



Littlewood, David  
ENGR-2090-01  
Engineering Dynamics  
Monday, Thursday  
RENSSELAER POLYTECHNIC INSTITUTE  
04-13-2006 -05-05-2006

**Comments: Use the space provided in the text area below for your comments.**

- Dr. Littlewood is a good professor, and I enjoyed the class even though it was difficult. The grading policy seemed fair and it was easy to succeed because of this.
- Dave Littlewood is an excellent teacher, he very quickly developed a concise, accurate, easy to understand method for explaining the theory of Dynamics, recognized the pitfalls of analysis, and helped me as a student avoid them. He was always, always, always, prepared for his lectures, I cannot recollect a time when he didn't display anything less than a full knowledge of any of the course material. He will be a top notch teacher in analysis courses. Very Smooth. Thanks Dave
- Dr. Littlewood is a great guy and that was reflected in his teaching. He spoke very well and was great at helping us understand difficult concepts. I could tell that he truly cared for all of the students and their learning. He was always willing to help out and sent frequent emails with tips and advice. Dr. Littlewood is very early in his career, but he is already a great teacher. In addition, I am sure that he will only get better with time.
- The professor was very fair with grading and explained concepts well. Tests often took longer than usual to be returned.
- Great professor
- Professor Littlewood is the best professor I have had here at RPI to date. He does not just blow through power points and say it's simple you should understand this. If you don't understand something, or if test performance was low, he would make it a point to go back and reiterate the material. In his office hours, instead of saying read this and you'll be able to figure it out, the typical response of an RPI professor, he would sit down with you and go step by step through the problem. This is one of the first classes here I feel that I have developed a firm understanding of the material for.
- littlewood is a great professor
- Great teacher- really explained things well and was very open to questions. Sent frequent emails providing tips for solving problems, and hosted numerous review sessions out of class that were very helpful.
- Hard course but good in general
- Great teacher, I learned a lot!
- Very clear and concise, presented all material in a manner that made sense. Justification behind why processes were chosen to solve problems was always provided, aiding in understanding how to solve problems. The instructor had a good grasp on what students had difficulty on.

Comments: Use the space provided in the text area below for your comments.

- Professor Littlewood did a great job teaching this course. His set up of presenting the material and then doing example problems which he later posted on webct made learning in this class very easily. I do not think that the course material was that easy, but the professor's ability to teach the material made it come very easily to me. I would really like to take another course with this teacher.

...the space provided...  
...a great professor...  
...regretted because of it...

...great job...  
...smooth...  
...thanks...

...great guy...  
...concepts...  
...frequent...  
...in addition...  
...with time...

The professor...  
returned

Great prof...  
...best professor...  
...simple you should understand...  
...would make it a point to go back...  
...will be able to...  
...professor...  
...that I...

Littlewood... professor

Great to... well...  
...very open...  
...out of...

...but good...

...I learned...

Very...  
...spend...  
...good...  
...had del...

To learn more, see the Interpretive Guide: [www.idea.ksu.edu/diagnosticguide.pdf](http://www.idea.ksu.edu/diagnosticguide.pdf)

There were **60** students enrolled in the course and **35** students responded. Your results are considered **reliable**. The **58%** response rate indicates that results **may not be representative** of the class as a whole.

### Summary Evaluation of Teaching Effectiveness

Teaching effectiveness is assessed in two ways: **A. Progress on Relevant Objectives**, a weighted average of student ratings of the progress they reported on objectives selected as "Important" or "Essential" (double weighted) and **B. Overall Ratings**, the average student agreement with statements that the teacher and the course were excellent. The **SUMMARY EVALUATION** is the average of these two measures. Individual institutions may prefer to combine these measures in some other manner to arrive at a summary judgment.

**Converted Averages** are standardized scores that take into account the fact that the average ratings for items on the IDEA form are not equal; students report more progress on some objectives than on others. Converted scores all have the same average (50) and the same variability (a standard deviation of 10); about 40% of them will be between 45 and 55. Because measures are not perfectly reliable, it is best to regard the "true score" as lying within plus or minus 3 of the reported score.

For comparative purposes, use converted averages. Your converted averages are compared with those from all classes in the IDEA database. If enough classes are available, comparisons are also made with classes in the same broad discipline as this class and/or with all classes that used IDEA at your institution. The Interpretive Guide offers some suggestions for using comparative results; some institutions may prefer to establish their own "standards" based on raw or adjusted scores rather than on comparative standing.

Both **unadjusted** (raw) and **adjusted** averages are reported. The latter makes classes more comparable by considering factors that influence student ratings, yet are beyond the instructor's control. Scores are adjusted to take into account student desire to take the course regardless of who taught it (item 39), student work habits (item 43), instructor reported class size, and two multiple item measures (student effort not attributable to the instructor and course difficulty not attributable to the instructor).

#### Your Average Scores

	Your Average (5-point scale)	
	Raw	Adj.
<b>A. Progress on Relevant Objectives</b> <sup>1</sup> Six objectives were selected as relevant (Important or Essential -see page 2)	4.1	4.1
<b>Overall Ratings</b>		
B. Excellent Teacher	4.5	4.6
C. Excellent Course	3.9	4.0
<b>D. Average of B &amp; C</b>	4.2	4.3
<b>Summary Evaluation (Average of A &amp; D)</b> <sup>1</sup>	4.2	4.2

<sup>1</sup> If you are comparing Progress on Relevant Objectives from one instructor to another, use the converted average.

<sup>2</sup> The process for computing Progress on Relevant Objectives for the Discipline and Institution was modified on May 1, 2006. Do not compare these results with reports generated prior to this date.

#### Your Converted Average When Compared to All Classes in the IDEA Database

Comparison Category	A. Progress on Relevant Objectives	Overall Ratings						Summary Evaluation (Average of A & D)	
		B. Excellent Teacher		C. Excellent Course		D. Average of B & C		Raw	Adj.
		Raw	Adj.	Raw	Adj.	Raw	Adj.		
Much Higher Highest 10% (63 or higher)									
Higher Next 20% (56-62)			56	56					
Similar Middle 40% (45-55)	52	54			50	51	53	54	53 54
Lower Next 20% (38-44)									
Much Lower Lowest 10% (37 or lower)									

#### Your Converted Average When Compared to Your:<sup>2</sup>

Discipline (IDEA Data)	55	58	59	60	54	56	57	58	56	58
Institution	53	57	57	59	51	55	54	57	54	57

IDEA Discipline used for comparison:  
 Engineering

## Student Ratings of Learning on Relevant (Important and Essential) Objectives

Average unadjusted (raw) and adjusted progress ratings are shown below for those objectives you identified as "Important" or "Essential." **Progress on Relevant Objectives** (also shown on page 1) is a weighted average of student ratings of the progress they reported on objectives selected as "Important" or "Essential" (double weighted). The percent of students rating each as "1" or "2" (either "no" or "slight" progress) and as "4" or "5" ("substantial" or "exceptional" progress) is also reported. These results should help you identify objectives where improvement efforts might best be focused. Page 3 contains suggestions about the types of changes you might consider to obtain more satisfactory results.

	Importance Rating	Your Average (5-point scale)		Percent of Students Rating	
		Raw	Adj.	1 or 2	4 or 5
21. Gaining factual knowledge (terminology, classifications, methods, trends)	Important	4.4	4.4	0%	89%
22. Learning fundamental principles, generalizations, or theories	Essential	4.4	4.4	0%	89%
23. Learning to <i>apply</i> course material (to improve thinking, problem solving, and decisions)	Essential	4.3	4.4	3%	86%
24. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course	Important	4.3	4.5	3%	83%
25. Acquiring skills in working with others as a member of a team	Minor/None				
26. Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)	Minor/None				
27. Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)	Minor/None				
28. Developing skill in expressing myself orally or in writing	Minor/None				
29. Learning how to find and use resources for answering questions or solving problems	Minor/None				
30. Developing a clearer understanding of, and commitment to, personal values	Minor/None				
31. Learning to <i>analyze</i> and <i>critically evaluate</i> ideas, arguments, and points of view	Important	2.9	2.9	41%	35%
32. Acquiring an interest in learning more by asking my own questions and seeking answers	Important	3.4	3.6	29%	50%
<b>Progress on Relevant Objectives</b>		<b>4.1</b>	<b>4.1</b>		

<sup>1</sup> The process for computing Progress on Relevant Objectives for the Discipline and Institution was modified on May 1, 2006. Do not compare these results with reports generated prior to this date.

Your Converted Average When Compared to Group Averages					
IDEA Database		IDEA Discipline <sup>1</sup>		Your Institution <sup>1</sup>	
Raw	Adjusted	Raw	Adjusted	Raw	Adjusted
58 Higher	58 Higher	59 Higher	60 Higher	57 Higher	59 Higher
<b>59 Higher</b>	<b>59 Higher</b>	<b>59 Higher</b>	<b>61 Higher</b>	<b>58 Higher</b>	<b>60 Higher</b>
<b>55 Similar</b>	<b>58 Higher</b>	<b>57 Higher</b>	<b>60 Higher</b>	<b>56 Higher</b>	<b>61 Higher</b>
54 Similar	58 Higher	58 Higher	61 Higher	56 Higher	62 Higher
34 Much Lower	35 Much Lower	44 Lower	45 Similar	38 Lower	40 Lower
43 Lower	46 Similar	49 Similar	52 Similar	45 Similar	50 Similar
<b>52</b>	<b>54</b>	<b>55</b>	<b>58</b>	<b>53</b>	<b>57</b>

Much Higher = Highest 10% of classes (63 or higher)  
 Higher = Next 20% (56-62)  
 Similar = Middle 40% (45-55)  
 Lower = Next 20% (38-44)  
 Much Lower = Lowest 10% (37 or lower)

## Description of Course and Students

Students described the course by rating three items related to "level of academic challenge." Results cannot be interpreted as "good" or "bad"; in general, these ratings have a slight positive relationship with measures of academic achievement. The three items describing your students relate to their academic motivation and work habits and are key factors in developing adjusted ratings.

Course Description	Your Average (5-point scale)
33. Amount of reading	3.2
34. Amount of work in other (non-reading) assignments	4.2
35. Difficulty of subject matter	4.1

### Student Description

37. I worked harder on this course than on most courses I have taken.	3.9
39. I really wanted to take this course regardless of who taught it.	3.5
43. As a rule, I put forth more effort than other students on academic work.	3.6

Your Converted Average When Compared to Group Averages					
IDEA Database		IDEA Discipline		Your Institution	
51	Similar	54	Similar	51	Similar
64	Much Higher	58	Higher	61	Higher
62	Higher	57	Higher	61	Higher

55	Similar	55	Similar	55	Similar
53	Similar	53	Similar	49	Similar
48	Similar	46	Similar	44	Lower

Much Higher = Highest 10% of classes (63 or higher)  
 Higher = Next 20% (56-62)  
 Similar = Middle 40% (45-55)  
 Lower = Next 20% (38-44)  
 Much Lower = Lowest 10% (37 or lower)



## Improving Teaching Effectiveness

One way to improve teaching effectiveness is to make more use of the teaching methods closely related to learning on specific objectives.

- Review [page 2](#) to identify the objective(s) where improvements are most desirable.
- Use the first column to answer the question, "Which of the 20 teaching methods are most related to learning on these objective(s)?"
- Review the next two columns to answer the question, "How did students rate my use of these important methods?"
- Read the last column to answer the question, "What changes should I consider in my teaching methods?"
- Beyond specific methods, do the results suggest a general area (e.g., Stimulating Student Interest) where improvement efforts should be focused?

Suggested Actions are based on comparisons with ratings for classes of similar size and level of student motivation. **Consider increasing use** means you employed the method less frequently than those teaching similar classes. **Retain current use or consider increasing** means you employed the method with typical frequency. **Strength to retain** means you employed the method more frequently than those teaching similar classes. More detailed suggestions are in the **Interpretive Guide** ([www.idea.ksu.edu/diagnosticguide.pdf](http://www.idea.ksu.edu/diagnosticguide.pdf)) and in the **POD-IDEA Center Notes** ([www.idea.ksu.edu/podidea](http://www.idea.ksu.edu/podidea)).

### Teaching Methods and Styles

	Relevant to Objectives: (see page 2)	Your Average (5-point scale)	Percent of Students Rating 4 or 5	Suggested Action
<b>Stimulating Student Interest</b>				
<b>15. Inspired students to set and achieve goals which really challenged them</b>	All selected objectives	3.7	49%	Consider increasing use
13. Introduced stimulating ideas about the subject	All selected objectives	4.1	69%	Retain current use or consider increasing
<b>4. Demonstrated the importance and significance of the subject matter</b>	All selected objectives	4.4	86%	Strength to retain
<b>8. Stimulated students to intellectual effort beyond that required by most courses</b>	All selected objectives	4.1	74%	Strength to retain

### Fostering Student Collaboration

<b>16. Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own</b>	31	2.8	34%	Consider increasing use
18. Asked students to help each other understand ideas or concepts	24, 31, 32	3.8	60%	Retain current use or consider increasing
5. Formed "teams" or "discussion groups" to facilitate learning	Not relevant to objectives selected	2.7	26%	

### Establishing Rapport

<b>2. Found ways to help students answer their own questions</b>	All selected objectives	4.4	83%	Strength to retain
<b>7. Explained the reasons for criticisms of students' academic performance</b>	23, 24, 31, 32	4.0	74%	Strength to retain
<b>1. Displayed a personal interest in students and their learning</b>	32	4.5	94%	Strength to retain
20. Encouraged student-faculty interaction outside of class (office visits, phone calls, e-mails, etc.)	Not relevant to objectives selected	4.2	77%	

### Encouraging Student Involvement

11. Related course material to real life situations	23	4.2	80%	Retain current use or consider increasing
19. Gave projects, tests, or assignments that required original or creative thinking	31	3.7	63%	Retain current use or consider increasing
9. Encouraged students to use multiple resources (e.g. data banks, library holdings, outside experts) to improve understanding	Not relevant to objectives selected	3.4	41%	
14. Involved students in "hands on" projects such as research, case studies, or "real life" activities	Not relevant to objectives selected	2.7	31%	

### Structuring Classroom Experiences

<b>6. Made it clear how each topic fit into the course</b>	21, 22, 23, 24, 31	4.4	86%	Strength to retain
<b>10. Explained course material clearly and concisely</b>	21, 22	4.5	89%	Strength to retain
<b>12. Gave tests, projects, etc. that covered the most important points of the course</b>	21, 22	4.6	97%	Strength to retain
3. Scheduled course work (class activities, tests, projects) in ways which encouraged students to stay up-to-date in their work	Not relevant to objectives selected	4.6	94%	
17. Provided timely and frequent feedback on tests, reports, projects, etc. to help students improve	Not relevant to objectives selected	3.5	51%	

**5-point Scale:** 1 = Hardly Ever 2 = Occasionally 3 = Sometimes 4 = Frequently 5 = Almost Always

**Statistical Detail**

	Number Responding					Omit	Avg.	s.d.
	1	2	3	4	5			
1. Displayed a personal interest in students and their learning	0	1	1	12	21	0	4.5	0.7
2. Found ways to help students answer their own questions	0	1	5	8	21	0	4.4	0.8
3. Scheduled course work (class activities, tests, projects) in ways...	0	1	1	10	23	0	4.6	0.7
4. Demonstrated the importance and significance of the subject matter	0	0	5	12	18	0	4.4	0.7
5. Formed "teams" or "discussion groups" to facilitate learning	10	6	10	1	8	0	2.7	1.5
6. Made it clear how each topic fit into the course	0	0	5	12	18	0	4.4	0.7
7. Explained the reasons for criticisms of students' academic...	1	3	5	11	14	1	4.0	1.1
8. Stimulated students to intellectual effort beyond that required by...	1	1	7	11	15	0	4.1	1.0
9. Encouraged students to use multiple resources (e.g. data banks,...	3	5	12	3	11	1	3.4	1.3
10. Explained course material clearly and concisely	0	1	3	9	22	0	4.5	0.8
11. Related course material to real life situations	1	1	5	12	16	0	4.2	1.0
12. Gave tests, projects, etc. that covered the most important points...	0	0	1	13	21	0	4.6	0.6
13. Introduced stimulating ideas about the subject	1	1	9	8	16	0	4.1	1.1
14. Involved students in "hands on" projects such as research, case...	14	1	9	4	7	0	2.7	1.6
15. Inspired students to set and achieve goals which really...	2	3	13	3	14	0	3.7	1.3
16. Asked students to share ideas and experiences with others...	11	5	7	4	8	0	2.8	1.6
17. Provided timely and frequent feedback on tests, reports,...	2	7	8	7	11	0	3.5	1.3
18. Asked students to help each other understand ideas or concepts	2	1	11	9	12	0	3.8	1.1
19. Gave projects, tests, or assignments that required original or...	5	2	6	7	15	0	3.7	1.4
20. Encouraged student-faculty interaction outside of class (office...	1	3	4	6	21	0	4.2	1.1

Key: 1 = Hardly Ever 2 = Occasionally 3 = Sometimes 4 = Frequently 5 = Almost Always

The details on this page are of interest primarily to those who want to confirm scores reported on pages 1-3 or who want to determine if responses to some items were distributed in an unusual manner.

Converted Averages are reported only for relevant learning objectives (Important or Essential - see page 2) and other items for which comparisons were provided.

Notes:  
Dept code selected on FIF: 1400  
Dept code used for discipline comparison: 1400

									Converted Avg.		Comparison Group Average		
	1	2	3	4	5	Omit	Avg.	s.d.	Raw	Adj.	IDEA	Discipline	Institution
21. Gaining factual knowledge (terminology,...	0	0	4	13	18	0	4.4	0.7	58	58	4.0	3.9	4.0
22. Learning fundamental principles, generalizations, or...	0	0	4	14	17	0	4.4	0.7	59	59	3.9	3.9	4.0
23. Learning to apply course material (to improve thinking,...	0	1	4	15	15	0	4.3	0.8	55	58	4.0	3.9	4.0
24. Developing specific skills, competencies, and points of...	0	1	5	13	16	0	4.3	0.8	54	58	4.0	3.9	4.0
25. Acquiring skills in working with others as a member of a team	13	5	8	3	6	0	2.5	1.5	NA	NA	3.9	4.0	3.9
26. Developing creative capacities (writing, inventing, designing,...	16	4	8	1	6	0	2.3	1.5	NA	NA	3.9	3.2	3.7
27. Gaining a broader understanding and appreciation of...	12	5	7	3	7	1	2.6	1.6	NA	NA	3.7	2.7	3.5
28. Developing skill in expressing myself orally or in writing	14	6	5	4	5	1	2.4	1.5	NA	NA	3.8	3.2	3.7
29. Learning how to find and use resources for answering questions...	4	4	9	6	11	1	3.5	1.4	NA	NA	3.7	3.5	3.7
30. Developing a clearer understanding of, and commitment to,...	11	4	9	3	7	1	2.7	1.5	NA	NA	3.8	3.2	3.6
31. Learning to analyze and critically evaluate ideas,...	9	5	8	5	7	1	2.9	1.5	34	35	3.8	3.3	3.7
32. Acquiring an interest in learning more by asking my...	6	4	7	4	13	1	3.4	1.5	43	46	3.8	3.5	3.7

Key: 1 = No apparent progress 2 = Slight progress 3 = Moderate progress 4 = Substantial progress 5 = Exceptional progress **Bold = Selected as Important or Essential**

33. Amount of reading	1	6	15	8	4	1	3.2	1.0	51	NA	3.2	3.0	3.2
34. Amount of work in other (non-reading) assignments	0	0	5	17	13	0	4.2	0.7	64	NA	3.4	3.7	3.5
35. Difficulty of subject matter	0	1	3	22	9	0	4.1	0.7	62	NA	3.4	3.6	3.4

Key: 1 = Much Less than Most 2 = Less than Most 3 = About Average 4 = More than Most 5 = Much More than Most

36. I had a strong desire to take this course.	2	2	12	8	11	0	3.7	1.2	NA	NA	3.7	NA	NA
37. I worked harder on this course than on most courses I have taken.	1	1	9	15	9	0	3.9	0.9	55	NA	3.6	3.6	3.6
38. I really wanted to take a course from this instructor.	2	3	17	7	5	1	3.3	1.0	NA	NA	3.4	NA	NA
39. I really wanted to take this course regardless of who taught it.	4	3	8	11	9	0	3.5	1.3	53	NA	3.3	3.4	3.5
40. As a result of taking this course, I have more positive feelings...	1	2	8	8	16	0	4.0	1.1	53	54	3.9	3.7	3.8
41. Overall, I rate this instructor an excellent teacher.	0	0	5	6	24	0	4.5	0.7	56	56	4.2	3.9	4.1
42. Overall, I rate this course as excellent.	1	1	8	14	11	0	3.9	1.0	50	51	3.9	3.7	3.9
43. As a rule, I put forth more effort than other students on...	1	5	9	13	7	0	3.6	1.1	48	NA	3.6	3.7	3.8

Key: 1 = Definitely False 2 = More False than True 3 = In Between 4 = More True than False 5 = Definitely True

**Additional Questions:**

	1	2	3	4	5	Omit	Avg.	s.d.
48.	16	6	2	10	0	1	2.2	1.3
49.	11	13	3	7	0	1	2.2	1.1
50.	6	7	11	10	0	1	2.7	1.1
51.						35		
52.						35		
53.						35		
54.						35		
55.						35		
56.						35		
57.						35		

	1	2	3	4	5	Omit	Avg.	s.d.
58.						35		
59.						35		
60.						35		
61.						35		
62.						35		
63.						35		
64.						35		
65.						35		
66.						35		
67.						35		