# **PAGE: DEFAULT SECTION**

1. How many classes of Calculus I did you teach this term? (Note: Multiple sections that met for the same lecture count as one class)

	Response Count
Show replies	526
answered question	526
skipped question	5

2. For each Calculus class that you taught, indicate whether it was an honors or non-honors.

	Honors	Non-honors	Response Count
Class 1	5.2% (27)	94.8% (497)	524
Class 2	4.0% (5)	96.0% (120)	125
Class 3	0.0% (0)	100.0% (25)	25
Class 4	0.0% (0)	100.0% (14)	14
Class 5	0.0% (0)	100.0% (3)	3
	an	swered questior	525
	s	kipped question	n 6

3. At the end of the term, how many students were enrolled in each Calculus class that you taught?

	Response Average	Response Total	Response Count
Class 1 Show replies	41.95	22,026	525
Class 2 Show replies	34.90	4,328	124
	answer	ed question	526
	skipp	ed question	5

# 3. At the end of the term, how many students were enrolled in each Calculus class that you taught?

	skippe	ed question	5
	answere	ed question	526
Class 5 Show replies	0.00	0	1
Class 4 Show replies	24.77	322	13
Class 3 Show replies	27.95	615	22

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# 4. Approximately what percentage of your students were prepared for the course?

	more than 80%	60 - 80%	40 - 60%	20 - 40%	less than 20%	Response Count
Class 1	25.1% (131)	38.6% (201)	25.3% (132)	9.8% (51)	1.2% (6)	521
Class 2	25.6% (32)	34.4% (43)	24.8% (31)	12.0% (15)	3.2% (4)	125
Class 3	17.4% (4)	43.5% (10)	30.4% (7)	8.7% (2)	0.0%	23
Class 4	14.3% (2)	42.9% (6)	28.6% (4)	14.3% (2)	0.0%	14
Class 5	100.0% (1)	0.0%	0.0%	0.0%	0.0%	1
			ans	wered qu	estion	522
			sl	kipped qu	estion	9

5. How many times this term did your department or college organize an event (workshop, seminar, meeting, etc.) related to issues of teaching and learning mathematics?

Response Percent	Response Count
answered question	523
skipped question	8

# 5. How many times this term did your department or college organize an event (workshop, seminar, meeting, etc.) related to issues of teaching and learning mathematics?

Zero	34.2%	179
Once	13.8%	72
Twice	6.9%	36
Three times	5.0%	26
More than three times	24.9%	130
Don't know	15.3%	80
	answered question	523
	skipped question	8

# 6. How many times this term did you attend an event described in question 5?

	Response Percent	Response Count
Zero	43.6%	228
Once	18.0%	94
Twice	9.4%	49
Three times	3.6%	19
More than three times	13.2%	69
N/A	12.2%	64
	answered question	523
	skipped question	8

# 7. How many office hours did you hold each week for Calculus I during the current semester?

	Response Count
Show replies	525
answered question	525
skipped question	6

# 8. How many office hours did your TA(s) hold each week for Calculus I during the current semester?

	Response Count
Show replies	440
answered question	440
skipped question	91

#### 9. How often did you do the following outside of class?

	Never	Infrequently	Frequently	Very frequently	Response Count
Helped students with course content during office hours	1.1% (6)	24.7% (130)	45.8% (241)	28.3% (149)	526
Helped students with course content outside of office hours	3.6% (19)	48.9% (256)	37.7% (197)	9.8% (51)	523
Mentored students regarding non-course content (e.g., career options, future course)	19.0% (100)	60.3% (317)	17.7% (93)	3.0% (16)	526
			answer	ed question	526
			skipp	ed question	5

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# 10. How many exams, not including the final, did you give?

		Response Count
	Show replies	500
	answered question	500
	skipped question	31
11. Indicate how often the following occured:	answered questio	n 5

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skipped question

6

# 11. Indicate how often the following occured:

	Never	Some class sessions	About half the class sessions	Most class sessions	Every class session	Response Count
you gave a short quiz	30.4% (158)	49.6% (258)	14.4% (75)	3.1% (16)	2.5% (13)	520
students turned in assignments (either hard copy or online)	10.7% (55)	31.8% (164)	20.6% (106)	20.4% (105)	16.5% (85)	515
				answered	l question	525
				skipped	l question	6

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# 12. What was the format of the majority of your homework assignments?

	Response Percent	Response Count
multiple choice items	2.1%	11
free response questions	81.9%	429
more or less equal amounts of both	10.9%	57
not applicable	5.2%	27
	answered question	524
	skipped question	7

# 13. How were homework assignments submitted? Check all that apply.

	Response Percent	Response Count	
on paper, in class	63.0%	331	
electronically via email or fax	5.3%	28	
	answered question	525	
	skipped question	6	

# 13. How were homework assignments submitted? Check all that apply.

via an on-line homework system (e.g., WeBWorK, MAPLE T.A.)	45.5%	239
not applicable	15.0%	79
	answered question	525
	skipped question	6

# 14. How were homework assignments graded? Check all that apply.

	Response Percent	Response Count
via an on-line homework system (e.g., WeBWorK, MAPLE T.A.)	44.1%	231
by hand by myself	39.3%	206
by hand by a grader	27.7%	145
solutions were posted or distributed for students to check their own work	13.5%	71
not applicable	13.2%	69
	answered question	524
	skipped question	7

# 15. Approximately what percent of each homework assignment (does not need to add up to 100%):

Percentage										
	0	10	20	30	40	50	60	70	80	90
was graded by hand?	26.1% (116)	7.6% (34)	10.1% (45)	9.0% (40)	6.1% (27)	7.2% (32)	1.1% (5)	1.3% (6)	2.0% (9)	2.9% (13)
was graded via an on-line homework system?	30.4% (102)	2.1% (7)	0.9%	2.1% (7)	2.4% (8)	11.6% (39)	3.6% (12)	4.8% (16)	5.4% (18)	6.8% (23)

answered

skipped

# 15. Approximately what percent of each homework assignment (does not need to add up to 100%):

was not graded, but solutions were posted?	51.1% (134)	9.9% (26)	4.6% (12)	2.3% (6)	2.3% (6)	5.3% (14)	3.4% (9)	3.4% (9)	2.7% (7)	1.9% (5)
was not graded and solutions were not posted?	62.1%	5.3%	2.1%	2.5%	0.4%	4.1%	5.3%	2.9%	2.9%	2.1%
	(151)	(13)	(5)	(6)	(1)	(10)	(13)	(7)	(7)	(5)

answered

skipped

# PAGE:

#### 16. How many projects (group or individual) did you assign this term?

	Response Percent	Response Count
0	73.9%	385
1	7.5%	39
2	6.5%	34
more than 2	12.1%	63
	answered question	521
	skipped question	10

#### 17. What percentage of your students' course grade was based on the projects?

		Response Count
	Show replies	454
	answered question	454
	skipped question	77
18. In my Calculus I course:		
	answered question	517

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skipped question

14

# 18. In my Calculus I course:

	Response Percent	Response Count
a common final was administered to all sections.	61.7%	319
different sections used different final exam questions.	31.7%	164
a combination of both.	6.6%	34
	answered question	517
	skipped question	14

# 19. How was your final exam for Calculus I graded?

	Response Percent	Response Count
By myself without a rubric	14.3%	75
By myself using my own rubric	37.4%	196
By myself using a common rubric	5.2%	27
By myself with one or more TAs/graders	6.1%	32
By one or more TAs/graders	2.3%	12
By a group of instructors using a common rubric	28.1%	147
Multiple Choice Scantron	2.1%	11
Other (please specify) Show replies	4.6%	24
	answered question	524
	skipped question	7

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20. What other course materials did you make available for students? Check all that apply.

515

skippedReapstise Respesse Percent Count

# 20. What other course materials did you make available for students? Check all that apply.

	answered question skipped question	515 16
Other (please specify) Show replies	11.1%	57
online lectures	7.6%	39
computer animations or interactive software	25.6%	132
supplemental curriculum materials including in-class worksheets and online material	55.9%	288
instructor prepared lecture notes	29.3%	151
student prepared class notes	5.0%	26
none	22.3%	115

# 21. What technology did you require students to use outside of class? Check all that apply.

	Response Percent	Response Count
Mathematica, Maple, Matlab, etc	23.2%	97
Graphing calculators	61.3%	257
Online course websites	45.1%	189
Java applets or other animations	5.5%	23
Other (please specify) Show replies	9.5%	40
	answered question	419
	skipped question	112

#### 22. How frequently were the following technologies used during class?

Response	Every	Most	About	Some	Never
520	d question	answered			
11	d question	skipped			

# 22. How frequently were the following technologies used <u>during</u> class?

		class sessions	half the class sessions	class sessions	class session	Count
Instructor demonstration with a graphing calculator	54.8% (275)	34.7% (174)	3.6% (18)	5.8% (29)	1.2% (6)	502
Student use of graphing calculators	38.6% (191)	32.9% (163)	9.3% (46)	13.9% (69)	5.3% (26)	495
Instructor demonstration with computer algebra system (e.g., Maple, Mathematica, MATLAB)	65.3% (326)	27.9% (139)	3.6% (18)	2.6% (13)	0.6% (3)	499
Student use of a computer algebra system (e.g., Maple, Mathematica, MATLAB)	79.2% (384)	15.1% (73)	4.3% (21)	1.0% (5)	0.4% (2)	485
				answered	question	520
				skipped	question	11

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# 23. When teaching my Calculus class, I:

	Not at all 1	2	3	4	5	Very often 6	Response Count
had enough time during class to help students understand difficult ideas.	1.4% (7)	8.5% (44)	18.0% (93)	24.9% (129)	31.5% (163)	15.8% (82)	518
felt pressured to go through material quickly to cover all the required topics.	11.3% (57)	28.9% (146)	23.6% (119)	17.4% (88)	14.7% (74)	4.2% (21)	505
				an	swered q	uestion	520
				S	skipped q	uestion	11
24. During class time, how fre	quently did	l you:		an	swered o	luestion	520
					skipped o		11

# 24. During class time, how frequently did you:

	Not at all 1	2	3	4	5	Very often 6	Response Count
show students how to work specific problems?	0.6%	2.5% (13)	6.5% (34)	14.2% (74)	25.0% (130)	51.2% (266)	520
have students work with one another?	22.2% (115)	22.9% (119)	15.2% (79)	13.3% (69)	11.2% (58)	15.2% (79)	519
hold a whole-class discussion?	20.8% (108)	24.3% (126)	15.3% (79)	15.4% (80)	11.8% (61)	12.4% (64)	518
have students give presentations?	66.6% (343)	19.0% (98)	6.6% (34)	4.1% (21)	1.6% (8)	2.1% (11)	515
have students work individually on problems or tasks?	19.2% (99)	25.4% (131)	17.6% (91)	13.8% (71)	13.4% (69)	10.7% (55)	516
lecture?	1.9% (10)	2.5% (13)	3.5% (18)	12.9% (67)	24.1% (125)	55.0% (285)	518
ask questions?	0.6% (3)	1.4% (7)	7.0% (36)	13.0% (67)	26.4% (136)	51.7% (267)	516
ask students to explain their thinking?	4.3% (22)	16.1% (83)	16.5% (85)	21.6% (111)	21.4% (110)	20.2% (104)	515
				an	swered q	uestion	520
				5	skipped q	uestion	11

25. How frequently did you:

	Not at all 1	2	3	4	5	Very often 6	Response Count
prepare extra materials				40.00/			
to help students	11.1%	16.3%	20.3%	19.2%	16.5%	16.7%	522
understand calculus	(58)	(85)	(106)	(100)	(86)	(87)	022
concepts or procedures?							
require students to	17.7%	16.1%	16.5%	15.5%	17.3%	16.9%	
explain their thinking on assignments?	(91)	(83)	(85)	(80)	(89)	(87)	515
-				an	swered q	uestion	522
				ç	skipped q	uestion	9

9

# 25. How frequently did you:

require students to explain their thinking on exams?	8.3% (43)	13.5% (70)	15.6% (81)	18.9% (98)	18.3% (95)	25.3% (131)	518
assign sections in the textbook for students to read before coming to class?	29.7% (154)	15.6% (81)	13.3% (69)	7.5% (39)	8.3% (43)	25.6% (133)	519
			·	an	swered o	question	522

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26. On a typical assignment, approximately what percentage of the problems focused on (does not need to add up to 100%):

skipped question

Percentage										
	0	10	20	30	40	50	60	70	80	
skills and methods for carrying out										
computations (e.g., methods of determining derivatives and antiderivatives)?	0.0%	2.6% (13)	6.9% (35)	16.1% (82)	14.8% (75)	20.1% (102)	12.2% (62)	12.2% (62)	10.4% (53)	3
graphical interpretation of central ideas?	1.2%	23.7% (118)	34.7% (173)	23.9% (119)	6.8% (34)	4.2% (21)	1.8%	2.4% (12)	0.8%	С
solving routine word problems?	1.6% (8)	24.6% (123)	38.9% (195)	19.6% (98)	7.2% (36)	4.6% (23)	0.8% (4)	1.2% (6)	1.4% (7)	О
solving complex or unfamiliar word problems?	12.4% (61)	48.9% (241)	21.9% (108)	7.9% (39)	3.7% (18)	2.6% (13)	1.0% (5)	1.0% (5)	0.4%	С
proofs or justifications?	30.6% (148)	50.9% (246)	10.1% (49)	4.3% (21)	1.2% (6)	1.4% (7)	0.6%	0.2%	0.0%	О

ansv

ski

27. On a typical exam, approximately what percentage of the points focused on (does not need to add up to 100%):

answe

skip

# 27. On a typical exam, approximately what percentage of the points focused on (does not need to add up to 100%):

Percentage	Percentage										
	0	10	20	30	40	50	60	70	80		
skills and methods for											
carrying out computations (e.g., methods of determining derivatives and antiderivatives)?	0.6% (3)	2.9% (15)	7.6% (39)	16.1% (83)	14.1% (73)	17.2% (89)	16.5% (85)	12.0% (62)	9.1% (47)	2.	
graphical interpretation of central ideas?	2.8% (14)	29.6% (150)	35.6% (180)	20.8% (105)	4.9% (25)	2.4% (12)	1.6%	1.2% (6)	0.6%	0.0	
solving standard word problems?	1.2% (6)	26.0% (133)	39.6% (203)	20.1% (103)	7.2% (37)	2.0% (10)	1.4%	1.4%	0.8%	0.0	
solving complex or unfamiliar word problems?	30.1% (144)	46.1% (221)	13.8% (66)	4.6% (22)	1.7% (8)	1.3% (6)	0.8%	0.8%	0.4% (2)	0.0	
proofs or justifications?	33.3% (158)	49.8% (236)	9.7% (46)	3.4% (16)	1.1% (5)	1.3%	0.4%	0.4%	0.2%	0.0	

answe

skip

#### 28. In a typical week, what percentage of students attended each class session?

	Response Count
Show replies	471
answered question	471
skipped question	60

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29. Indicate the extent to which you agree or disagree with the following statements.

answered question 501

skipped question 30

29. Indicate the extent to which you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Response Count
All students in beginning calculus are capable of understanding the ideas of calculus.	8.4% (42)	14.6% (73)	13.2% (66)	22.2% (111)	30.7% (154)	11.0% (55)	501
Calculus students learn best from lectures, provided they are clear and well-organized.	3.4% (17)	12.1% (60)	20.2% (100)	37.3% (185)	20.4% (101)	6.7% (33)	496
It is the student's responsibility to address his or her deficiencies with prerequisites.	1.2% (6)	4.0% (20)	13.0% (65)	43.1% (215)	27.3% (136)	11.4% (57)	499
Understanding ideas in calculus typically comes after achieving procedural fluency.	3.4% (17)	12.5% (62)	20.2% (100)	36.1% (179)	23.2% (115)	4.6% (23)	496
If I had a choice, I would continue to teach calculus.	0.6% (3)	2.8% (14)	4.8% (24)	11.1% (55)	33.1% (164)	47.6% (236)	496
Familiarity with the research literature on how students think about ideas in calculus would be useful for teaching.	2.0% (10)	4.4% (22)	8.0% (40)	27.8% (138)	39.2% (195)	18.5% (92)	497
					answere	d question	501
					skippe	d question	30

30. Enter the *number of students* who received the following grades in what you indicated in item 4 above was your first Calculus class. (If you only taught one section of Calculus I, enter your data for that section here.)

	Response Respon Average Total	se Response Count
W/D Show replies	4.75 1,8	42 388
	answered question	on 478
	skipped questi	on 53

# 30. Enter the *number of students* who received the following grades in what you indicated in item 4 above was your first Calculus class. (If you only taught one section of Calculus I, enter your data for that section here.)

F Show replies	4.56	2,058	451
D Show replies	4.07	1,866	458
C (includes C- and C+) Show replies	10.34	4,899	474
B (includes B- and B+) Show replies	12.64	6,005	475
A (includes A- and A+) Show replies	10.09	4,803	476
	answered	question	478
	skipped	question	53

#### 31. Select YES to enter grade data for another class.

	Response Percent	Response Count
Yes	20.0%	93
No	80.0%	373
	answered question	466
	skipped question	65

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32. Enter the number of students who received the following grades in what you previously indicated was your second Calculus class.

	Response Average	Response Total	Response Count
W/D Show replies	3.77	298	79
F Show replies	3.78	344	91
	answer	ed question	95
	skipp	ed question	436

# 32. Enter the number of students who received the following grades in what you previously indicated was your second Calculus class.

D Show replies	3.51	316	90
C (includes C- and C+) Show replies	8.38	788	94
B (includes B- and B+) Show replies	11.19	1,063	95
A (includes A- and A+) Show replies	8.98	853	95
	answere	d question	95
	skippe	d question	436

# 33. Select YES to enter grade data for another class.

	Response Percent	Response Count
Yes	16.0%	16
No	84.0%	84
	answered question	100
	skipped question	431

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34. Enter the number of students who received the following grades in what you previously indicated was your third Calculus class.

	Response Average	Response Total	Response Count
W/D Show replies	3.86	54	14
F Show replies	3.60	54	15
D Show replies	3.13	50	16
	answer	ed question	16
	skipp	ed question	515

#### 34. Enter the number of students who received the following grades in what you previously indicated was your third Calculus class.

	skipped	question	515
	answered	question	16
A (includes A- and A+) Show replies	9.25	148	16
B (includes B- and B+) Show replies	11.13	178	16
C (includes C- and C+) Show replies	7.81	125	16

# 35. Select YES to enter grade data for another class.

	Response Percent	Response Count
Yes	27.3%	6
No	72.7%	16
	answered question	22
	skipped question	509

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36. Enter the number of students who received the following grades in what you previously indicated was your fourth Calculus class.

	Response Average	Response Total	Respons Count
W/D Show replies	5.14	36	
F Show replies	2.57	18	
D Show replies	2.29	16	
C (includes C- and C+) Show replies	6.43	45	
	answer	ed question	
	ekinn	od guaction	<b>52</b> 4

skipped question

# 36. Enter the number of students who received the following grades in what you previously indicated was your fourth Calculus class.

	skipped qu	estion	524
	answered que	estion	7
A (includes A- and A+) Show replies	4.57	32	7
B (includes B- and B+) Show replies	7.14	50	7

#### 37. Select YES to enter grade data for another class.

	Response Percent	Response Count
Yes	0.0%	0
No	100.0%	10
	answered question	10
	skipped question	521

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38. Enter the number of students who received the following grades in what you previously indicated was your fifth Calculus class.

	Response Average	Response Total	Response Count
W/D Show replies	3.00	3	1
F Show replies	3.00	3	1
D Show replies	4.00	4	1
C (includes C- and C+) Show replies	10.00	10	1
B (includes B- and B+) Show replies	5.00	5	1
	answer	ed question	1
	skipp	ed question	530

38. Enter the number of students who received the following grades in what you previously indicated was your fifth Calculus class.

A (includes A- and A+) Show replies	3.00 3	1
	answered question	1
	skipped question	530