  | O*  | 4   | 5   |     |
| 14   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 3   | 4   | 5   | 5   | 3   | O*  | O*  | O*  | 4   | 3   | 2   |     |
| 15   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   |     |
| 16   | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 4   | 4   | 4   | O*  | O*  | O*  | 4   | 4   | 3   |     |
| 17   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |     |
| 18   | 4  | 5  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   |
| 19   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |     |
| 20   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |     |
| 21   | 4  | 5  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 5   | 4   | 4   | O*  | 4   | 4   | 3   | 4   |     |     |
| 22   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 3   | 3   | 4   | 5   |     |     |     |
| 23   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   |     |     |
| 24   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 4   | 4   | 4   | 5   | 5   | 5   | 3   | 3   | 4   | 5   |     |
| 25   | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 2   |     |     |
| 26   | 4  | 4  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 3   | 3   | O*  | 5   | 5   | 3   | 1   |     |
| 27   | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 2   |     |
| 28   | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5   | 5   | 5   | 5   | 3   | 3   | O*  | O*  | 5   | 4   | 2   |     |
| Total| 127| 129| 123| 125| 128| 120| 130| 122| 123| 129| 134| 129| 116| 97| 62| 76| 123| 112| 95|     |
| AVG  | 4.5| 4.6| 4.4| 4.5| 4.6| 4.4| 4.6| 4.5| 4.4| 4.6| 4.8| 4.6| 4.1| 4.2| 4.1| 4.5| 4.4| 4.0| 3.4|     |

Stats for calculated questions, excluding Q18, Q19, Q20, Q21
Sum of valid response values : 1993
Total number of valid response values : 445
Average : 4.5
N at the bottom indicates the number of records that are included in the average calculations for that question. There are a few reasons why a would not be included in the average calculations, most of which are explained below.

N*, in purple, italicized indicates a null answer, i.e., the student did not choose a response for this question (note that this is different than choose response, if one exist - NA responses usually don’t stamp a null, but rather a non-averaged value - see below). Null answers are not included in \( \bar{x} \) calculations.

C* indicates a comment question. Comments are displayed in detail below.

Values in red are not bounded by the question's response set and are problematic. For example, if you had a value of 7 in a question that was at response set with values 0-6, the value would be considered unbounded. Technically, this should never be possible, but the system flags the comments encountered. Unbounded values are not calculated in averages.

Values in purple, italicized indicate a response set value which has been designated as not averaged. Typically, if a response set has an NA ch into this category. These values will not be included in the average calculations.

Averages are only calculated for numeric values. If you have a field that collects alphanumeric values, only those values that are exclusively run included in the average calculations. For instance, if Q1 has responses John, 1,3,Paul, [N*], the system will calculate the average of the field as 2, (John, Paul, and [N*] are discarded). Averages are also affected by unbounded and non-averaged values, as specified above, in questions that a response sets.

**OBJECTIVES SUMMARY**

<table>
<thead>
<tr>
<th>Objective</th>
<th>E</th>
<th>G</th>
<th>A</th>
<th>P</th>
<th>U</th>
<th>NA</th>
<th>NULL</th>
<th>Total Ratings</th>
<th>Medi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate proficiency in the fundamentals of stress analysis; uniformly distributed stresses, elastic strain, shear and bending-moments in prismatic beams, normal and shear stress in bending, torsion, stresses in pressure vessels</td>
<td>16</td>
<td>10</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Define and apply in design problems the concepts of deflection and stiffness, general spring rates, deflection due to bending, strain energy, Castiglione's method, Euler and Johnson columns</td>
<td>15</td>
<td>11</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Design components and systems for static strength, including the use of factors of safety, failure theories and stress concentrations</td>
<td>14</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Design components and systems against fatigue, including the use of the endurance limit, modifying factors, fluctuating stresses, torsion, combined loading, cumulative fatigue damage</td>
<td>14</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Explain the design considerations in the use of screws, fasteners, and connections and apply them in design problems</td>
<td>12</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Explain the design considerations of welded, brazed and bonded joints and apply to design problems</td>
<td>12</td>
<td>14</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Explain the design considerations of mechanical springs and apply to design problems</td>
<td>12</td>
<td>14</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Explain the design considerations of spur gears and apply to design problems</td>
<td>10</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Explain and apply the rudiments of structural optimization</td>
<td>10</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Schedule, conduct and present, both in written form and orally, minor and major design projects</td>
<td>10</td>
<td>13</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>27</td>
<td>4</td>
</tr>
</tbody>
</table>

**QUESTION VALUE TOTALS**

This report shows how many times a specific response was selected for questions with an attached response set.

1. The instructor did a good job of making the objectives of the course clear to me.

   - Excellent [5] : 16
   - Good [4] : 11
   - Average [3] : 1
   - Poor [2] : 0
   - Unsatisfactory [1] : 0
   - NA [0] : 0
   - NULL : 0
   - Num. Responses : 28
     - Avg : 4.5
     - Std. Dev : 0.6
     - Median : 5

2. The instructor did a good job in developing and presenting the material in a clear and organized manner.

   - Excellent [5] : 19

https://www2.oakland.edu/secure/secs/evals/admin/module_home.cfm?module=coursereport&id=22256
3. The instructor stimulated and deepened my interest in the subject.

Excellent [5]: 15
Good [4]: 11
Average [3]: 1
Poor [2]: 0
Unsatisfactory [1]: 1
NA [0]: 0
NULL: 0
Num. Responses: 28
Avg: 4.6
Std. Dev: 0.7
Median: 5

4. The instructor motivated me to do my best work.

Excellent [5]: 16
Good [4]: 11
Average [3]: 0
Poor [2]: 0
Unsatisfactory [1]: 1
NA [0]: 0
NULL: 0
Num. Responses: 28
Avg: 4.5
Std. Dev: 0.8
Median: 5

5. Explaining and clarifying difficult material and problem solutions

Excellent [5]: 18
Good [4]: 9
Average [3]: 0
Poor [2]: 1
Unsatisfactory [1]: 0
NA [0]: 0
NULL: 0
Num. Responses: 28
Avg: 4.6
Std. Dev: 0.7
Median: 5

6. Willingness to provide individual assistance to students outside of classroom hours

Excellent [5]: 15
Good [4]: 11
Average [3]: 0
Poor [2]: 0
Unsatisfactory [1]: 1
NA [0]: 0
NULL: 1
Num. Responses: 27
Avg: 4.4
Std. Dev: 0.8
Median: 5

7. Ability to handle questions from the class.
Excellent [5]: 19
Good [4]: 8
Average [3]: 1
Poor [2]: 0
Unsatisfactory [1]: 0
NA [0]: 0
NULL: 0
Num. Responses: 28
Avg: 4.6
Std. Dev: 0.6
Median: 5

8. Utilization of class time

Excellent [5]: 17
Good [4]: 9
Average [3]: 0
Poor [2]: 0
Unsatisfactory [1]: 1
NA [0]: 0
NULL: 1
Num. Responses: 27
Avg: 4.5
Std. Dev: 0.8
Median: 5

9. Utilization of instructional aids such as blackboard, slides or viewgraph

Excellent [5]: 14
Good [4]: 11
Average [3]: 3
Poor [2]: 0
Unsatisfactory [1]: 0
NA [0]: 0
NULL: 0
Num. Responses: 28
Avg: 4.4
Std. Dev: 0.7
Median: 4.5

10. Uniformity and impartiality in grading

Excellent [5]: 18
Good [4]: 9
Average [3]: 1
Poor [2]: 0
Unsatisfactory [1]: 0
NA [0]: 0
NULL: 0
Num. Responses: 28
Avg: 4.6
Std. Dev: 0.6
Median: 5

11. Promptness in returning homework, laboratory reports and examinations.

Excellent [5]: 22
Good [4]: 6
Average [3]: 0
Poor [2]: 0
Unsatisfactory [1]: 0
NA [0]: 0
NULL: 0
Num. Responses: 28
Avg: 4.6
Std. Dev: 0.4
Median: 5
12. Overall rating as a teacher.

Excellent [5] : 19
Good [4] : 8
Average [3] : 0
Poor [2] : 1
Unsatisfactory [1] : 0
NA [0] : 0
NULL : 0
Num. Responses : 28
Avg : 4.6
Std. Dev : 0.7
Median : 5

13. Value of the textbook contribution to the course.

Excellent [5] : 11
Good [4] : 11
Average [3] : 5
Poor [2] : 1
Unsatisfactory [1] : 0
NA [0] : 0
NULL : 0
Num. Responses : 28
Avg : 4.1
Std. Dev : 0.8
Median : 4

14. Value of the recitation component of the course.

Excellent [5] : 10
Good [4] : 9
Average [3] : 3
Poor [2] : 1
Unsatisfactory [1] : 0
NA [0] : 0
NULL : 0
Num. Responses : 23
Avg : 4.2
Std. Dev : 0.8
Median : 4

15. Value of the laboratory component of the course.

Excellent [5] : 7
Good [4] : 5
Average [3] : 2
Poor [2] : 0
Unsatisfactory [1] : 1
NA [0] : 0
NULL : 0
Num. Responses : 15
Avg : 4.1
Std. Dev : 1.1
Median : 4

16. Please rate the adequacy of the computing and/or laboratory facilities.

Excellent [5] : 10
Good [4] : 5
Average [3] : 2
Poor [2] : 0
Unsatisfactory [1] : 0
NA [0] : 0
NULL : 0
Num. Responses : 17
Avg : 4.5
17. Please provide an overall rating of this course as a learning experience.

   Excellent [5] : 14
   Good [4] : 12
   Average [3] : 1
   Poor [2] : 1
   Unsatisfactory [1] : 0
   NA [0] : 0
   NULL : 0

   Num, Responses : 28
   Avg : 4.4
   Std. Dev : 0.7
   Median : 4.5

18. What is your approximate cumulative grade point average?

   3.50-4.00 [5] : 6
   3.00-3.49 [4] : 16
   2.00-2.49 [2] : 0
   Below 2.0 [1] : 0
   NULL : 0

   Num, Responses : 28
   Avg : 4.0
   Std. Dev : 0.7
   Median : 4

19. Provide how many study hours you spent per week outside of the classroom for this course.

   6-9 [4] : 4
   4-6 [3] : 6
   0-2 [1] : 2
   NULL : 0

   Num, Responses : 28
   Avg : 3.4
   Std. Dev : 1.3
   Median : 3

20. What grade do you expect to receive in this course?

   3.50-4.00 [5] : 12
   3.00-3.49 [4] : 10
   2.00-2.49 [2] : 2
   Below 2.00 [1] : 0
   NULL : 0

   Num, Responses : 28
   Avg : 4.1
   Std. Dev : 0.9
   Median : 4

21. What is your assessment of the amount of material covered in the course?

   Too much [4] : 4
   Just right [3] : 17
   Too little [2] : 0
   Much too little [1] : 0
   NULL : 0

   Num, Responses : 28
   Avg : 3.6
   Std. Dev : 0.9
22. Please provide additional comments regarding the instructor

Too much [4] : 4
Just right [3] : 17
Too little [2] : 0
Much too little [1] : 0
NULL : 0

Num. Responses : 28
Avg : 3.6
Std. Dev : 0.9
Median : 3

23. Please provide additional comments regarding the course

Too much [4] : 4
Just right [3] : 17
Too little [2] : 0
Much too little [1] : 0
NULL : 0

Num. Responses : 28
Avg : 3.6
Std. Dev : 0.9
Median : 3

24. Please provide additional comments regarding grading and evaluation

Too much [4] : 4
Just right [3] : 17
Too little [2] : 0
Much too little [1] : 0
NULL : 0

Num. Responses : 28
Avg : 3.6
Std. Dev : 0.9
Median : 3

25. Please provide additional comments regarding anything else

Too much [4] : 4
Just right [3] : 17
Too little [2] : 0
Much too little [1] : 0
NULL : 0

Num. Responses : 28
Avg : 3.6
Std. Dev : 0.9
Median : 3

COMMENT QUESTION SUMMARY

22. Please provide additional comments regarding the instructor

Survey ID 85045 : Dr. Latcha is a good instructor. I think he does a good job presenting the material to class and makes class a little more fun by m

Survey ID 85070 : There is a lot of material covered in this course but Professor Latch does a very good job at explaining it as well as walking throu

Survey ID 85100 : He is good at teaching

Survey ID 85114 : Seems like he’s very knowledgeable and like he could be a great professor if he wanted to be here. Unfortunately it’s been made
class is an inconvenience to his life and rushing to leave early on a regular Asis is more of a priority than teaching,
Survey ID 85116: I don’t personally prefer this course to be taught during summer time.

Survey ID 85135: Very good at his job and entertaining.

Survey ID 85141: Professor Latcha is knowledgeable and enthusiastic about the material he teaches, I feel engaged in his class. Best professor at University by far.

Survey ID 85144: Taught material clearly answered all questions. Very reasonable and made changes to favor everyone in the class.

Survey ID 85171: Great instructor, stright to the point.

Survey ID 85231: hard but good

Survey ID 85234: Well versed in the subject, answered all questions with detail.

Survey ID 85280: Great teacher. That's all

Survey ID 85314: This instructor did a great job presenting material to the class and keeping everyone involved. The teaching pace I felt was perfect.

23. Please provide additional comments regarding the course

Survey ID 85045: I find the material this course covers interesting and think it is a good course as a whole,

Survey ID 85100: I think there should be more examples done in class, because sometimes the homework is hard to understand if we do not do ex

Survey ID 85116: No comments

Survey ID 85135: Difficult.

Survey ID 85141: Course material could get challenging but Professor Latcha gave everyone the proper materials they needed to do well in his cla:

Survey ID 85171: I like the course, I like how it relates to previous courses I've taken.

Survey ID 85231: good

Survey ID 85280: It was intense, but that's because it's a summer class

Survey ID 85314: This course provide good practical knowledge that can be directly applied in the working field.

24. Please provide additional comments regarding grading and evaluation

Survey ID 85045: Dr. Latcha's grading is very good and he returned our assignments by the next class.

Survey ID 85100: to get a 2.0 is a little bit high, but the way the professor grades is great

Survey ID 85116: No comments

Survey ID 85135: Fair.

Survey ID 85141: Fair grader

Survey ID 85144: Grading was reasonable and accurate

Survey ID 85171: Quick grading, fair.

Survey ID 85231: good

Survey ID 85280: Grading was fair.

25. Please provide additional comments regarding anything else

Survey ID 85116: Room 168 is too much cold

Survey ID 85135: N/A

Survey ID 85141: Thank you Professor Latcha for a great semester

Survey ID 85171: N/A

Survey ID 85231: good

Survey ID 85280: N/A