<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Count</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How valuable were the assigned readings? 1=taught me little; 5=extremely educational</td>
<td>3.47</td>
<td>62</td>
<td>3</td>
<td>8</td>
<td>20</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>2. How valuable were the homework and/or computer assignments? 1=taught me little; 5=extremely educational</td>
<td>3.77</td>
<td>74</td>
<td>1</td>
<td>6</td>
<td>16</td>
<td>37</td>
<td>14</td>
</tr>
<tr>
<td>3. How valuable were the laboratories? 1=taught me little; 5=extremely educational</td>
<td>2.42</td>
<td>74</td>
<td>18</td>
<td>19</td>
<td>25</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>4. Rate the examinations in this course as a test of your knowledge. 1=too easy, not adequate; 3=adequate; 5=too difficult, not a fair test</td>
<td>3.59</td>
<td>75</td>
<td>1</td>
<td>3</td>
<td>30</td>
<td>33</td>
<td>8</td>
</tr>
<tr>
<td>5. Did the lecturer stimulate your interest in the subject? 1=not at all; 5=stimulated great interest, inspired independent effort</td>
<td>3.38</td>
<td>74</td>
<td>5</td>
<td>12</td>
<td>22</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>6. Was the lecture presentation organized and clear? 1=disorganized and unclear; 5=very organized and lucid</td>
<td>4.03</td>
<td>75</td>
<td>1</td>
<td>4</td>
<td>14</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>7. Was the lecturer willing and able to help you overcome difficulties? 1=was of no help; 5=was very helpful</td>
<td>4.17</td>
<td>69</td>
<td>0</td>
<td>4</td>
<td>12</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>8. Rate the overall teaching effectiveness of your lecturer compared to others at Cornell. 1=worse than average; 5=much better than average</td>
<td>3.68</td>
<td>75</td>
<td>3</td>
<td>5</td>
<td>22</td>
<td>28</td>
<td>17</td>
</tr>
<tr>
<td>9. Was the recitation organized and clear? 1=not at all; 5=very organized, lucid</td>
<td>3.68</td>
<td>72</td>
<td>2</td>
<td>6</td>
<td>20</td>
<td>29</td>
<td>15</td>
</tr>
<tr>
<td>10. Was the recitation instructor willing and available to help you overcome difficulties? 1=was of no help; 5=was very helpful</td>
<td>4.03</td>
<td>72</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>11. How would you rate the recitation instructor's command of the course material? 1=poor command of material; 5=excellent command of material</td>
<td>4.24</td>
<td>74</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>27</td>
<td>35</td>
</tr>
<tr>
<td>12. What was the overall quality of the recitations and your recitation instructor? 1=worse than average; 5=much better than average</td>
<td>3.64</td>
<td>74</td>
<td>3</td>
<td>5</td>
<td>24</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td>13. Overall, how does course compare with other technical courses you've taken at Cornell? 1=poorly, not educational; 5=excellently, extremely educational</td>
<td>3.32</td>
<td>74</td>
<td>1</td>
<td>8</td>
<td>35</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>14. How many hours each week did you spend on this course outside of class/lab/recitation? 1=less than 2; 2=(2-4); 3=(5-8); 4=(9-15); 5=16 or more</td>
<td>2.80</td>
<td>74</td>
<td>0</td>
<td>23</td>
<td>43</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>15. How prepared were you for this course? 1=overprepared, it repeated material; 5=underprepared, course assumed unfamiliar knowledge</td>
<td>2.95</td>
<td>75</td>
<td>2</td>
<td>18</td>
<td>38</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>16. Was the code of academic integrity maintained in this course? 1=no, often violated; 5=yes, well maintained</td>
<td>4.44</td>
<td>73</td>
<td>0</td>
<td>3</td>
<td>8</td>
<td>16</td>
<td>46</td>
</tr>
<tr>
<td>17. Most important reason for taking this course? 1=field or major requires it; 2=prerequisite for further courses of interest; 3=interest in subject matter; 4=reputation of the course; 5=reputation of the instructor</td>
<td>--</td>
<td>75</td>
<td>67</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
1. Please comment on the strengths of any aspect of this course (e.g., the lecture, recitation, laboratory, computing, text, homeworks, examinations or course content).

30210: Professor Ruina was amazingly helpful and responsive to students. It really helped that in lecture he would often pause to allow time to think about the material. I wish all professors here were half so concerned about the students.

30392: Lectures were well organized.

30507: Lecturer has very good command of the materials. I enjoy his teaching alternate ways to solve problems that are rarely taught in typical dynamics books these days.

30660: Material is very fundamental.

30749: Overall, the class material is not that difficult. Text was pretty good.

30783: Professor's open mindedness and willingness to consider suggestions, improvements, concerns, whatever. Bonus problems are always fun - I wish the professor assigned some challenge bonus problems that were picked from his robot researches - that would give us a real-life example of the use this course has.

30826: Recitation effectively covers all knowledge needed. Textbook is very succinct.

31089: Prof Ruina was very meticulous in his examples.

31342: Lecture was good. The example problems helped with homework and exams. Homework was easier than exams by a long shot.

Recitation was pointless and my TA is a nice guy, just an awful instructor.

31350: Ruina knows his stuff and the lectures were extremely valuable.

31373: Ruina was an excellent lecturer with a great command of the material. He made it easy for students to understand.

Kevin Rompala was an excellent lab TA.

31535: The labs added to my understanding of the material.

31540: Good lectures, Good section and homework.

31555: The demos in class helped a lot to visualize and understand the problem. Also the coins were fun too.

31663: Lectures were great for learning the material. Explanations were clear and “forcing” students to ask questions is a very effective tactic.

31767: Tough, but Fair Exams.

Lecture was very useful and helpful in understanding the material. The lecturer did a good job of presenting it, and always asked if we were clear on what he was doing.
On the first day of classes, I thought I was going to hate this course - although it turns out it's not so bad.

Homework was useful in understanding the material, and I like the way it's 2 small assignments per week rather than 1 large one.

Thanks for being a good professor and showing some cool stuff during lecture!

31793: ruina is relatively engaging and and he offers an extra section monday afternoon which is really helpful and he's willing to help whoever shows with whatever they need.

31795: Professor Ruina goes out of his way to help the students that are willing to ask for it, and this is much appreciated. I felt that he genuinely wants all of us to succeed. His attitude and teaching practices make his lectures engaging despite being stuck right between two other intense engineering courses.

32051: The lectures were very helpful. Recitation was good help for understanding hw problems, it always went 10 minutes over allotted time though! Labs were not that helpful. Homeworks were helpful in understanding the material. Exams seemed more focused in general knowledge about material related to text, instead of focusing on explicit concepts taught in class, not too sure if this was a good or bad thing. Good class overall!

32243: NA

32532: LECTURE ROCKS!!!, Extra Section was even better

32572: The text was the strongest part and was still full of errors as the TAs pointed out.

32596: Lecture was excellent, very comfortable. Recitation was standard - good way to go through homework problems.

32683: Professor is very knowledgeable of subject area. It is evident he has experience teaching the class and knows which topics are harder for students.

32728: Short homeworks.

32764: The recitation could do with more examples.

32908: test were good evaluations

33335: The lecture is open and casual so that the students can feel free to ask questions. The textbook explained the concepts well and was very engaging.

33602: none really

33737: Ruina is a particularly good lecturer, makes things very clear. However, he comes off as rough and arrogant at times, which I think is why many do not like him.

33869: Great lectures and recitations. Good speed and depth. Overall a great experience.
33887: Manish and Kevin were both excellent and very helpful TA's.

33900: homeworks were good

33961: The instructor was very helpful during class to make sure everyone knew the material.

34104: Lecture format was very good. Professor always made sure he was going slow enough that everyone understood what was going on. Homeworks were good problems, and a good idea to have them due twice a week. Helped me stay caught up on material.

34365: Lectures are good and giving extra time on exams make them fair.

34446: Professor Ruina is a good lecturer. He seems to really care if we understand the material. Exams are also very fair.

34638: The professor did not assign "busy work"

34731: Lecture was fairly well organized and topics were well-explained. However, handwriting could be better.

34900: Lectures were well-organized and clear. Questions and discussions were very encouraged. Section was helpful in problem solving techniques. Homeworks were relevant and interesting. Labs didn't really relate too closely to lectures, but were still fun and educational.

34927: The course honed my mathematical and physics skills.

34966: The lecture was very well taught.

35860: Prof Ruina was very stimulating and made the lecture worth attending.

35915: Good lecture.
2. Please comment on the weaknesses of any aspect of this course (e.g., the lecture, recitation, laboratory, computing, text, homeworks, examinations or course content).

30210: I feel that the labs offered little. While it was nice that they were only 4 times a semester, I don't think the contributed any valuable material, and it was mostly a waste of a class period.

30392: The tests were often on differential equations, which were not covered adequately in class. Too many homework assignments - due tuesdays and thursdays, not enough time in between for other homeworks. Grader is too picky. Half credit often taken off for forgetting to put in a single vector notation. recitation instructor often let class out 10 minutes late. labs had almost nothing to do with course, just busywork. course could do without lab.

30660: Test don't seem to be a good test of my knowledge. In addition, I feel it is unnecessary to have 2 problem sets due a week.

30749: lectures were unclear and boring. multiple problem sets per week was annoying and unessesary. Examinations were not really covered by lectures or homework, the only way to study for them was by previous exams. Resitations were aweful, and the TA was mean and unhelpful. For a class so similar to Physics 112, it is a wonder why it was so much less enjoyable.

30783: the idea of asking for matlab code in exams is extremely terrible. I think a better way to do this would be to assign 2 small matlab projects that would be as far as we go with matlab instead of testing us during the exams for a matlab code.

Text is interesting to read but that it doesn't have answers to any problems makes it practically useless to prepare for exams.

30826: lectures and formula derivations too slow the equations and quantitative things learned in labs could not be retained time window to hand in each homework far too narrow - serving as a dishonorable unwritten policy against lateness, or "unofficial attendance"
31089: The grading on the homework was too severe and often kids got fed up with strict notations to the point of becoming uninterested or frustrated with the class. Homework should not be due during final exams (one even on the 212 exam day!). Also being tested on material on homework due the same day is unfair.

31342: Homework too easy for tests, tests too difficult! Labs were pointless, recitation was pointless.

31350: I did not like the labs and was glad there were only four of them. The most useful part of labs was the last one where we used the tachometer, because the TA let us use it to test the RPM of our air motor for MAE 225.

31373: More emphasis could have been placed on solving problems using differential equations as this was tested while not being covered particularly well in lecture.

31535: two problem sets in one week is too much, constantly having to worry about a 203 problem set takes away from my other courses. homework assignments due the day of the prelim, whose material is included in that evening’s exam does not allow the students adequate time to prepare for the prelim.
homework assignment due during study week and on the Thursday of finals week are against university policy (and yet continue to exist).

31540: My recitation instructor had some trouble with harder problems, and the labs were crappy. Pre-labs were especially pointless. The labs themselves did not teach me very much; I primarily learned how to graph with excel.

31555: The greatest weakness of this course I believe and I know other students believe, is that in the first lecture the professor said that this course is basically useless, because computers can do all these calculations quicker than we can. So the only reason why we're taking this course is because Cornell feels that it will shape us better. This statement destroyed any motivation I had to want to try hard in this course. This would later haunt me, because I fell behind quickly. But why should I care about a course if the professor doesn't even care about it?

31663: The labs are horrible. Nobody learns anything from them and the write ups are close to pointless. Also, the prelab questions which are aimed at getting students to read and understand the lab beforehand do not stimulate this activity and in no way help in the understanding of the lab. Perhaps some more interesting/educational prelab questions could be given. The labs themselves are very boring as well. The only lab that I felt like I had a hold on was the gyroscope lab, because it was interesting and I didn't have to rely on a hard to follow computer program for the entire lab.

31767: Please make your subscripts larger and more clear on the blackboard. I often had trouble recognizing subscripts.

I really disliked the labs.

31793: The prelims were way too hard. They weren't like anything we'd done in lecture, section, or the homework.

32051: Matlab was bad, didn't really understand it till the end.

32243: NA

32532: Recitation instructor was late every single week. Labs and Prelabs seemed unimportant to the course. Never learned precession which was the last lab's topic. Instruction in CS 100M on how to do ode's would help a lot.

32572: Lecture was worthless. Examinations were way too hard, and the material was most often much more advanced, the style of the questions was not consistent with the assigned homework, which was mostly busy work.

This is quite honestly the worst course I have ever taken.

32596: Labs were pointless and use of Matlab was unexpected - I, along with many other students, were unprepared.

32603: Labs are worthless
Lecture is very sporadic, not in line with book teachings

32683: Professor writes down an entire example and solution and then explains it. Instead, it would be better to simply take the time to explain the steps taken in problems thoroughly as he is writing them down instead of having students try to write a bunch of equations down without knowing why and then try explain it. I find his tests to be very... dangerous. The entire test is only 3 questions, and while the students may learn hundreds of theories coming into a test, are only tested on a select few.

32728: Labs were useless.

32764: The computing part of the homework can be rather hard and we aren't adequately prepared for it.
32908: Homeworks were at times very difficult

33335: The solutions for homework and prelims should be clearer. Sometimes the handwriting was difficult to read and the format hard to understand.

33602: Lectures unorganised and while helpful not very enlightening or stimulating. Exams very dissimilar to the homework assignments so hard to study for. Practice exams needed since old ones weren't very applicable with the new text book. 2nd homeworks should be due Friday not Thursday.

33737: First prelim quite hard......4 differential equations when we only had one in the homeworks all year. Matlab parts were confusing at times.

33887: The HW assignments on the book weren't enough preparation for the first prelim.

33900: labs weren't helpful

33961: The material did not seem the most relevant to the workplace or for future classes.

34104: Labs seemed a bit disconnected from course material. Very little overlap.

34247: Did not enjoy the course in any way, however, I've never heard of anybody actually enjoying Dynamics anyway.

34365: Putting notes on the board before class starts makes things very difficult to understand. I don't know what goes where as far as the flow of the material and things cannot be clarified since the lecturer is speaking about something else already.

34446: Labs are useless. The textbook is occasionally not as complex as what we are learning, but overall it's okay.

34638: The professor tried to make the course interesting, but I feel it didn't work as well as he hoped. The exams were a little too hard, and I didn't feel like it tested the material we learned fairly. Too many problem sets per week (the two problem sets should be combined), which furthers exhaustion especially in regards to this specific class.

34731: There shouldn't be HW assignments due during study week.

34900: beginning of material was review of high school easy material, and so it was boring. We should have spent more time on the harder material towards the end, as well as solving problems using computer software (Matlab).

34927: Unfair expectation of MATLAB.

34966: The homework assignments sometimes didn't reflect the types of problems expected on exams.

35118: Why is this class necessary? It only repeats everything that I already did in AP Physics C or any other comparable mechanics course.

35456: The labs were fairly useless and had very little to do with the course. Overall, they were a waste and should be done away with.

The computing assignments with Matlab were not given enough prior instruction, and sometimes lecture did not adequately cover material for homeworks.
35860: The prelims were difficult and seemed almost impossible at times inspite of the hours spent studying for it. The first prelim in particular seemed very difficult if you did not know how to set the problem up with diff equations.

35915: Some homework problems are not helpful, labs are generally not helpful.

35916: Labs were worthless, had nothing to do with the class.