

**TABLE SP.1** Percentage of mathematics departments whose institutions offer certification programs for some or all grades K–8, and also for secondary teachers, by type of department in fall 2010. (Data from fall 2000, 2005, when available, in parentheses)

	Percentage whose institutions have a K-8 teacher certification program	Percentage whose institutions have a secondary mathematics certification program
Mathematics Departments		
Univ (PhD)	62 (72,78)	79
Univ (MA)	90 (87,92)	96
Coll (BA)	70 (85,88)	80
Total Math Depts	72 (84,87)	82

**TABLE SP.2** Percentage of mathematical programs at public two-year colleges (TYCs) having organized programs that allow various types of pre- and in-service teachers to complete their entire mathematics course or licensure requirements, in fall 2010. (Fall 2005 data in parentheses.)

	Percentage of TYCs with an organized program in which students can complete their entire mathematics course or licensure requirements
Pre-service elementary teachers	41 (30)
Pre-service middle school teachers	24 (19)
Pre-service secondary teachers	13 (3)
In-service elementary teachers	25 (16)
In-service middle school teachers	12 (15)
In-service secondary teachers	10 (2)
Career-switchers aiming for elementary teaching	30 (19)
Career-switchers aiming for middle school teaching	17 (14)
Career-switchers aiming for secondary teaching	13 (6)

**TABLE SP.3** Percentages of four-year mathematics departments in universities and four-year colleges that offer K-8 teacher certification programs having various characteristics, by type of department, in fall 2010.

Percentage Where		Percentage of four-year math depts			
		Univ (PhD) %	Univ (MA) %	College (BA) %	All Math Depts %
Dept. offers a K-8 certification program.		62	90	70	72
Dept. offers program for "math specialists" in any K-8 grades.		36	27	21	24
	Of those departments that offer a program for "math specialists" in any K-8 grade, the percentage of depts offering a program for "math specialists" in early elementary grades.	44	72	58	58
Dept. offers courses team-taught with education dept.		11	5	8	8

**TABLE SP.4** Percentage of public two-year colleges (TYCs) that are involved with K-8 teacher preparation in various ways, in fall 2010. (Data from fall 2005 in parentheses.)

	Percentage of TYCs
Assign a mathematics faculty member to coordinate K–8 teacher education in mathematics	36 (38)
Offer a special mathematics course for preservice K–8 teachers in 2009–2010 or 2010–2011	7 (11)
Offer mathematics pedagogy courses in the mathematics department	5 (9)
Offer mathematics pedagogy courses outside of the mathematics department	9 (10)

**TABLE SP.5** Among all four-year colleges and universities with a K-8 certification program, the percentage of mathematics departments requiring various numbers of mathematics courses for "early" grades certification (if there is a distinction), by type of department, in fall 2010. Also the average number of various courses taught in mathematics and education departments required for "early" grades certification (if there is a distinction), by type of department, in fall 2010. (Table can be compared to Table SP.5 in CBMS2005 report, where questions were broken down further.)

	Percentage of departments with K-8 certification programs that require various numbers of mathematics courses for "early" certification			
Number of mathematics courses required for "early" grades certification	Univ (PhD) %	Univ (MA) %	Coll (MA) %	All Math %
0 required	7	9	8	8
1 required	15	3	11	10
2 required	38	35	44	42
3 required	22	29	10	14
4 required	11	13	14	14
5 or more required	5	11	13	11
	Average number of various courses required for "early" certification			
Type of required courses	Univ (PhD)	Univ (MA)	Coll (MA)	All Math
Mathematics Department math courses	2.4	3.0	2.7	2.7
Methods (pedagogy) courses (taught in any department)	1.7	1.8	1.3	1.4
Mathematics Department methods (pedagogy) courses	0.6	0.8	0.5	0.5

Some percentages do not total 100% due to round-off error.

**TABLE SP.6** Among mathematics departments at four-year colleges and universities having K-8 certification programs, the percentage of mathematics departments offering various core courses specifically designed for pre-service elementary teachers by type of department, in fall 2010. (Table SP.6 in the CMBS2005 report dealt with mathematics courses likely to be taken in K-8 certification programs.)

Core areas covered by one or more specially designed courses(s) offered by mathematics departments	Percentage of mathematics departments with K-8 certification program offering various courses			
	Univ (PhD)	Univ (MA)	Coll (MA)	All Math
Numbers/Operations	73	92	71	74
Algebra	58	64	55	57
Geometry/Measurement	67	94	64	69
Statistics/Probability	53	76	52	56
Methods of teaching elementary grades mathematics	27	36	31	31

**TABLE SP.7** Among mathematics departments at four-year colleges and universities having K-8 certification programs, and offering courses in core areas described in Table SP.6, the percentages of the faculty who generally teach these courses by rank and by the type of mathematics department, in fall 2010. (CBMS2005 report Table SP.7 dealt with rank of course coordinator.)

Rank of faculty who generally teach courses of SP.6	Percentages of mathematics faculty at mathematics departments with K-8 certification program			
	Univ (PhD)	Univ (MA)	Coll (MA)	All Math
Tenured/tenure-track faculty	30	79	63	62
Postdocs	0	0	0	0
Other full-time faculty	53	10	25	26
Part-time faculty	8	11	12	11
Graduate teaching assistants	9	0	0	1

**TABLE SP.8** Among all four-year colleges and universities offering certification programs for pre-service mathematics secondary teachers, the percentage offering team-taught courses with education departments, by type of department, in fall 2010.

	Type of department			
	Univ (Ph.D)	Univ (MA)	Coll (BA)	All math
Percentage of departments at colleges and universities that have a separate education department	95	100	97	97
Of those with a separate education department, the percentage that offer courses team-taught by education and mathematics faculty	15	5	8	8

**TABLE SP.9** Among four-year colleges and universities with secondary pre-service teaching certification programs, for various courses, the percentage of mathematics departments whose program requires the course, or whose students generally take the course, or who offer a special course in the given subject that is designed for secondary teachers, by type of department, in fall 2010.

Course	Percentage of departments with secondary certification program where:											
	Course is required				Course is generally taken, but not required				Math dept offers special course in the subject for secondary pre-service teachers			
	Univ (Ph.D) %	Univ (MA) %	Coll (BA) %	All math %	Univ (Ph.D) %	Univ (MA) %	Coll (BA) %	All math %	Univ (Ph.D) %	Univ (MA) %	Coll (BA) %	All math %
Advanced Calculus/Analysis	63	61	46	51	11	3	18	15	17	4	2	4
Modern Algebra	87	92	89	89	5	6	6	6	25	2	4	7
Number Theory	30	30	27	28	23	22	18	20	24	0	3	6
Geometry	86	97	92	92	13	3	6	7	41	15	19	22
Discrete Mathematics	50	74	68	66	6	9	6	6	17	16	6	9
Statistics	76	97	91	90	18	3	5	7	9	11	5	6
History of Math	49	56	53	53	16	17	8	10	25	8	20	19

Some totals are less than 100% due to round-off

**TABLE SP.10** Percentage of mathematics, statistics and public two-year college departments offering distance learning<sup>1</sup>, and using various practices with regard to distance learning in fall 2010.

	Mathematics Depts				Statistics Depts			Two-Year Colleges
	Univ (PhD)	Univ (MA)	College (BA)	Total	Univ (PhD)	Univ (MA)	Total	
Percentage offering distance learning	48	57	28	35	30	62	39	88
Characterize majority of course instruction:								
All instruction with no instructor physically present	68	61	77	72	83	25	57	na
Some instruction with no instructor physically present	32	39	23	28	17	75	43	na
Format of majority of distance learning:								
Complete online	na	na	na	na	na	na	na	73
Hybrid	na	na	na	na	na	na	na	22
Other	na	na	na	na	na	na	na	5
Instructional materials created by:								
Faculty	41	31	41	39	34	38	36	10
Commercially produced materials	10	16	5	9	.	13	6	12
Combination of both	49	53	53	52	66	50	58	78
How distance learning students take majority of tests:								
Not at a monitored testing site	22	35	33	31	26	29	27	11
At proctored testing site	55	32	37	40	34	29	32	42
Combination of both	23	33	30	29	40	43	41	47
Give credit for distance learning not offered through department:								
Yes	26	29	55	43	19	25	22	na
No	34	32	20	26	35	38	36	na
No department policy	39	39	25	31	47	38	42	na

<sup>1</sup> Distance learning courses are those courses in which the majority of instruction occurs with the instructor and students separated by time and/or place (e.g. courses in which the majority of the course is taught online, or by computer software, by television, or by correspondence.)

**TABLE SP.11** Percentages of public two-year colleges (TYCs) with various practices in distance learning courses in fall 2010.

Distance learning course exams when there are multiple instructors teaching the course	% of TYCs
No common departmental exams	39
Common departmental exams for some courses	20
Common departmental exams for all courses	23
Not applicable or unreported	18
Requirements of distance learning faculty whose entire teaching load is distance courses regarding time required to be on campus to meet with students	
Never	8
Only for scheduled meeting or student appointment	6
A specified number office hours per week	21
Not applicable or unreported	65

**TABLE SP.12** Percentage of four-year mathematics and statistics departments, and public two-year college (TYC) programs, with courses offered in both distance and non-distance learning formats, and comparison of various practices in the distance learning and the non-distance learning formats, by type and level of department, in fall 2010.

	Math				Stat			TYC
	Univ (PhD)	Univ (MA)	College (BA)	Total	Univ (PhD)	Univ (MA)	Total	
Some courses in both non-distance and distance learning formats	93	90	87	89	100	100	100	97
Of those with courses in both formats the percentage where:								
Contents, goals, and objectives same as in non-distance learning	98	100	99	99	92	100	95	100
Instructors hold comparable office hours on campus	62	73	59	63	56	75	65	na
Instructors participate in evaluation in same way	72	77	86	81	91	75	83	78
Same use of common exams as in face-to-face	56	51	63	59	56	50	53	47
Same course outlines as in face-to-face	95	100	97	97	92	88	90	96
Same course projects as in face-to-face	74	78	68	72	56	50	53	49

**TABLE SP.13.A** Percentage of four-year mathematics departments offering various upper level mathematics courses by distance learning, by department type, in fall 2010.

	Mathematics Departments			
	Univ (PhD)	Univ (MA)	College (BA)	Total
E22. Introduction to Proofs	1	4	1	1
E23-1. Modern Algebra I	1	1	0	1
E23-2. Modern Algebra II				
E24. Number Theory	1			0
E25. Combinatorics				
E26. Actuarial Mathematics				
E27. Logic/Foundations (not E22)				
E28. Discrete Structures			0	0
E29. History of Mathematics	3	5	1	2
E30. Geometry	2		0	0
E31-1. Advanced Calculus I and/or Real Analysis I	1	4		1
E31-2. Advanced Calculus II and/or Real Analysis II				
E32. Advanced Mathematics for Engineering and Physical Sciences	1			0
E33. Advanced Linear Algebra (beyond E17, E19)	1			0
E34. Vector Analysis				
E35. Advanced Differential Equations (beyond E18)				
E36. Partial Differential Equations				
E37. Numerical Analysis I and II	1			0
E38. Applied Mathematics (Modeling)				
E39. Complex Variables	1			0
E40. Topology				
E41. Mathematics of Finance (not E26, E38)	1			0
E42. Codes and Cryptology				
E43. Biomathematics			1	1
E44. Operations Research (all courses)				
E45. Senior Seminar/ Independent Study in Mathematics				
E46. Other advanced level mathematics				
E47. Mathematics for Secondary School Teachers	2	4		1

Note: These estimates are based on small numbers and have large standard error. Blank entries represent courses with no responses while zero entries indicate percentages that round to 0%.

**TABLE SP.13.B** Percentage of four-year mathematics and statistics departments offering upper level statistics courses by distance learning, by department type, in fall 2010.

	Mathematics Departments				Statistics Departments		
	Univ (PhD)	Univ (MA)	College (BA)	Total	Univ (PhD)	Univ (MA)	Total
E6. Mathematical Statistics (calculus prerequisite)							
E7. Probability (calculus prerequisite)	1			0	2		1
E8. Combined Probability & Statistics (calculus prerequisite)	1			0			
E9. Stochastic Processes							
E10. Applied Statistical Analysis	1	3		1	5		4
E11. Design & Analysis of Experiments					3		2
E12. Regression (and Correlation)	1		1	1	3		2
E13. Biostatistics					3		2
E14. Nonparametric Statistics					3		2
E15. Categorical Data Analysis							
E16. Sample Survey Design & Analysis							
E17. Statistical Computing							
E18. Data Management							
E19. Senior Seminar/ Independent Studies							
E20. Bayesian Statistics							
E21. Statistical Consulting							
E22. Statistical Software					2		1
E23. Other upper level Probability & Statistics	2			0			
E23. Other mathematical science courses					3	8	4
F16. Statistical Computing (Math only)							

Note: These estimates are based on small numbers and have large standard error. Blank entries represent courses with no responses while zero entries indicate percentages that round to 0%.

**TABLE SP.14** Percentage of mathematics and statistics departments in four-year colleges and universities, and of mathematics programs at public two-year colleges, that offer various kinds of special opportunities for undergraduates, by type of department, in fall 2010. (Fall 2005 data in parentheses.) This table can be compared to Table SP.14 of the 2005 report.

Percentage with special opportunities for undergraduates	Honors sections of courses for majors %	Math or Stat club %	Special programs for women %	Special programs for minorities %	Math or Stat contests %	Special Math or Stat colloquia for undergrads %	Outreach in K–12 schools %
<b>Mathematics Departments</b>							
Univ (PhD)	70 (70)	91 (88)	31 (15)	21 (10)	93 (92)	82 (70)	71 (51)
Univ (MA)	40 (44)	96 (92)	21 (21)	21 (23)	82 (68)	88 (71)	75 (63)
Coll (BA)	15 (18)	75 (66)	16 (4)	12 (6)	62 (62)	51 (37)	40 (26)
<b>Total Mathematics Departments</b>	<b>26 (28)</b>	<b>80 (72)</b>	<b>19 (8)</b>	<b>14 (8)</b>	<b>69 (67)</b>	<b>60 (46)</b>	<b>49 (34)</b>
<b>Statistics Departments</b>							
Univ (PhD)	43 (27)	48 (27)	19 (0)	22 (7)	24 (22)	67 (47)	30 (11)
Univ (MA)	55 (41)	45 (29)	0 (0)	0 (0)	36 (29)	82 (44)	18 (15)
<b>Total Statistics Depts</b>	<b>46 (30)</b>	<b>47 (27)</b>	<b>13 (0)</b>	<b>15 (6)</b>	<b>28 (23)</b>	<b>71 (46)</b>	<b>27 (12)</b>
<b>Two-Year College Mathematics Programs</b>	<b>20 (24)</b>	<b>31 (22)</b>	<b>6 (7)</b>	<b>11 (15)</b>	<b>41 (37)</b>	<b>16 (6)</b>	<b>32 (25)</b>

Note: 0 means less than one-half of 1%.

**TABLE SP.15** Percentage of mathematics and statistics departments in four-year colleges and universities, and of mathematics programs in public two-year colleges, that offer various additional special opportunities for undergraduates, by type of department, in fall 2010. (Fall 2005 data, where available, in parentheses.) This table can be compared to Table SP.15, p. 60 of 2005 Report.

Percentage with additional opportunities for undergraduates	Undergrad. Research opportunity %	Indep. Studies opportunity %	Assigned advisors in dept. %	Senior thesis opportunity %	Math career day %	Graduate school advising %	Internship opportunity %	Senior seminar opportunity %	Consulting lab with clients %
<b>Mathematics Departments</b>									
Univ (PhD)	96 (90)	96 (95)	90 (85)	63 (62)	40 (24)	67 (49)	50 (47)	47 (39)	
Univ (MA)	91 (74)	100 (91)	100 (97)	56 (53)	46 (15)	70 (61)	67 (55)	66 (46)	
Coll (BA)	83 (54)	94 (79)	90 (88)	58 (48)	17 (10)	46 (45)	55 (35)	59 (38)	
Total mathematics depts	86 (62)	95 (83)	91 (89)	59 (50)	24 (12)	52 (47)	56 (39)	58 (39)	
<b>Statistics Departments</b>									
Univ (PhD)	85 (60)	90 (62)	89 (73)	54 (27)	30 (15)	66 (56)	69 (47)	30 (15)	32
Univ (MA)	82 (59)	100 (100)	73 (85)	27 (44)	45 (15)	64 (59)	91 (71)	27 (29)	55
Total statistics depts	84 (60)	93 (70)	84 (76)	46 (31)	35 (15)	66 (57)	75 (52)	29 (18)	39
<b>Two-Year College Mathematics Programs</b>									
	14 (9)	36 (38)	42 (40)	na (na)	na	na	na	na	

**TABLE SP.16** Percentages of four-year mathematics and statistics departments offering various numbers of courses team-taught with a member of another department in spring or fall 2010

Numbers of team-taught courses	Mathematics Departments				Statistics Departments		
	Univ (PhD) %	Univ (MA) %	College (BA) %	Total %	Univ (PhD) %	Univ (MA) %	Total %
None	73	70	89	84	78	100	84
One course	15	30	7	12	14	0	10
Two or more courses	12	0	3	4	8	0	6

**TABLE SP.17** Percentage of all four-year mathematics departments offering new interdisciplinary courses in the last five years, and, among those offering new course(s) in the given area, the average number of new courses offered, by type of department, in fall 2010.

	Univ (Phd)		Univ (MA)		Coll (BA)		All departments	
Percentage that offered any new interdisciplinary course	56		45		30		36	
Of those offering any new course, those offering course in:	Offered new course %	Mean number of new courses	Offered new course %	Mean number of new courses	Offered new course %	Mean number of new courses	Offered new course %	Mean number of new courses
Mathematics and finance or business	24	1.5	20	1.1	1	2.0	8	1.4
Mathematics and biology	41	1.5	20	1.0	3	1.2	12	1.3
Mathematics and the study of the environment	3	1.0	12	1.0	5	1.0	5	1.0
Mathematics and engineering or the physical sciences	13	1.8	9	1.0	4	1.0	6	1.3
Mathematics and economics	4	1.0	5	1.0	3	1.1	4	1.1
Mathematics and social sciences other than economics	1	1.0	5	1.0	0	0	1	1.0
Mathematics and education	18	2.0	14	1.4	13	1.6	14	1.7
Mathematics and the humanities	5	1.0	13	1.0	13	1.4	12	1.3
Other	2	1.0	0	0	10	1.3	8	1.2

**TABLE SP.18** Percentage of departments offering dual-enrollment courses taught in high school by high school (HS) teachers, enrollments in various dual-enrollment courses in spring 2010 and fall 2010, compared to total of all other enrollments in fall 2010, and (among departments with dual-enrollment programs) percentage of various departmental controls over dual-enrollment courses, by type of department. (Fall 2005 data in parentheses.) The comparable data in the CBMS2005 report is in Table SP.16.

	Four-year Mathematics			Two-year Mathematics			Four-year Statistics		
Percentage of departments with dual enrollment courses	17% (14%)			61% (50%)			8% (8%)		
Number of dual enrollments in:	Dual Enrollments		Other enrollments	Dual enrollments		Other enrollments	Dual enrollments		Other enrollments
	spring 2010	fall 2010	fall 2010	spring 2010	fall 2010	fall 2010	spring 2010	fall 2010	fall 2010
College algebra	5312	11680	251495	21955	30873	230034			
Precalculus	3184	1952	114256	20847	22931	60998			
Calculus I	5449	4576	334791	9557	10974	85696			
Statistics	3451	2367	208546	7521	4247	134273	1573	0	76702
Other	2725	2166		17413	11779				
Dept. control of dual enroll. courses taught by HS teachers	Never	Sometimes	Always	Never	Sometimes	Always	Never	Sometimes	Always
Textbook choice	18% (41%)	38% (15%)	45% (44%)	14% (14%)	15% (12%)	71% (74%)	38% (36%)	31% (30%)	31% (34%)
Syllabus design/ approval	3% (2%)	2% (6%)	95% (92%)	3% (4%)	1% (7%)	96% (89%)	38% (36%)	62% (0%)	0% (64%)
Final exam design	22% (40%)	32% (30%)	46% (30%)	31% (36%)	28% (28%)	41% (37%)	38% (100%)	62% (0%)	0% (0%)
Choice of instructor	17% (32%)	24% (20%)	59% (48%)	33% (35%)	20% (13%)	47% (52%)	38% (36%)	31% (0%)	31% (64%)
Departmental teaching evaluations required in dual enrollment courses			40% (16%)			48% (64%)			0% (0%)

**TABLE SP.19** Percentage of departments in four-year colleges and universities and in public two-year colleges that assign their own full-time or part-time faculty members to teach, in high school, courses that award both high school and college credit, and number of students enrolled, in fall 2010. (Fall 2005 data in parentheses.) This table was Table SP.17 in 2005 report.

	Four-year Mathematics Departments	Two-year Mathematics Departments	Statistics Departments
Assign their own members to teach dual-enrollment courses	4% (4%)	22% (12%)	0%
Number of students enrolled	3932 (2874)	6358 (2008)	na

**TABLE SP.20** Percentage of four-year mathematics departments requiring certain courses (or exit exam) in all, some, or none of their majors, by type of department, in fall 2010. These percentages can be compared to CBMS2005 Table SP19.

Mathematics Department Requirements	Required in all majors			Required in some but not all majors			Not required in any major		
	Univ (PhD) %	Univ (MA) %	College (BA) %	Univ (PhD) %	Univ (MA) %	College (BA) %	Univ (PhD) %	Univ (MA) %	College (BA) %
Modern Algebra I	39	47	62	39	46	27	21	7	11
Real Analysis I	51	46	36	34	36	28	15	18	36
Modern Algebra I or Real Analysis I (major may choose either to fulfill this requirement)	18	20	6	29	17	20	53	63	73
A one-year upper level sequence	42	49	31	26	11	16	32	40	53
At least one computer science course	61	65	73	18	21	13	21	14	15
At least one statistics course	44	37	55	27	47	25	29	16	20
At least one applied mathematics course beyond course E21	17	32	29	39	32	14	44	36	57
A capstone experience (senior project, thesis, seminar, internship)	30	57	75	19	16	7	50	28	18
An exit exam (written or oral)	10	11	23	2	4	4	88	86	73

**TABLE SP.21** Percentage of statistics departments requiring certain courses (or exit exam) in all, some, or none of their majors, by type of department, in fall 2010. This table can be compared to CBMS2005 Table SP.20.

Percentage of statistics departments that require:	Required in all majors		Required in some but not all majors		Not required in any major	
	Univ (PhD) %	Univ (MA) %	Univ (PhD) %	Univ (MA) %	Univ (PhD) %	Univ (MA) %
(a) Calculus I	92	91	6	9	2	0
(b) Calculus II	92	91	6	9	2	0
(c) Multivariable Calculus	69	55	22	27	9	18
(d) Linear algebra/Matrix theory	79	64	15	27	5	9
(e) At least one Computer Science course	60	91	16	0	24	9
(f) At least one applied mathematics course, not incl. (a), (b), (c), (d)	19	64	21	18	59	18
(g) A capstone experience (e.g., a senior thesis or project, seminar, or internship)	43	55	10	9	47	36
(h) An exit exam (oral or written)	10	18	4	0	87	82
(i) One Probability Course	81	91	13	9	6	0
(j) One Mathematical Statistics Course	79	64	12	36	8	0
(k) One Linear Models Course	56	55	13	18	31	27
(l) One Bayesian Inference Course	3	0	10	0	86	100

**TABLE SP.22** Percentages of four-year mathematics departments offering varying numbers of tracks in their major, by level of department, in fall 2010.

Number of tracks	Mathematics Departments			
	Univ (PhD) %	Univ (MA) %	College (BA) %	Total %
One or two tracks	26	34	72	60
Three or four tracks	37	46	21	27
More than four tracks	37	17	5	11

(Some totals are less than 100% due to round-off error)

**TABLE SP.23** Percentage of mathematics departments offering various upper-division mathematics courses at least once in the two academic years 2009-2010 and 2010-2011, plus historical data on the two year period 2004-2006, by type of department. The table can be compared to TABLE SP.22 in 2005 report.

Upper-level mathematics courses	All Math Depts 2004-2006 %	Academic Years 2009-2010 & 2010-2011			
		All Math Depts 2009-2011 %	PhD Math %	MA Math %	BA Math %
Modern Algebra I	61	80	85	96	76
Modern Algebra II	21	27	59	49	16
Number Theory	37	51	72	61	45
Combinatorics	22	27	61	53	15
Actuarial Mathematics	11	13	22	23	10
Foundations/Logic	11	11	23	13	8
Discrete Structures	14	30	26	37	30
History of Mathematics	35	49	52	69	45
Geometry	55	74	83	78	71
Math for secondary teachers	37	35	35	62	30
Adv Calculus/ Real Analysis I	66	79	94	86	75
Adv Calculus/Real Analysis II	26	31	71	50	20
Adv Mathematics for Engineering/Physics	16	12	41	19	5
Advanced Linear Algebra	19	23	61	48	11
Introduction to Proofs	na	57	73	77	50

**TABLE SP.24** Percentage of mathematics and statistics departments offering various undergraduate statistics courses at least once in two academic years 2004-2005 and 2005-2006 and at least once in the two academic years 2009-2010 and 2010-2011, by type of department. This table can be compared to SP.23 of 2005 report.

Upper level statistics courses	All Math Depts 2004-2006 %	AY 2009-10 & 2010-11				All Stat Depts 2004-2006 %	AY 2009-10 & 2010-2011		
		All Math Depts %	PhD Math %	MA Math %	BA Math %		All Stat Depts %	PhD Stat %	MA Stat %
Mathematical Statistics	38	42	51	49	40	76	78	85	62
Probability	51	37	57	33	33	86	63	60	69
Combined Probability and Statistics	na	26	33	34	23	na	37	33	46
Stochastic Processes	6	9	33	7	5	43	37	40	31
Applied Statistical Analysis	13	13	25	18	10	65	50	52	46
Experimental Design	6	10	13	26	6	54	51	50	54
Regression & Correlation	6	11	21	15	8	62	71	65	85
Biostatistics	4	4	10	7	3	25	27	22	38
Nonparametric Statistics	2	5	11	12	2	38	30	27	38
Categorical Data Analysis	1	1	5	3	0	21	31	27	38
Sample Survey Design	4	2	6	4	1	49	41	42	38
Stat Software & Computing	3	5	14	10	2	43	na	na	na
Stat Computing	na	na	na	na	na	na	41	35	54
Stat Software	na	na	na	na	na	na	35	32	43
Data Management	0	1	2	0	1	5	10	5	23
Bayesian Statistics	na	na	na	na	na	na	36	31	50
Statistical Consulting	na	na	na	na	na	na	29	17	63
Senior Seminar/Independent Study	3	12	9	15	11	41	44	43	46

Note: 0 means less than one-half of one percent

**TABLE SP.25** Departmental estimates of the percentage of graduating mathematics or statistics majors from academic year 2009-2010 who had various post-graduation plans, by type of department, in fall 2010. (Data from fall 2005, when available, in parentheses.) 2005 data from TABLE SP.24 of 2005 report.

Departmental estimates of post-college plans	Mathematics Departments			Statistics Departments	
	Univ (PhD) %	Univ (MA) %	College (BA) %	Univ (PhD) %	Univ (MA) %
Students who went into pre-college teaching	13 (16)	48 (44)	27 (32)	1 (1)	1 (0)
Students who went to graduate school in the mathematical or statistical sciences	15	12	17	23	29
Students who went to graduate or professional school outside of mathematics/statistics	10	4	8	5	5
Students who took jobs in business, government, etc.	27 (19)	19 (21)	30 (29)	41 (16)	45 (36)
Students who had other plans known to the department	5 (4)	3 (1)	4 (2)	2 (0)	3 (6)
Students whose plans are not known to the department	30 (39)	14 (18)	13 (17)	29 (65)	18 (28)

**TABLE SP.26** Percentage of four-year mathematics and statistics departments undertaking various assessment activities during the last six years, by type of department, in fall 2010. (Data from fall 2005 in parentheses.) 2005 data from Table SP.25 in the 2005 report.

Percentage using various assessment tools	Four-year Mathematics Departments			Statistics Departments	
	Univ (PhD) %	Univ (MA) %	College (BA) %	Univ (PhD) %	Univ (MA) %
Consult outside reviewers	53 (47)	48 (45)	31 (29)	42 (37)	80 (59)
Survey program graduates	71 (62)	80 (81)	71 (74)	63 (54)	70 (71)
Consult other departments	54 (51)	45 (41)	26 (35)	47 (29)	60 (56)
Study data on students' progress in later courses	62 (45)	65 (52)	55 (38)	41 (30)	40 (56)
Evaluate placement system	72 (72)	51 (72)	60 (51)	12 (5)	30 (15)
Change undergraduate program due to assessment	78 (76)	76 (72)	69 (76)	61 (69)	80 (29)

**TABLE SP.23** (continued) Percentage of mathematics departments offering various upper-division mathematics courses at least once in the two academic years 2009-2010 and 2010-2011, plus historical data on the two year period 2004-2006, by type of department. The table can be compared to TABLE SP.22 in 2005 report.

Upper-level math courses, continued	All Math Depts 2004-2006 %	Academic Years 2009-2010 & 2010-2011			
		All Math Depts 2009-2011 %	PhD Math %	MA Math %	BA Math %
Vector Analysis	9	11	26	15	7
Advanced Differential Equations	13	16	48	24	8
Partial Differential Equations	19	26	74	56	11
Numerical Analysis I and II	47	42	84	63	31
Applied Math/Modeling	26	37	60	41	33
Complex Variables	37	44	80	65	33
Topology	32	25	65	40	15
Mathematics of Finance	8	12	29	16	7
Codes & Cryptology	8	11	22	11	9
Biomathematics	8	12	36	21	5
Operations Research	12	17	31	27	13
Math senior seminar/Ind study	45	65	67	85	61
All other advanced level mathematics	na	25	46	43	17