

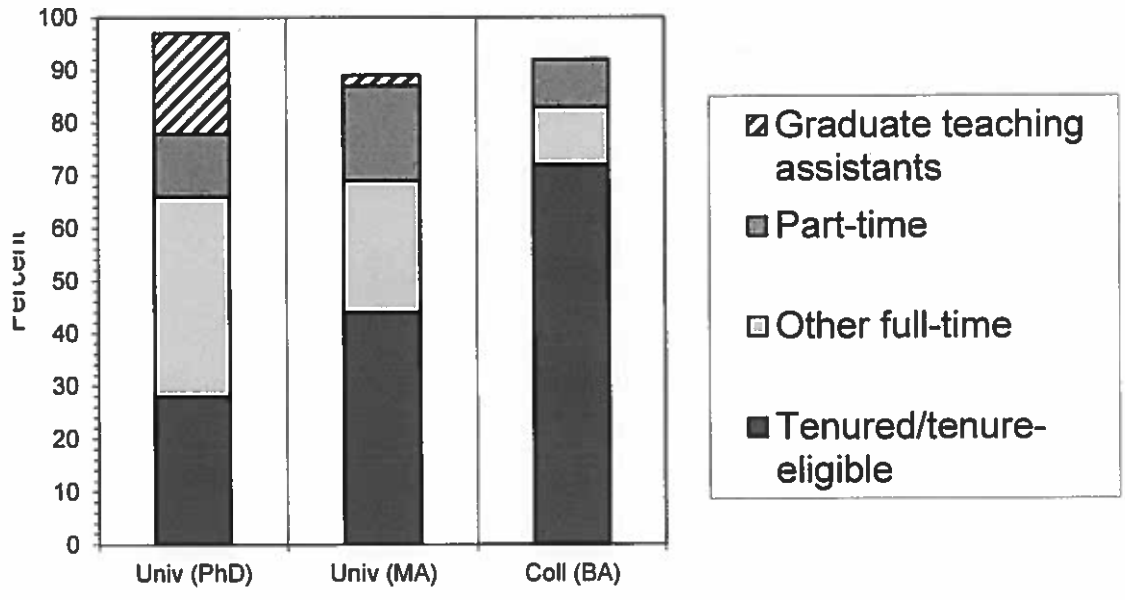
TABLE FY.1 Percentage of sections (excluding distance-learning sections) in Mainstream Calculus I and Mainstream Calculus II taught by various types of instructors in four-year mathematics departments in fall 2015, by size of sections and type of department. Also average section sizes and enrollments (not including distance-learning enrollments). This table can be compared to Table FY.3, p. 119 of CBMS2010.

Course & Department Type	Percentage of sections taught by												Average Section Size			Enrollment (1000s)						
	Tenured/tenure-eligible <sup>1</sup> %		Other full-time %		Part-time %		Graduate teaching assistants %		Unknown %		PhD	MA	BA	PhD	MA	BA	PhD	MA	BA			
<b>Mainstream Calculus I</b>																						
Lecture with separate recitation		28	32	75	48	26	18	12	24	1	7	4	0	5	14	6	98	45	26	93	40	12
Sections that meet as a class		26	62	72	31	26	8	12	7	10	27	0	0	3	5	10	32	30	23	39	18	51
Other sections		27	0	35	32	0	65	7	100	0	34	0	0	0	0	0	32	0	9	2	0	0
Total Mainstream Calculus I		27	44	72	38	25	11	12	18	9	19	2	0	4	11	9	60	38	24	134	58	63
<b>Mainstream Calculus II</b>																						
Lecture with separate recitation		33	66	65	52	11	23	5	17	0	5	6	0	6	0	12	90	37	22	54	13	5
Sections that meet as a class		27	60	69	38	18	15	8	4	6	25	0	0	3	18	9	38	28	20	21	7	24
Other sections		38	NA	100	25	NA	0	0	NA	0	38	NA	0	0	NA	0	29	NA	10	1	0	0
Total Mainstream Calculus II		30	64	69	44	14	17	6	12	5	15	4	0	4	7	10	64	33	20	76	21	29
Total Mainstream Calculus I & II		28	50	71	40	22	13	10	16	7	18	3	0	4	10	9	62	37	23	210	79	92

Note: 0% means less than one half of 1%. ) enrollment means under 500. Inconsistencies in column and row sums are due to round-off.

NA = Not applicable.

<sup>1</sup> In 2010, the CBMS survey added the word "permanent" to the description "tenured/tenure eligible" that was used previously. In 2015 the word "permanent" was deleted.



**FIGURE FY.1.1** Percentage of sections (excluding distance learning) in Mainstream Calculus I in four-year mathematics departments by type of instructor and by type of department in fall 2015. (Deficits from 100% represent unknown instructors.) This figure can be compared to Figure FY.3.1, p. 120, in CBMS2010.

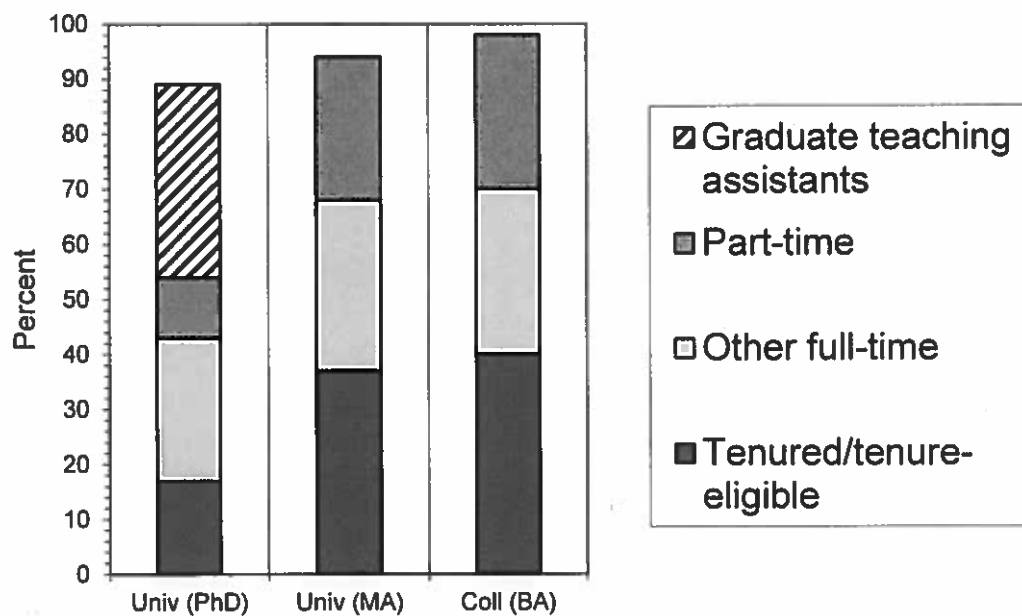
**TABLE FY.2** Percentage of sections (excluding distance-learning sections) in Non-Mainstream Calculus I and in Non-Mainstream Calculus II, III, etc. taught by various types of instructors in mathematics departments in fall 2015, by size of sections and type of department. Also average section size and enrollments (not including distance-learning enrollments). This table can be compared to Table FY.5, p. 121 in CBMS2010.

Course & Department Type	Percentage of sections taught by												Average Section Size			Enrollment (1000s)					
	Tenured/tenure-eligible <sup>1</sup> %		Other full-time %		Part-time %		Graduate teaching assistants %		Unknown %		Average Section Size			Enrollment (1000s)							
	PhD	MA BA	PhD	MA BA	PhD	MA BA	PhD	MA BA	PhD	MA BA	PhD	MA	BA	PhD	MA	BA					
Non-Mainstream Calculus I																					
Lecture with separate recitation	25	33	56	51	23	44	14	44	0	2	0	0	8	0	0	96	56	19	26	3	1
Sections that meet as a class	15	38	39	16	32	29	10	24	30	47	0	0	13	6	2	38	32	29	29	14	17
Other sections	0	NA	NA	56	NA	NA	0	NA	NA	44	NA	NA	0	NA	NA	61	NA	NA	2	0	0
Total Non-Mainstream Calculus I	17	37	40	26	31	30	11	26	28	35	0	0	11	5	2	54	34	29	57	17	17
Total Non-Mainstream Calculus II, III, etc.	32	32	35	29	14	11	19	55	17	15	0	0	4	0	37	41	39	22	6	8	1
Total Non-Mainstream Calculus I, II, III, etc.	19	36	39	27	26	28	12	34	27	32	0	0	10	4	5	52	35	28	63	25	18

Note: 0 means less than one half of 1% in columns 1 through 18. Inconsistencies in row and column sums are due to round-off.

NA = Not applicable.

<sup>1</sup> In 2010, the CBMS survey added the word "permanent" to the description "tenured/tenure eligible" that was used previously. In 2015 the word "permanent" was deleted.



**FIGURE FY.2.1** Percentage of sections (excluding distance-learning sections) in Non-mainstream Calculus I in four-year mathematics departments taught by various kinds of instructors, by type of department in fall 2015. (Deficits from 100% represent unknown instructors.) This Figure can be compared to Figure FY.5.1, p. 122, in CBMS 2010.

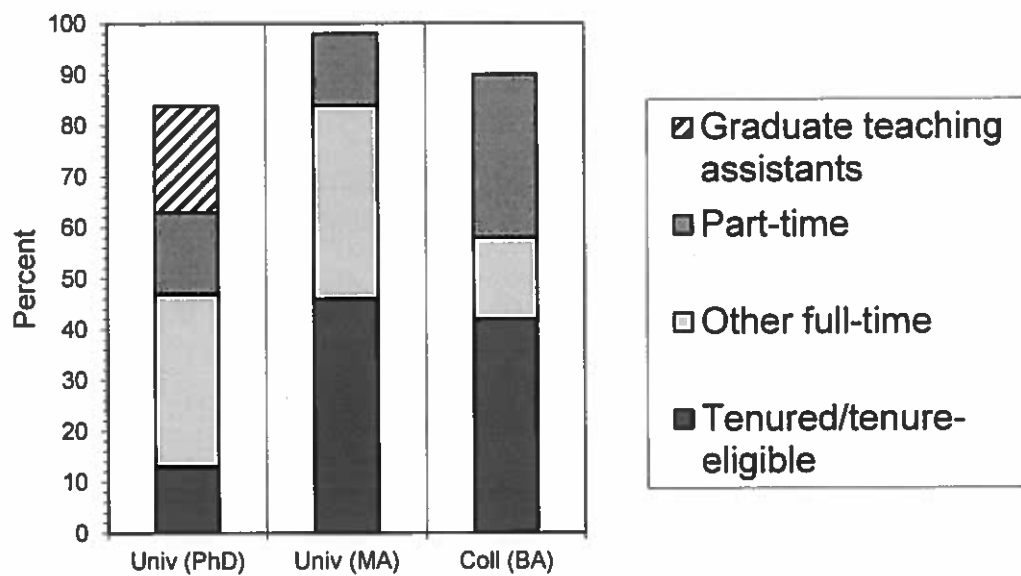
TABLE FY.3 Percentage of sections (excluding distance-learning sections) in Introductory Statistics courses (for non-majors) taught by various types of instructors in mathematics departments in fall 2015, by size of sections and type of department. Also average section size and enrollments (not including distance learning enrollments). Comparable 2010 data is in CBMS2010, Table FY.6, p. 123.

Course & Mathematics Department Type	Percentage of sections taught by												Average Section Size			Enrollment (1000s)					
	Tenured/tenure-eligible <sup>1</sup> %		Other full-time %		Part-time %		Graduate teaching assistants %		Unknown %		PhD	MA	BA	PhD	MA	BA	PhD	MA	BA		
	PhD	MA	BA	PhD	MA	BA	PhD	MA	BA	PhD	MA	BA	PhD	MA	BA	PhD	MA	BA			
Introductory Statistics (F1) (non-calculus)																					
Lecture with separate recitation	17	49	43	52	39	19	3	8	19	7	0	0	20	4	19	141	41	31	15	9	18
Sections that meet as a class	13	46	42	31	38	16	17	16	34	23	0	0	16	0	8	30	39	26	26	34	85
Other sections	9	NA	38	91	NA	49	0	NA	13	0	NA	0	0	NA	0	2	NA	12	0	0	0
Total Introductory Statistics (non-calculus)	13	46	42	34	38	16	16	14	32	21	0	0	17	1	9	42	39	27	41	43	104
Introductory Statistics (F2) (calculus prerequisite for non-majors/minors)																					
Lecture with separate recitation	54	86	41	29	7	0	9	0	59	8	0	0	0	7	0	53	79	27	2	5	3
Sections that meet as a class	37	71	69	24	11	11	17	17	12	15	0	0	8	0	8	33	31	27	5	8	11
Other sections	100	0	100	0	NA	0	0	NA	0	0	NA	0	0	NA	0	34	NA	30	0	0	0
Total Introductory Statistics (calculus)	43	74	63	24	10	8	15	14	22	13	0	0	6	1	6	37	40	27	7	13	14
Statistics for Pre-service Teachers (F3,F4)	23	76	29	27	0	0	12	27	0	38	0	71	0	0	0	25	23	3	1	1	0
Probability & Statistics (non-Calculus) (F5)	46	32	27	0	34	31	54	13	29	0	0	0	0	21	13	34	38	31	3	2	6
Total, all introductory statistics courses for non-majors	20	52	44	30	31	16	18	14	30	19	0	1	13	2	9	40	39	27	53	58	123

Note: 0% means less than one half of 1%. 0 enrollment means under 500. Some row and column sums appear inconsistent due to round-off.

NA = Not applicable.

<sup>1</sup> In 2010, the CBMS survey added the word "permanent" to the description "tenured/tenure eligible" that was used previously. In 2015, the word "permanent" was deleted.

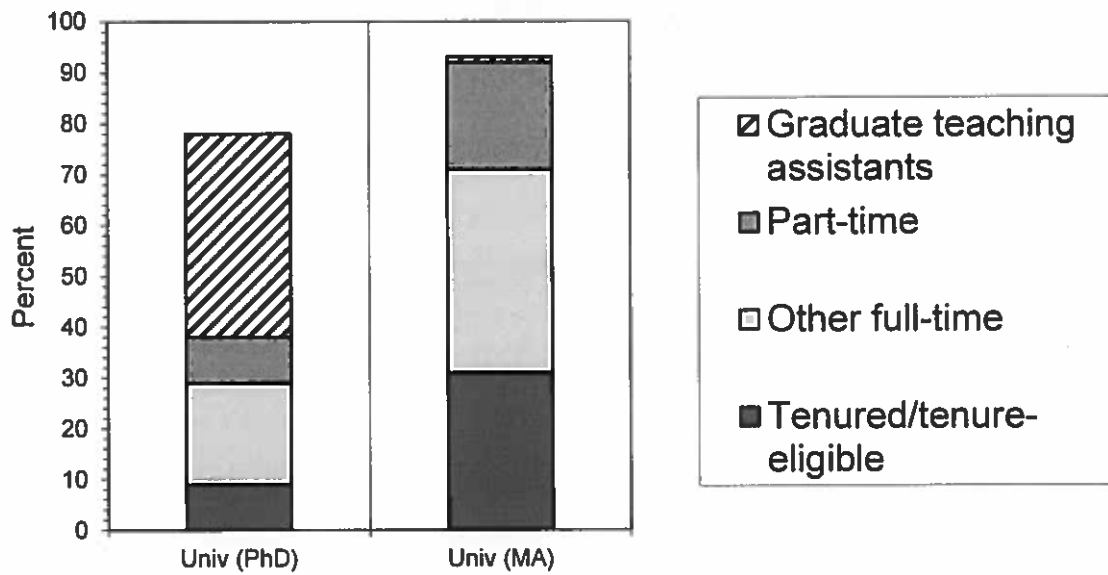


**FIGURE FY.3.1** Percentage of sections (excluding distance-learning sections) in Introductory Statistics (non-Calculus) in four-year mathematics departments, by type of instructor and type of department in 2010. (Deficits from 100% represent unknown instructors.) This Figure can be compared to Figure FY.6.1, p. 124, in CBMS2010.

**TABLE FY.4 Percentage of sections (excluding distance-learning sections) in Introductory Statistics courses (for non-majors) taught by various types of instructors in statistics departments in fall 2015, by size of sections and type of department. Also average section size and total (non-distance-learning) enrollments. This table can be compared to Table FY.9, p. 129, in CBMS2010.**

Course & Statistics Department Type	Percentage of sections taught by											Average Section Size	Enrollment (1000s)			
	Tenured/tenure-eligible <sup>1</sup> %	Other full-time (with PhD) %	Other full-time (without PhD) %	Part-time %	Graduate teaching assistants %	Unknown %	PhD	MA	PhD	MA	PhD			MA		
Introductory Statistics (non-Calculus for non-majors/minors ) (E1)																
Lecture with separate recitation	6	9	26	9	18	6	21	38	3	32	26	57	96	35	5	
Sections that meet as a class	17	16	4	9	35	11	15	41	1	6	5	66	53	18	7	
Other sections	0	NA	3	3	NA	42	NA	52	NA	0	NA	20	NA	1	0	
Total Introductory Statistics (non-Calculus)	9	31	11	10	30	9	16	40	1	23	11	58	65	54	12	
Introductory Statistics (calculus prerequisite for non-majors/minors ) (E2)																
Lecture with separate recitation	14	17	24	17	7	12	0	16	0	27	58	73	57	10	1	
Sections that meet as a class	31	41	22	0	6	8	4	31	0	0	7	54	68	5	2	
Other sections	5	NA	33	NA	2	0	NA	60	NA	0	NA	26	NA	1	0	
Total Introductory Statistics (Calculus)	18	33	25	5	6	9	3	29	0	14	23	59	65	16	3	
Statistics for Pre-service Teachers (E3,E4)	100	0	0	0	100	0	0	0	0	0	0	36	5	0	0	
Probability & Statistics (non-Calculus) (E5)	6	0	19	0	6	3	100	33	0	33	0	102	40	4	0	
Total, all introductory probability & statistics courses	11	31	14	9	8	9	14	37	1	21	13	59	65	74	15	

Note: 0% means less than one half of 1%. 0 enrollment means under 500. Row and column sums may appear inconsistent due to round-off.  
NA = Not applicable.



**FIGURE FY.4.1** Percentage of sections (excluding distance-learning sections) in Introductory Statistics (non-Calculus) taught in statistics departments in fall 2015, by type of instructor and type of department. (Deficits from 100% represent unknown instructors). This Figure can be compared to Figure FY.9.1, p. 128, in CBMS2010.



**TABLE FY.5** Percentage of mathematics departments using various practices in the teaching of Introductory Statistics (no calculus prerequisite) in fall 2015 by type of department. This table can be compared to Table FY.7, p. 125, in CBMS2010.

	Mathematics Departments			
	Univ (PhD)	Univ (MA)	College (BA)	All Depts. Combined
Percentage of departments that offer Introductory Statistics with no calculus prerequisite	50	78	83	78
Number of different kinds of introductory statistics courses for non-majors with no calculus prerequisite				
1	61	69	74	72
2	35	23	23	24
3	4	4	2	3
More than 3	.	4	0	1
Of those that offer the course, the percentage of departments in which the majority of sections use real data for the following percentages of class sessions:				
0-20%	21	29	28	28
21-40%	13	31	23	23
41-60%	26	19	18	19
61-80%	12	2	14	12
81-100%	29	18	18	19
Percentage of departments where the majority of sections use in-class demonstrations in the following percentages of class sessions:				
0-20%	21	23	18	19
21-40%	26	17	22	22
41-60%	20	33	21	23
61-80%	16	17	17	17
81-100%	18	9	21	19
Percentage of departments using the following kinds of technology in the majority of sections:				
Graphing calculators	57	77	66	67
Statistical packages	48	64	45	48
Educational software	29	55	52	50
Applets	16	30	24	24
Spreadsheets	66	72	67	68
Web-based resources	42	65	49	50
Classroom response systems	4	12	6	6
Online textbooks	41	48	39	41
Online videos	26	32	32	31
Percentage of departments where the majority of sections require assessments beyond homework, exams, and quizzes	19	22	45	39

**TABLE FY.6** Percentage of statistics departments using various practices in the teaching of Introductory Statistics for non-majors/minors (no calculus prerequisite) in fall 2015 by type of department. This table can be compared to Table FY.8, p. 127, in CBMS2010.

	Statistics Departments		
	Univ (PhD)	Univ (MA)	All Depts. Combined
Percentage of departments that offer Introductory Statistics for non-majors/minors with no calculus prerequisite	97	85	94
Number of different kinds of introductory statistics courses for non-majors with no calculus prerequisite			
1	17	38	23
2	26	23	26
3	21	23	22
More than 3	35	15	30
Of those that offer the course, the percentage of departments in which the majority of sections use real data the following percentages of the time:			
0-20%	14	20	15
21-40%	12	20	14
41-60%	16	10	15
61-80%	16	40	21
81-100%	42	10	35
Percentage of departments where the majority of sections use in-class demonstrations in the following percentages of class sessions:			
0-20%	8	30	13
21-40%	18	40	23
41-60%	24	10	21
61-80%	7	.	5
81-100%	44	20	39
Percentage of departments using following kinds of technology in the majority of sections			
Graphing calculators	46	50	47
Statistical packages	65	75	68
Educational software	53	55	53
Applets	45	27	41
Spreadsheets	52	64	55
Web-based resources	74	45	68
Classroom response systems	55	33	50
Online textbooks	51	45	50
Online videos	38	27	35
Percentage of departments where the majority of sections require assessments beyond homework, exams, and quizzes	35	25	32

**TABLE FY.7** Of departments that offered Introductory Statistics (no calculus prerequisite) in fall 2015, the percentage that cover the following topics, by type of department.

	Mathematics Depts				Statistics Depts		
	Univ (PhD)	Univ (MA)	College (BA)	Total	Univ (PhD)	Univ (MA)	Total
Conditional probability	92	90	72	76	85	75	83
Simulation to explore randomness	50	84	45	51	78	67	73
Resampling techniques	9	34	21	22	50	8	39

**TABLE FY.8** Of mathematics departments that offered Introductory Statistics (no precalculus prerequisite) in fall 2015, the percentage whose instructors typically received the following highest degree in statistics, by type of mathematics department.

	No graduate degree in statistics	Masters degree in statistics	PhD degree in statistics
<b>Mathematics Departments</b>			
Univ (PhD)	52	29	18
Univ (MA)	48	35	17
Coll (BA)	68	18	14
<b>Total Math Depts</b>	<b>64</b>	<b>21</b>	<b>15</b>

**TABLE FY.9** Of departments that offered Introductory Statistics (no calculus prerequisite) in fall 2015 and where a similar course is offered outside the mathematical sciences departments, the average estimated fall 2015 enrollment of all similar courses and an estimate of the total national enrollment.

	Mathematics Depts				Statistics Depts		
	Univ (PhD)	Univ (MA)	College (BA)	Total	Univ (PhD)	Univ (MA)	Total
Average estimated outside enrollment	710	196	68	134	306	496	328
Estimated outside national enrollment	34369	20217	34988	89574	6038	1296	7334

Note: The estimates for statistics departments are for colleges with separate statistics departments. Since such colleges would be expected to also have mathematics departments, adding statistics for both types of departments together would result in duplicating the counts of some students.