

Appendix VII

## Tables of Standard Errors

<b>Table S.1</b>	Four-year	SE	Two-year	SE
Mathematics	1971	73	1887	103
Statistics	371	16	137	12
Computer Science	77	11	na	
Total	2419	82	2024	109

<b>Table S.2</b>	Math. Dept.	SE	Stat. Dept.	SE	TYC	SE
Precollege	209	22			1150	86
Introductory	863	35			368	31
Calculus level	748	35			138	10
Advanced	150	7			0	-
Other (Two-year only)					231	12
Total Mathematics	1971	73			1887	103
Statistics						
Elementary	231	16	81	6	137	25
Upper level	32	3	27	5	0	-
Total Stat	262	16	108	7	137	25
CS						
Lower	56	9				
Middle	12	2				
Upper	10	2				
Total	77	11				
Grand Total	2310	82	108	7	2024	111

<b>Table S.3</b>	Four-year	SE
Math	12468	978
Math Ed	3614	433
Statistics	856	61
Actuarial	849	117
All Joint Majors (comb.)	1222	258
Math & CS		
Math & Stat		
Math/Stat & Bus. or Econ.		
Other	231	63
Total M, S, Jt. degrees	19241	1100
Women	8692	685
CS degrees	2137	389
Women	394	80
Total degrees	21377	1180
Women	9086	688

<b>Table S.4</b>	TTE	SE	OFT	SE	PT	SE	GTA	SE	UNKN	SE	Enroll	SE
Math Depts												
Math courses	47	2	16	1	20	2	6	0	11	2	1928	71
Stat Courses	60	2	9	1	14	2	3	1	13	2	250	16
CS Courses	60	5	17	5	21	6	1	0	2	1	73	11
All Math Dept	49	2	15	1	19	2	6	0	11	2	2251	81
Stat Depts												
All Stat courses	49	3	11	1	8	1	10	1	22	2	105	5
TYC												
All courses	54	na			46	5					1836	103

<b>Table S.5</b>	TTE	SE	OFT	SE	PT	SE	GTA	SE	UNKN	SE	Enroll	SE
Math, Precollege	18	3	20	4	44	4	9	2	9	2	201	22
Math, Intro	32	2	22	2	27	2	8	1	10	1	834	34
Math, Calculus	59	3	15	1	12	3	7	1	8	2	743	35
Math, Upper level	78	8	-	-	-	-	-	-	23	8	150	7
Math, Elem level stat	48	2	14	1	22	3	4	1	12	3	218	16
Math, Upper level stat	77	6	-	-	-	-	-	-	23	6	32	3
Math, CS Lower level	50	5	17	5	29	7	1	1	3	1	52	8
Stat Dept, Elem level	33	3	17	2	12	1	15	2	23	3	81	6
Stat Dept, Upper level	79	2	-	-	-	-	-	-	21	2	27	5
TYC, All	54	na			46	5					1836	103

**Standard Error Table for S.6**

<b>Table S.6</b>	TTE	SE	OFT	SE	PT	SE	GTA	SE	UNKN	SE	Enroll	SE	Avg Sect	SE
MS Calc I														
Lect/Recit	46	8	19	4	20	11	9	2	7	3	107	14	50	3
Reg < 31	65	3	18	2	11	3	3	1	4	1	49	5	21	1
Reg > 30	48	5	16	3	14	3	9	3	12	5	78	8	36	1
MS Calc I Total	53	4	18	2	15	4	7	1	8	3	234	14	35	1
MS Calc II														
Lect/Recit	50	10	15	6	27	17	4	2	4	2	61	13	51	4
Reg < 31	76	4	9	2	5	2	4	1	6	2	22	3	19	1
Reg > 30	52	7	17	3	5	1	13	8	13	7	45	5	37	1
MS Calc II Total	59	6	14	2	12	7	7	3	8	3	128	14	36	1
Total I & II	55	4	16	2	14	5	7	1	8	3	362	27	35	1
TYC														
	Full-time				Part-time									
MS Calc I	90	3			10	3					63	4	20	6
MS Calc II	86	3			14	3					29	2	24	1
Total I & II	89	3			11	3					93	6	21	4

<b>Table S.7</b>	TTE	SE	OFT	SE	PT	SE	GTA	SE	UNKN	SE	Enroll	SE	Avg Sect	SE
NMS Calc I														
Lect/Recit	35	5	30	5	20	4	9	3	7	2	34	4	56	5
Reg < 31	33	6	18	5	23	6	15	8	11	4	17	2	24	1
Reg > 30	27	4	24	5	24	4	11	2	14	6	48	6	45	3
NMS Calc I Total	31	3	24	3	23	3	12	3	11	3	99	6	42	2
NMS Calc II	34	6	15	4	17	5	11	4	22	9	22	3	29	4
NMS Calc I & II	31	3	22	3	21	3	12	3	14	3	121	8	39	2
TYC	Full-time				Part-time									
NMS Calc I	75	8			25	8					19	3	21	5
NMS Calc II	50	17			50	17					2	1	27	3
Total I & II	73	8			27	8					21	3	21	4

<b>Table S.8 Math Depts</b>	T/TE	SE	OFT	SE	PT	SE	GTA	SE	UNKN	SE	Enroll	SE	Avg Sect	SE
Intro Stat (F1)														
Lect/Recit	46	5	6	2	27	10	2	1	19	8	47	13	33	3
Reg < 31	46	5	17	4	26	5	2	1	9	3	54	7	22	1
Reg > 30	46	4	18	3	17	3	8	2	12	2	74	9	45	3
Course Total	46	2	15	1	24	3	4	1	12	3	174	16	31	1
Intro Stat (F2)														
Lect/Recit	59	10	21	6	8	7	2	2	9	8	8	3	25	1
Reg < 31	70	9	8	6	12	4	3	2	7	7	6	1	15	2
Reg > 30	49	8	23	9	10	7	19	8	0	0	9	2	38	4
Course Total	61	6	16	4	10	3	7	2	6	6	23	4	24	1
Prob & Stat (F3) Course Total	41	7	8	3	26	9	9	4	16	6	18	4	32	3
Other Prob & Stat (F4) Course Total	71	14	12	5	0	0	6	5	12	11	3	1	27	4
Total All Elem. Prob & Stat	48	2	14	1	22	3	4	1	12	3	218	16	30	1
TYC	Full-time				Part-time									
Elem Stat	61	3			39	3					114	9	28	1

<b>Table S.9 Stat Depts</b>	T/TE	SE	OFT	SE	PT	SE	GTA	SE	UNKN	SE	Enroll	SE	Avg Sect	SE
Intro Stat (no calc) (E1)														
Lect/Recit	21	2	20	2	13	2	14	4	31	6	38	3	61	6
Reg < 31	44	8	25	8	20	5	4	3	7	4	5	2	23	4
Reg > 30	33	7	9	3	11	3	25	6	21	5	13	2	40	2
Course Total	29	3	18	2	14	1	16	3	24	4	56	4	47	3
Intro Stat (calc prereq) (E2)														
Lect/Recit	35	4	21	3	9	2	10	3	25	3	7	1	46	5
Reg < 31	47	11	11	3	3	1	8	3	31	10	4	1	27	7
Reg > 30	47	4	13	2	15	4	14	3	11	2	5	0	37	3
Course Total	43	4	15	2	9	1	11	2	23	3	16	2	37	3

<b>Table S.10</b>	Computer algebra systems	SE	Commercial packages	SE	Mostly lecture	SE	Enroll	SE	Avg Sect	SE
MS Calc I	9	3	12	5	66	18	63	4	20	6
MS Calc II	9	3	11	3	85	5	29	2	24	1
Total MS Calc I & II	9	2	12	4	71	13	93	6	21	4

<b>Table S.11</b>	Computer algebra systems	SE	Commercial packages	SE	Mostly lecture	SE	Enroll	SE	Avg Sect	SE
NMS Calc I	0	0	22	10	72	15	19	3	21	5
NMS Calc II	0	0	0	0	84	8	2	1	27	3
Total NMS Calc I & II	0	0	20	9	73	14	21	3	21	4

<b>Table S.12</b>	Computer algebra systems	SE	Commercial packages	SE	Mostly lecture	SE	Enroll	SE	Avg Sect	SE
Elementary Statistics	2	1	19	5	81	5	114	9	28	1

<b>Table S.13 (A)</b>	% of Math Depts.	SE	% of Stat Depts.	SE
Offer elementary statistics course with no calculus prerequisite	84	3	88	3
Percentage of class sessions in which real data is used is:				
0-20%	18	4	9	3
21-40%	27	4	17	3
41-60%	19	4	16	3
61-80%	16	4	20	3
81-100%	20	4	38	4
Percentage of class sessions in which in-class demonstrations or problem solving activities take place is:				
0-20%	14	2	19	3
21-40%	29	5	22	4
41-60%	13	3	16	3
61-80%	25	4	17	3
81-100%	19	3	26	4
Majority of sections use the following kinds of technology:				
Graphing calculators	71	4	43	4
Statistical packages	55	4	87	3
Educational software	19	3	40	4
Applets	17	4	34	4
Spreadsheets	51	5	48	4
Web-based resources	54	7	74	4
Classroom response systems	10	3	29	4
Percentage of departments where the majority of sections require assessments beyond homework, exams, and quizzes	45	5	36	4

<b>Table 13 (B)</b> Practices used in teaching College Algebra	Percentage of all sections, nationally	SE	Mean of department-reported percentages	SE
a. Emphasize problem solving in the modeling sense	44	5	53	5
b. Include elementary data analysis	27	5	26	6
c. Include writing assignments	16	3	23	5
d. Include small group activities	36	5	42	6
e. Include small group projects	20	5	22	6
f. Include class presentations	9	3	12	4
g. Use graphing calculators	66	5	72	4
h. Use spreadsheets	5	3	8	5
i. Use online homework generating and grading packages	68	4	58	6
j. Use classroom response systems (e.g., clickers)	9	3	8	4
k. Primarily use a traditional approach	65	5	70	4





<b>Table S.19</b>	Asian	Black	Hisp.	White	Other
FT men %	9	2	2	56	2
SE	0	0	0	1	0
FT women %	3	1	1	23	1
SE	0	0	0	1	0

<b>Table S.20</b>	Asian	Black	Hisp.	White	Other
FT men %	20	1	1	49	3
SE	1	0	0	1	0
FT women %	8	0	1	15	2
SE	1	0	0	1	0

<b>Table S.21</b>	D&Ret	SE	Number	SE
PhD Math	146	5	5615	27
MA Math	91	9	3209	47
BA Math	123	28	7540	369
Total Math	360	30	16364	373
Total Doc Stat	15	3	789	14

<b>Table SP.1</b>	% Have K-8	SE	% have math certification	SE
Univ (PhD)	62	3	79	3
Univ (MA)	90	5	96	3
Coll (BA)	70	5	80	5
Math Total	72	4	82	3

<b>Table SP.2</b>	Percentage of TYCs with an organized program in which students can complete their entire mathematics course or licensure requirements	SE
Pre-service elementary teachers	41	8
Pre-service middle school teachers	24	8
Pre-service secondary teachers	13	4
In-service elementary teachers	25	6
In-service middle school teachers	12	4
In-service secondary teachers	10	4
Career-switchers aiming for elementary teaching	30	6
Career-switchers aiming for middle school teaching	17	4
Career-switchers aiming for secondary teaching	13	4

<b>Table SP.3</b>	Univ (PhD) %	SE	Univ (MA) %	SE	College (BA) %	SE	All Math Depts %	SE
Dept. offers a K-8 certification program.	62	3	90	5	70	5	72	4
Dept. offers program for "math specialists" in any K-8 grades.	36	5	27	9	21	8	24	6
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	10	72	18	58	22	58	13
Dept. offers courses team-taught with education dept.	11	3	5	3	8	3	8	2

<b>Table SP.4</b>	% of TYCs	SE
Assign a mathematics faculty member to coordinate K-8 teacher education in mathematics	36	5
Offer a special mathematics course for preservice K-8 teachers in 2009-2010 or 2010-2011	7	3
Offer mathematics pedagogy courses in the mathematics department	5	2
Offer mathematics pedagogy courses outside of the mathematics department	9	4

<b>Table SP.5</b>	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) %	SE	Univ (MA) %	SE	College (BA) %	SE	All Math Depts %	SE
0 required	7	3	9	8	8	5	8	4
1 required	15	4	3	3	11	5	10	3
2 required	38	6	35	13	44	8	42	6
3 required	22	4	29	9	10	4	14	3
4 required	11	3	13	8	14	4	14	3
5 or more required	5	2	11	4	13	4	11	3
	Average number of various courses required for "early" certification							
Type of required courses	Univ (PhD) %	SE	Univ (MA) %	SE	College (BA) %	SE	All Math Depts %	SE
Mathematics Department math courses	2.4	0.1	3.0	0.4	2.7	0.2	2.7	0.2
Methods (pedagogy) courses (taught in any department)	1.7	0.2	1.8	0.4	1.3	0.1	1.4	0.1
Mathematics Department methods (pedagogy) courses	0.6	0.1	0.8	0.2	0.5	0.1	0.5	0.1

<b>Table SP.6</b>	Percentage of mathematics departments with K-8 certification program offering various courses							
Core areas covered by one or more specially designed courses(s) offered by mathematics departments	Univ (PhD)	SE	Univ (MA)	SE	Coll (MA)	SE	All Math	SE
Numbers/Operations	73	5	92	5	71	5	74	4
Algebra	58	6	64	8	55	8	57	6
Geometry/Measurement	67	5	94	4	64	7	69	5
Statistics/Probability	53	6	76	5	52	8	56	6
Methods of teaching elementary grades mathematics	27	4	36	7	31	7	31	5

<b>Table SP.7</b>	Percentages of mathematics faculty at mathematics departments with K-8 certification program							
Rank of faculty who generally teach courses of SP.6	Univ (PhD)	SE	Univ (MA)	SE	Coll (MA)	SE	All Math	SE
Tenured/tenure-track faculty	30	5	79	7	63	6	62	5
Postdocs	0	-	0	-	0	-	0	-
Other full-time faculty	53	5	10	4	25	3	26	2
Part-time faculty	8	3	11	6	12	5	11	4
Graduate teaching assistants	9	3	0	-	0	-	1	0

Table SP.8	Type of department							
	Univ (Ph.D)	SE	Univ (MA)	SE	Coll (BA)	SE	All math	SE
Percentage of departments at colleges and universities that have a separate education department	95	2	100	0	97	1	97	1
Of those with a separate education department, the percentage that offer courses team-taught by education and mathematics faculty	15	3	5	4	8	3	8	3

Percentage of departments with secondary certification program where:												
Table SP.9 (SE's only)	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 %
Adv. Calculus/Analysis	5	6	7	5	4	3	6	5	4	3	2	1
Modern Algebra	4	4	3	2	3	3	3	2	4	2	4	3
Number Theory	4	9	7	5	4	11	5	4	5	-	2	2
Geometry	3	3	4	3	3	3	4	3	6	7	8	6
Discrete Mathematics	6	6	6	5	3	6	3	2	4	8	4	3
Statistics	4	3	3	2	4	3	3	2	3	7	4	3
History of Math	4	10	7	5	4	6	3	2	3	5	5	4

Table SP.10 (SE's only)	Mathematics Depts				Statistics Depts			Two-Year Colleges
	Univ (PhD)	Univ (MA)	College (BA)	Total	Univ (PhD)	Univ (MA)	Total	
Percentage offering distance learning	4	9	5	4	4	10	4	4
Characterize majority of course instruction:								
All instruction with no instructor physically present	5	14	8	5	6	12	7	na
Some instruction with no instructor physically present	5	14	8	5	6	12	7	na
Format of majority of distance learning:								
Complete online	na	na	na	na	na	na	na	6
Hybrid	na	na	na	na	na	na	na	5
Other	na	na	na	na	na	na	na	3
Instructional materials created by:								
Faculty	6	9	13	8	8	13	7	2
Commercially produced materials	3	10	2	2	-	9	4	4
Combination of both	6	8	12	7	8	13	7	5
How distance learning students take majority of tests:								
Not at a monitored testing site	4	11	11	7	7	13	7	4
At proctored testing site	5	12	8	5	8	13	7	5
Combination of both	4	9	8	5	8	14	7	4
Give credit for distance learning not offered through department:								
Yes	5	9	11	7	7	12	6	na
No	5	9	7	5	8	13	7	na
No department policy	5	12	9	6	8	13	7	na

Table SP.11		
Distance learning course exams when there are multiple instructors teaching the course	% of TYCs	SE
No common departmental exams	39	6
Common departmental exams for some courses	20	4
Common departmental exams for all courses	23	4
Not applicable or unreported	18	na
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	3
Only for scheduled meeting or student appointment	6	3
A specified number office hours per week	21	5
Not applicable or unreported	65	5

Table SP.12 (SE's only)	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	3	5	6	4	0	0	0	2
Of those with courses in both formats, the percentage where:								
Contents, goals, and objectives same as in non-distance learning	2	0	1	1	4	0	2	4
Instructors hold comparable office hours on campus	5	12	14	8	8	12	7	na
Instructors participate in evaluation in same way	5	7	8	4	5	12	6	4
Same use of common exams as in face-to-face	6	12	8	6	8	13	7	5
Same course outlines as in face-to-face	2	0	2	1	4	9	5	2
Same course projects as in face-to-face	6	7	10	6	8	13	8	5

Table SP.13.A	Mathematics Departments							
	Univ (PhD)	SE	Univ (MA)	SE	College (BA)	SE	Total	SE
E22. Introduction to Proofs	1	0	4	3	1	0	1	0
E23-1. Modern Algebra I	1	1	1	1	0	0	1	0
E23-2. Modern Algebra II								
E24. Number Theory	1	0					0	0
E25. Combinatorics								
E26. Actuarial Mathematics								
E27. Logic/Foundations (not E22)								
E28. Discrete Structures					0	0	0	0
E29. History of Mathematics	3	1	5	4	1	1	2	1
E30. Geometry	2	1			0	0	0	0
E31-1. Advanced Calculus I and/or Real Analysis I	1	0	4	3			1	0
E31-2. Advanced Calculus II and/or Real Analysis II								
E32. Advanced Mathematics for Engineering and Physical Sciences	1	1					0	0
E33. Advanced Linear Algebra (beyond E17, E19)	1	1					0	0
E34. Vector Analysis								
E35. Advanced Differential Equations (beyond E18)								
E36. Partial Differential Equations								
E37. Numerical Analysis I and II	1	1					0	0
E38. Applied Mathematics (Modeling)								
E39. Complex Variables	1	0					0	0
E40. Topology								
E41. Mathematics of Finance (not E26, E38)	1	0					0	0
E42. Codes and Cryptology								
E43. Biomathematics					1	1	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	1	4	3			1	0

Table SP.13.B (SE's only)	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	0		0
E8. Combined Probability & Statistics (calculus prerequisite)	1			0			
E9. Stochastic Processes							
E10. Applied Statistical Analysis	1	3		0	2		1
E11. Design & Analysis of Experiments					1		1
E12. Regression (and Correlation)	1		1	1	1		1
E13. Biostatistics					1		1
E14. Nonparametric Statistics					1		1
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					0		0
E23. Other upper level Probability & Statistics	1			0			
E23. Other mathematical science courses					1	5	2
F16. Statistical Computing (Math only)							



<b>Table SP.14</b>	Honors	Club	Women	Minorities	Contests	Colloquia	Outreach
Univ (PhD)	70	91	31	21	93	82	71
<i>SE</i>	5	2	3	4	2	3	4
Univ (MA)	40	96	21	21	82	88	75
<i>SE</i>	8	3	7	7	5	5	5
Coll (BA)	15	75	16	12	62	51	40
<i>SE</i>	4	5	5	3	4	6	6
All Math	26	80	19	14	69	60	49
<i>SE</i>	3	4	4	2	3	4	5
Univ (PhD)	43	48	19	22	24	67	30
<i>SE</i>	4	5	4	4	4	4	4
Univ (MA)	55	45	0	0	36	82	18
<i>SE</i>	11	11			11	8	8
All Stat	46	47	13	15	28	71	27
<i>SE</i>	4	5	3	3	4	4	4
TYC	20	31	6	11	41	16	32
<i>SE</i>	3	5	2	3	4	4	5

<b>Table SP.15</b>	REU	Ind. Studies	Advisor	Thesis	Career	Grad. Sch.	Intern	Sen Sem	Consult. Lab
Univ (PhD)	96	96	90	63	40	67	50	47	
SE	1	2	3	4	3	4	4	5	
Univ (MA)	91	100	100	56	46	70	67	66	
SE	6	0	0	10	6	4	8	11	
Coll (BA)	83	94	90	58	17	46	55	59	
SE	4	2	5	8	4	7	6	7	
All Math	86	95	91	59	24	52	56	58	
SE	3	1	3	6	3	6	4	5	
Univ (PhD)	85	90	89	54	30	66	69	30	32
SE	3	2	3	4	4	4	4	4	4
Univ (MA)	82	100	73	27	45	64	91	27	55
SE	8	0	10	10	11	11	6	10	11
All Stat	84	93	84	46	35	66	75	29	39
SE	3	2	3	4	4	4	3	4	4
TYC	14	36	42	na	na	na	na	na	na
SE	4	5	5						

<b>Table SP.16</b>	Mathematics Departments				Statistics Departments		
	Univ (PhD) %	Univ (MA) %	College (BA) %	Total %	Univ (PhD) %	Univ (MA) %	Total %
None	73	70	89	84	78	100	84
SE	4	7	4	3	4	0	3
One course	15	30	7	12	14	0	10
SE	4	7	3	2	3		2
Two or more courses	12	0	3	4	8	0	6
SE	2		2	2	3		2

Table SP.17	Univ (Phd)		Univ (MA)		Coll (BA)		All departments	
	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
Percentage that offered any new interdisciplinary course	56	45	30	36	6	8	5	4
SE	6	8	5	4	5	4	5	4
Of those offering any new course, those offering course in:								
Mathematics and finance or business	24	1.5	20	1.1	1	2.0	8	1.4
SE	4	0.1	8	0.1	1	1.1	1	0.1
Mathematics and biology	41	1.5	20	1.0	3	1.2	12	1.3
SE	5	0.1	8	0.0	1	0.2	2	0.1
Mathematics and the study of the environment	3	1.0	12	1.0	5	1.0	5	1.0
SE	1	0.0	5	0.0	3	0.0	2	0.0
Mathematics and engineering or the physical sciences	13	1.8	9	1.0	4	1.0	6	1.3
SE	5	0.4	5	0.0	2	0.0	2	0.1
Mathematics and economics	4	1.0	5	1.0	3	1.1	4	1.1
SE	2	0.0	5	.	3	0.7	2	0.1
Mathematics and social sciences other than economics	1	1.0	5	1.0	0	0	1	1.0
SE	1	.	4	0.0			1	0.0
Mathematics and education	18	2.0	14	1.4	13	1.6	14	1.7
SE	3	0.4	5	0.3	5	0.3	3	0.2
Mathematics and the humanities	5	1.0	13	1.0	13	1.4	12	1.3
SE	2	0.0	4	0.0	4	0.3	3	0.3
Other	2	1.0	0	0	10	1.3	8	1.2
SE	1	0.0			4	0.2	3	0.2

Table SP.18 (SE's only)	Four-year Mathematics				Two-year Mathematics				Four-year Statistics			
	Dual Enrollments		Other enrollments		Dual enrollments		Other enrollments		Dual enrollments		Other enrollments	
	spring 2010	fall 2010	fall 2010	fall 2010	spring 2010	fall 2010	fall 2010	fall 2010	spring 2010	fall 2010	fall 2010	fall 2010
Percentage of departments with dual enrollment courses	2		5		2		5		2		2	
Number of dual enrollments in:	College algebra	1887	6004	15896	4967	7660	27830					
	Precalculus	2469	1322	8188	5340	7508	7334					
	Calculus I	1771	945	15230	2178	2678	5972					
	Statistics	1600	1069	15835	1919	1226	12162		778	0		5069
	Other	853	779		3987	5233						
Dept. control of dual enroll. courses taught by HS teachers	Never	Sometimes	Always	Never	Sometimes	Always	Never	Sometimes	Always	Never	Sometimes	Always
Textbook choice	7	14	14	6	5	6	6	5	6	28	22	22
Syllabus design/ approval	1	1	2	3	1	3	3	1	3	28	28	
Final exam design	8	13	14	10	7	7	10	7	7	28	28	
Choice of instructor	10	10	17	9	6	8	9	6	8	28	22	22
Departmental teaching evaluations required in dual enrollment courses			19				6					

<b>Table S.19</b>	Asian	Black	Hisp.	White	Other
FT men %	9	2	2	56	2
SE	0	0	0	1	0
FT women %	3	1	1	23	1
SE	0	0	0	1	0

<b>Table S.20</b>	Asian	Black	Hisp.	White	Other
FT men %	20	1	1	49	3
SE	1	0	0	1	0
FT women %	8	0	1	15	2
SE	1	0	0	1	0

<b>Table SP.20 (SE's only)</b>	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) %
Mathematics Department Requirements									
Modern Algebra I	5	12	6	5	13	7	5	4	4
Real Analysis I	4	10	8	3	10	4	3	7	7
Modern Algebra I or Real Analysis I	4	6	3	4	6	5	4	8	5
A one-year upper level sequence	4	7	6	3	4	6	5	10	6
At least one computer science course	4	11	6	3	10	4	3	6	4
At least one statistics course	4	9	5	4	5	6	3	7	5
At least one applied mathematics course beyond course E21	4	8	7	4	5	3	4	7	8
A capstone experience (senior project, thesis, seminar, internship)	5	9	6	3	5	4	5	12	5
An exit exam (written or oral)	3	4	4	1	3	3	3	4	3

Table SP.21 (SE's only)	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) %
Percentage of statistics departments that require:						
(a) Calculus I	2	6	2	6	0	na
(b) Calculus II	2	6	2	6	0	na
(c) Multivariable Calculus	5	11	4	10	3	8
(d) Linear algebra/Matrix theory	4	11	3	10	2	6
(e) At least one Computer Science course	5	6	4	na	4	6
(f) At least one applied mathematics course, not incl. (a), (b), (c), (d)	4	11	4	8	5	8
(g) A capstone experience (e.g., a senior thesis or project, seminar, or internship)	5	11	3	6	5	11
(h) An exit exam (oral or written)	3	8	2	na	3	8
(i) One Probability Course	4	6	3	6	2	na
(j) One Mathematical Statistics Course	4	11	3	11	2	na
(k) One Linear Models Course	5	11	3	8	4	10
(l) One Bayesian Inference Course	2	na	3	na	4	0

Table SP.22	Mathematics Departments			
	Univ (PhD) %	Univ (MA) %	College (BA) %	Total %
Number of tracks				
One or two tracks	26	34	72	60
SE	4	4	6	4
Three or four tracks	37	46	21	27
SE	4	8	5	4
More than four tracks	37	17	5	11
SE	5	7	2	2

Upper-level mathematics courses	Academic Years 2009-2010 & 2010-2011							
	All Math Depts %	SE	Univ (PhD) %	SE	Univ (MA) %	SE	College (BA) %	SE
Modern Algebra I	80	3	85	4	96	3	76	5
Modern Algebra II	27	3	59	4	49	9	16	3
Number Theory	51	4	72	3	61	7	45	6
Combinatorics	27	3	61	4	53	8	15	4
Actuarial Mathematics	13	2	22	2	23	5	10	3
Foundations/Logic	11	2	23	3	13	5	8	3
Discrete Structures	30	3	26	4	37	8	30	4
History of Mathematics	49	4	52	2	69	7	45	5
Geometry	74	3	83	2	78	6	71	4
Math for secondary teachers	35	6	35	3	62	6	30	8
Adv Calculus/ Real Analysis I	79	4	94	3	86	3	75	5
Adv Calculus/Real Analysis II	31	4	71	4	50	7	20	6
Adv Mathematics for Engineering/Physics	12	2	41	3	19	7	5	2
Advanced Linear Algebra	23	3	61	7	48	6	11	3
Introduction to Proofs	57	5	73	5	77	7	50	7

Upper-level mathematics courses	Academic Years 2009-2010 & 2010-2011							
	All Math Depts %	SE	Univ (PhD) %	SE	Univ (MA) %	SE	College (BA) %	SE
Vector Analysis	11	2	26	4	15	6	7	2
Advanced Differential Equations	16	3	48	4	24	6	8	3
Partial Differential Equations	26	2	74	4	56	9	11	3
Numerical Analysis I and II	42	4	84	4	63	5	31	5
Applied Math/Modeling	37	4	60	4	41	7	33	5
Complex Variables	44	4	80	4	65	8	33	5
Topology	25	3	65	3	40	8	15	3
Mathematics of Finance	12	2	29	4	16	5	7	2
Codes & Cryptology	11	2	22	3	11	3	9	2
Biomathematics	12	2	36	4	21	6	5	2
Operations Research	17	2	31	4	27	6	13	3
Math senior seminar/Ind study	65	3	67	5	85	5	61	4
All other advanced level mathematics	25	5	46	4	43	10	17	6



Table SP.24 (SE's only) Upper level statistics courses	AY 2009-10 & 2010-11				AY 2009-10 & 2010-2011		
	All Math Depts %	PhD Math %	MA Math %	BA Math %	All Stat Depts %	PhD Stat %	MA Stat %
Mathematical Statistics	4	4	8	6	4	3	10
Probability	4	5	9	6	4	4	9
Combined Probability and Statistics	3	2	8	4	4	4	10
Stochastic Processes	1	3	3	2	4	4	9
Applied Statistical Analysis	2	4	5	3	4	4	10
Experimental Design	2	3	7	2	4	4	10
Regression & Correlation	2	4	7	2	4	4	7
Biostatistics	2	3	5	2	4	4	10
Nonparametric Statistics	1	2	4	1	4	4	10
Categorical Data Analysis	0	1	1	0	4	4	10
Sample Survey Design	0	1	2	0	4	4	10
Stat Software & Computing	1	3	6	1			
Stat Computing					4	4	10
Stat Software					4	4	14
Data Management	1	1	na	1	3	2	8
Bayesian Statistics					5	4	13
Statistical Consulting					5	4	13
Senior Seminar/ Independent Study	3	2	6	5	4	4	10

Table SP.25	Mathematics Departments			Statistics Departments	
	Univ (PhD) %	Univ (MA) %	College (BA) %	Univ (PhD) %	Univ (MA) %
Departmental estimates of post-college plans					
Students who went into pre-college teaching	13	48	27	1	1
<i>SE</i>	1	9	3	1	1
Students who went to graduate school in the mathematical or statistical sciences	15	12	17	23	29
<i>SE</i>	1	3	3	2	5
Students who went to graduate or professional school outside of mathematics/statistics	10	4	8	5	5
<i>SE</i>	1	1	2	1	3
Students who took jobs in business, government, etc.	27	19	30	41	45
<i>SE</i>	2	4	3	4	5
Students who had other plans known to the department	5	3	4	2	3
<i>SE</i>	1	1	2	1	2
Students whose plans are not known to the department	30	14	13	29	18
<i>SE</i>	3	2	2	5	5

Table SP.26	Four-year Mathematics Departments			Statistics Departments	
	Univ (PhD) %	Univ (MA) %	College (BA) %	Univ (PhD) %	Univ (MA) %
Percentage using various assessment tools					
Consult outside reviewers	53	48	31	42	80
<i>SE</i>	4	8	5	5	9
Survey program graduates	71	80	71	63	70
<i>SE</i>	4	8	4	4	11
Consult other departments	54	45	26	47	60
<i>SE</i>	4	12	6	5	11
Study data on students' progress in later courses	62	65	55	41	40
<i>SE</i>	5	7	6	5	11
Evaluate placement system	72	51	60	12	30
<i>SE</i>	2	9	6	3	11
Change undergraduate program due to assessment	78	76	69	61	80
<i>SE</i>	5	12	6	4	9

<b>Table E.1 (SE's only)</b>	Mathematics Departments				Statistics Departments		
Bachelors degrees in Math and Stat Depts	Univ (PhD)	Univ (MA)	College (BA)	Total Math	Univ (PhD)	Univ (MA)	Total Stat
Mathematics majors							
Men	268	113	384	482			
Women	228	195	531	609			
Total Math degrees	471	287	871	1031			
Mathematics Education							
Men	32	106	119	163			
Women	56	246	179	309			
Total Math Ed degrees	86	336	258	433			
Statistics Majors							
Men	26	11	22	36	32	45	55
Women	23	16	12	30	19	27	33
Total Stat degrees	48	26	28	61	50	66	83
Computer Science majors							
Men	117	48	307	332			
Women	16	14	77	80			
Total CS degrees	127	59	363	389			
Total degrees - Men	264	170	527	614	32	45	55
Total degrees - Women	230	396	513	688	19	27	33
Total all degrees	462	550	936	1180	50	66	83

Fall 2010 enrollments (1000s)							
Table E.2 (SE's only)	Mathematics Departments				Statistics Departments		
	Univ (PhD)	Univ (MA)	Coll (BA)	Total Math Depts	Univ (PhD)	Univ (MA)	Total Stat Depts
Mathematics Courses							
Precollege	9	14	15	22			
Introductory (incl. Precalc)	17	21	22	35			
Calculus	13	19	26	35			
Advanced Mathematics	3	4	5	7			
Total Math courses	26	46	49	73			
Statistics Courses							
Elementary Statistics	7	4	14	16	3	5	6
Upper Statistics	1	1	2	3	1	5	5
Total Stat Courses	7	5	14	16	4	6	7
CS courses							
Lower CS	1	1	9	9			
Middle CS	0	1	2	2			
Upper CS	0	1	2	2			
Total CS courses	2	2	11	11			
Total all courses	30	49	58	82			

Number of sections: Fall 2010							
Table E.3 (SE's only)	Mathematics Departments				Statistics Departments		
	Univ (PhD)	Univ (MA)	Coll (BA)	Total Math Depts	Univ (PhD)	Univ (MA)	Total Stat Depts
Mathematics Courses							
Precollege	284	537	583	841			
Introductory (incl. Precalc)	517	701	668	1098			
Calculus	279	512	791	982			
Advanced Mathematics	101	1043	240	1075			
Total Math courses	719	1821	1333	2369			
Statistics Courses							
Elementary Statistics	123	98	393	423	70	123	141
Upper Statistics	36	110	125	170	33	153	157
Total Stat Courses	137	187	403	465	86	205	223
CS courses							
Lower CS	35	46	340	345			
Middle CS	19	34	116	122			
Upper CS	25	24	158	162			
Total CS courses	76	98	533	547			
Total all courses	825	1910	1481	2554			

Table E.4	Four-year Mathematics Departments		Two-year Mathematics Departments		Statistics Departments	
	Distance-learning Enrollments	Other Enrollments	Distance-learning Enrollments	Other Enrollments	Distance-learning Enrollments	Other Enrollments
Precollege Level	8106	201089	87073	1062667		
SE	2256	21544	22398	81875		
College Algebra, Trigonometry, & Pre-Calculus	12021	431420	40898	309272		
SE	1959	22913	10166	27694		
Calculus I	2159	332632	3504	82192		
SE	976	14965	917	5577		
Calculus II	782	128104	285	30827		
SE	362	13668	160	2571		
Differential Equations & Linear Algebra	862	115837	298	10473		
SE	314	9536	209	1401		
Elementary Statistics	12368	218385	23363	110910	4171	77153
SE	2477	15877	4494	9371	1774	4741

Table E.5	Percentage of mathematics sections taught by					No. of Math sections	Percentage of statistics sections taught by					No. of Stat sections	Percentage of CS sections taught by					No. of CS sections		
	TTE %	OFT %	PT %	GTA %	Ukn %		TTE <sup>1</sup> %	OFT %	PT %	GTA %	Ukn %		TTE %	OFT %	PT %	GTA %	Ukn %			
Math Depts																				
Univ (PhD)	33	24	14	17	13	19088	51	14	7	16	12	1530	42	30	15	11	2	201		
SE	1	1	1	1	1	719	3	2	1	2	2	137	10	8	6	4	1	76		
Univ (MA)	46	17	21	6	11	16494	63	10	16	1	10	1628	89	0	11	0	0	307		
SE	4	4	5	1	7	1821	4	3	3	1	5	187	9	0	9	0	0	98		
Coll (BA)	57	11	23	0	10	29712	62	8	15	0	14	5943	58	18	22	0	2	3740		
SE	3	2	2	0	2	1333	3	1	3	0	3	403	5	5	6	0	1	533		
Total Math Depts	47	16	20	6	11	65294	60	9	14	3	13	9102	60	17	21	1	2	4248		
SE	2	1	2	0	2	2369	2	1	2	1	2	465	5	5	6	0	1	547		
Stat Depts																				
Univ (PhD)							38	13	7	15	27	1573								
SE							2	1	1	2	2	86								
Univ (MA)							65	9	10	2	14	1085								
SE							5	2	2	1	5	205								
Total Stat Depts							49	11	8	10	22	2658								
SE							3	1	1	1	2	223								

		Number of precollege-level sections taught by					
<b>Table E.6</b>		TTE	OFT	PT	GTA	Ukn	Total Sections
Mathematics Departments							
	Univ (PhD)	31	353	666	365	162	1578
	SE	11	98	164	52	25	284
	Univ (MA)	279	620	769	279	128	2075
	SE	67	350	268	111	42	537
	Coll (BA)	1043	461	1806	27	362	3699
	SE	291	145	271	26	119	583
	Total	1353	1434	3241	671	652	7352
	SE	298	391	415	125	129	841

		Number of introductory-level sections taught by					
<b>Table E.7</b>		TTE	OFT	PT	GTA	Ukn	Total Sections
Mathematics Departments							
	Univ (PhD)	636	2128	1123	1616	766	6268
	SE	63	244	124	205	127	517
	Univ (MA)	2073	1611	2058	485	329	6556
	SE	315	267	590	139	156	701
	Coll (BA)	5529	1891	3761	0	1344	12525
	SE	519	333	280	0	227	668
	Total	8238	5631	6942	2100	2438	25349
	SE	611	492	665	248	303	1098

		Number of calculus-level sections taught by					
<b>Table E.8</b>		TTE	OFT	PT	GTA	Ukn	Total Sections
Mathematics Departments							
	Univ (PhD)	3120	2057	789	1289	721	7976
	SE	173	160	111	124	111	279
	Univ (MA)	3080	495	611	160	213	4559
	SE	329	83	127	83	75	512
	Coll (BA)	6743	839	1223	0	771	9575
	SE	551	198	567	0	411	791
	Total	12943	3391	2622	1448	1705	22110
	SE	665	268	591	149	433	982



		Number of elementary-level statistics sections taught by					
<b>Table E.9</b>		TTE	OFT	PT	GTA	Ukn	Total Sections
Mathematics Departments							
	Univ (PhD)	251	243	124	274	77	969
	SE	31	45	23	56	22	123
	Univ (MA)	641	185	293	19	70	1208
	SE	82	44	59	11	29	98
	Coll (BA)	2564	601	1130	28	691	5014
	SE	134	104	234	22	187	393
	Total	3456	1029	1547	320	838	7191
	SE	161	121	243	61	190	423

		Number of lower-level CS sections taught by					
<b>Table E.10</b>		TTE	OFT	PT	GTA	Ukn	Total Sections
Mathematics Departments							
	Univ (PhD)	25	29	29	15	4	101
	SE	7	13	13	8	3	35
	Univ (MA)	116	0	30	0	0	146
	SE	31	0	22	0	0	46
	Coll (BA)	1089	397	656	14	73	2230
	SE	156	136	232	14	38	340
	Total	1229	426	715	30	77	2477
	SE	160	136	234	16	38	345

		Number of middle-level CS sections taught by					
<b>Table E.11</b>		TTE	OFT	PT	GTA	Ukn	Total Sections
Mathematics Departments							
	Univ (PhD)	31	11	2	7	0	51
	SE	10	7	2	6	0	19
	Univ (MA)	92	0	0	0	0	92
	SE	34	0	0	0	0	34
	Coll (BA)	521	156	95	0	0	769
	SE	98	51	47	0	0	116
	Total	644	168	97	7	0	912
	SE	104	51	47	6	0	122

<b>Table E.12</b>					
Mathematics Departments	Sections taught by TTE	Total sections	Statistics Departments	Sections taught by TTE	Total sections
Advanced Math. courses					
Univ (PhD)	2500	3266			
<i>SE</i>	96	101			
Univ (MA)	2098	3304			
<i>SE</i>	180	1043			
Coll (BA)	3548	3913			
<i>SE</i>	257	240			
Total advanced mathematics	8146	10483			
<i>SE</i>	328	1075			
Advanced Stat. courses			Advanced Stat. courses		
Univ (PhD)	438	561	Univ (PhD)	324	452
<i>SE</i>	24	36	<i>SE</i>	22	33
Univ (MA)	308	420	Univ (MA)	382	442
<i>SE</i>	63	110	<i>SE</i>	131	153
Coll (BA)	721	929			
<i>SE</i>	107	125			
Total advanced statistics	1467	1910	Total advanced stat.	706	894
<i>SE</i>	126	170	<i>SE</i>	133	157
Total all advanced courses	9613	12394			
<i>SE</i>	360	1067			

Table E.13	Average section size Fall 2010							All Depts. 2010
	Mathematics Depts				Statistics Depts			
	Univ (PhD)	Univ (MA)	Coll (BA)	Overall Math	Univ (PhD)	Univ (MA)	Overall Stat	
Mathematics courses								
Precollege	36	30	23	27				
<i>SE</i>	3	4	1	1				
Introductory (incl. Precalc)	47	31	27	33				
<i>SE</i>	2	1	1	1				
Calculus	48	31	24	34				
<i>SE</i>	2	1	2	1				
Advanced Mathematics	20	12	12	14				
<i>SE</i>	1	5	1	2				
Statistics courses								
Elementary Statistics	52	32	26	30	49	38	45	33
<i>SE</i>	5	3	1	1	3	3	2	nr
Upper Statistics	27	13	12	17	33	27	30	21
<i>SE</i>	2	4	2	1	1	2	1	nr
CS courses								
Lower CS	29	22	20	21				
<i>SE</i>	4	2	2	2				
Middle CS	18	15	12	12				
<i>SE</i>	5	2	1	1				
Upper CS	15	16	11	11				
<i>SE</i>	1	7	2	2				

Table E.14	Average recitation section size		
	Univ (PhD)	Univ (MA)	College (BA)
For Lecture/Recitation Courses			
Calculus Courses			
Mainstream Calculus I	29	30	30
<i>SE</i>	1	2	4
Mainstream Calculus II	29	25	33
<i>SE</i>	1	4	7
Other Calculus I	30	19	15
<i>SE</i>	1	10	7
Elementary Statistics			
in Mathematics Depts	28	29	32
<i>SE</i>	3	3	3
in Statistics Depts	30	34	
<i>SE</i>	2	3	

Table E.15	Mathematics Departments				Statistics Departments		
	Univ (PhD)	Univ (MA)	College (BA)	Total	Univ (PhD)	Univ (MA)	Total
Total freshmen enrolled in Fall 2010	346	209	336	891	65	57	122
<i>SE</i>	18	36	37	55	9	12	15
Total entering with AP credit	34	8	13	55	11	2	13
<i>SE</i>	3	4	4	6	4	1	4
Mean ratio of those with AP credit to total enrollment	0.13	0.03	0.04	0.05	0.18	0.04	0.12
<i>SE</i>	0.01	0.01	0.01	0.01	0.05	0.01	0.03

Table F.1 Mathematics	PhD Depts				MA Depts				BA Depts						
	T	TE	OFT	PT	T	TE	OFT	PT	T	TE	OFT	PT			
Doc Fac	4604	986	1739	1001	370	2369	758	237	16	354	5218	1712	627	6	609
SE	25	8	25	22	7	34	21	12	4	28	292	136	133	4	107
Doc (F)	518	269	496	226	107	579	273	89	6	102	1408	546	158	0	220
SE	4	3	8	6	3	14	10	7	3	10	114	61	55	0	49
Non-doc Fac	16	8	756	0	731	65	17	749	1	1434	475	136	1821	0	2553
SE	1	1	13	0	14	6	3	28	1	78	74	50	279	0	256
Non-doc (F)	6	1	449	0	326	26	11	427	1	659	203	127	828	0	1263
SE	0	0	8	0	7	3	3	18	1	36	41	49	105	0	154
Tot Math	4621	994	2495	1001	1101	2434	775	986	18	1787	5693	1848	2448	6	3161
SE	25	8	28	22	17	35	21	32	4	89	312	139	377	4	292
Tot Math (F)	525	270	946	226	433	605	284	516	7	761	1611	673	987	0	1484
SE	4	3	12	6	8	14	9	19	3	38	130	76	124	0	160
<b>Stat Depts</b>	PhD Depts				MA Depts										
Doc Fac	579	207	184	71	84	145	57	20	15	9					
SE	12	6	8	6	8	11	9	7	8	6					
Doc (F)	95	84	61	18	15	20	18	7	7	0					
SE	3	3	3	2	1	4	5	5	5	0					
Non-doc Fac	1	2	31	0	21	2	0	37	0	20					
SE	0	1	3	0	2	2	0	8	0	8					
Non-doc (F)	0	0	20	0	11	2	0	20	0	7					
SE	0	0	1	0	1	2	0	6	0	3					
Tot Stat	580	209	215	71	105	147	57	57	15	29					
SE	12	6	9	6	8	12	9	10	8	12					
Tot Stat (F)	95	84	82	18	26	22	18	26	7	7					
SE	3	3	4	2	2	3	5	8	5	3					

**Standard Error Table for F.1.1**

<b>Table F.1.1</b>	T	TE	OFT	PD	PT
<b>Mathematics</b>	PhD Depts + MA Depts + BA Depts				
Doc Fac	12191	3456	2603	1024	1332
SE	295	137	136	23	111
Doc (F)	2505	1088	744	232	429
SE	115	62	56	6	50
Non-doc Fac	557	161	3326	1	4718
SE	74	50	280	1	268
Non-doc (F)	235	139	1705	1	2249
SE	41	49	107	1	158
Tot Math	12747	3617	5929	1025	6050
SE	315	141	380	23	306
Tot Math (F)	2740	1227	2449	233	2678
SE	131	77	126	6	164
<b>Stat Depts</b>					
Doc Fac	724	264	204	86	93
SE	16	11	11	10	10
Doc (F)	115	102	68	24	15
SE	5	6	6	5	1
Non-doc Fac	3	2	69	0	41
SE	2	1	9	0	8
Non-doc (F)	2	0	40	0	18
SE	2	0	6	0	4
Tot Stat	727	267	272	86	133
SE	17	11	13	10	15
Tot Stat (F)	117	102	108	24	32
SE	5	6	9	5	4

**Table F.2**

	Univ (PhD)				Univ (MA)				Coll (BA)				Total			
	T	TE	OFT	PD	T	TE	OFT	PD	T	TE	OFT	PD	T	TE	OFT	PD
Men, 2010	4096	724	1549	775	1829	490	470	10	4082	1175	1461	6	10007	2390	3480	792
SE	24	6	20	18	29	18	19	2	233	114	284	4	236	115	285	18
Women, 2010	525	270	946	226	605	284	516	7	1611	673	987	0	2740	1227	2449	233
SE	4	3	12	6	14	9	19	3	130	76	124	0	131	77	126	6
Total, 2010	4621	994	2495	1001	2434	775	986	18	5693	1848	2448	6	12747	3617	5929	1025
SE	25	8	28	22	35	21	32	4	312	139	377	4	315	141	380	23

**Table F.3**

	Univ (PhD)				Univ (MA)				Total			
	T	TE	OFT	PD	T	TE	OFT	PD	T	TE	OFT	PD
Men, 2010	485	125	133	53	125	40	31	9	610	165	164	62
SE	10	4	6	4	13	7	7	6	16	8	10	8
Women, 2010	95	84	82	18	22	18	26	7	117	102	108	24
SE	3	3	4	2	3	5	8	5	5	6	9	5
Total, 2010	580	209	215	71	147	57	57	15	727	267	272	86
SE	12	6	9	6	12	9	10	8	17	11	13	10

Standard Error Tables for F.4

<b>Table F.4</b>	<30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	>69
Total Univ (PhD)	1	8	12	12	12	13	14	12	9	7
SE	0	0	0	0	0	0	0	0	0	0
Total Univ (MA)	2	9	12	14	14	14	14	10	7	4
SE	0	1	1	1	1	1	1	1	1	0
Total Coll (BA)	4	10	11	12	16	13	11	13	8	2
SE	1	1	1	1	1	1	1	1	1	0

Standard Error Tables for F.5 (Full-time) and F.6 (Part-time)

<b>Table F.5</b>						<b>Table F.6</b>					
	Asian	Black	Mex Am	White	Oth/Unk		Asian	Black	Mex Am	White	Oth/Unk
<b>PhD Math</b>						<b>PhD Math</b>					
FT Men	13	1	2	59	3	PT Men	5	2	1	47	6
SE	0	0	0	0	0	SE	0	0	0	1	0
FT Women	4	0	1	16	1	PT Women	4	1	1	30	3
SE	0	0	0	0	0	SE	0	0	0	1	0
<b>MA Math</b>						<b>MA Math</b>					
FT Men	12	4	2	47	2	PT Men	3	4	2	40	9
SE	1	0	0	1	0	SE	0	1	0	1	1
FT Women	5	2	1	26	1	PT Women	3	3	2	29	6
SE	0	0	0	1	0	SE	0	0	0	1	0
<b>BA Math</b>						<b>BA Math</b>					
FT Men	4	2	2	57	2	PT Men	2	1	0	43	8
SE	1	0	0	2	0	SE	0	0	0	3	1
FT Women	2	1	1	28	1	PT Women	1	1	0	38	5
SE	0	0	0	1	0	SE	0	1	0	3	1
<b>All Stat</b>						<b>All Stat</b>					
FT Men	20	1	1	49	3	PT Men	2	4	0	65	5
SE	1	0	0	1	0	SE	0	1	0	3	1
FT Women	8	0	1	15	2	PT Women	1	0	0	18	6
SE	1	0	0	1	0	SE	0	0	0	2	2





Table FY.2 Practices used in teaching College Algebra	Univ (PhD)		Univ (MA)		College (BA)		Total	
	% of all sections, nationally	Mean of department-reported percentages	% of all sections, nationally	Mean of department-reported percentages	% of all sections, nationally	Mean of department-reported percentages	% of all sections, nationally	Mean of department-reported percentages
a. Emphasize problem solving in the modeling sense	38	38	64	60	40	54	44	53
SE	6	4	15	11	7	7	5	5
b. Include elementary data analysis	35	24	19	27	25	26	27	26
SE	8	6	9	12	8	8	5	6
c. Include writing assignments	11	13	21	15	17	28	16	23
SE	3	3	11	7	5	7	3	5
d. Include small group activities	26	24	44	38	39	47	36	42
SE	3	4	14	8	8	9	5	6
e. Include small group projects	11	3	32	20	23	27	20	22
SE	1	0	18	11	7	9	5	6
f. Include class presentations	4	5	4	4	14	15	9	12
SE	1	2	2	2	6	6	3	4
g. Use graphing calculators	46	46	77	78	73	75	66	72
SE	6	5	14	10	7	5	5	4
h. Use spreadsheets	1	1	10	0	7	11	5	8
SE	0	1	9	0	4	7	3	5
i. Use online homework generating and grading packages	76	71	75	60	58	54	68	58
SE	4	4	9	7	8	9	4	6
j. Use classroom response systems (e.g., clickers)	13	10	0	0	10	9	9	8
SE	3	3	0	0	6	6	3	4
k. Primarily use a traditional approach	60	64	65	68	69	72	65	70
SE	6	5	11	10	7	6	5	4



Table FY.4	Mathematics Departments			Total
	Univ (PhD)	Univ (MA)	College (BA)	
Percentage that offer an Honors Calculus course	65	26	10	20
<i>SE</i>	4	6	3	2
Of those that offer Honors Calculus, the percentage of depts that offer if for:				
Calculus I	71	73	66	69
<i>SE</i>	5	19	24	10
Calculus II	88	85	97	91
<i>SE</i>	3	15	3	3
Calculus III	74	32	17	48
<i>SE</i>	4	18	18	8
Of those that offer Honors Calculus, compared to Mainstream Calculus, the percentage of departments where Honors Calculus:				
Contains more theory	95	84	84	89
<i>SE</i>	2	11	13	5
Contains more applications	57	59	88	69
<i>SE</i>	6	20	9	6
Is aimed at mathematics majors	32	56	43	40
<i>SE</i>	4	17	24	9
Requires a test or placement mechanism as a prerequisite	75	95	59	72
<i>SE</i>	4	4	23	9
Can be selected by any interested student	18	5	17	15
<i>SE</i>	4	4	10	4

Table FY.5 Course & Department Type	Percentage of sections taught by																						
	TTE %			OFT %			PT %			GTA %			Unknown %			Avg. Sec. Size			Enroll. (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 / recitation	31	60	29	28	20	39	17	20	26	15	0	0	9	0	6	74	33	29	27	3	5		
SE	5	16	15	4	8	14	6	8	12	5	0	0	3	0	6	8	3	2					
Regular section <31	16	43	41	21	23	15	11	20	32	45	2	0	7	13	12	27	25	22	6	3	7		
SE	8	11	10	9	7	9	5	14	10	21	1	0	3	8	7	3	1	2					
Regular section >30	18	31	44	33	16	13	13	38	25	24	0	0	13	15	18	52	39	36	27	15	5		
SE	4	9	9	5	10	7	3	6	18	3	0	0	5	14	15	3	6	3					
Total Non-Mainstream Calculus I	22	38	39	29	18	20	14	32	29	25	0	0	10	12	12	54	35	27	60	22	17		
SE	3	6	7	5	6	8	3	5	6	5	0	0	3	8	4	3	4	1					
Total Non-Mainstream Calculus II	18	22	60	21	32	0	12	44	10	25	0	0	24	3	31	35	33	19	12	5	5		
SE	3	12	21	3	5	0	4	10	9	7	0	0	9	3	27	5	3	8					
Total Non-Mainstream Calculus I & II	21	35	45	27	21	14	13	34	23	25	0	0	13	11	18	50	35	25	72	27	23		
SE	3	6	6	3	5	6	3	5	6	5	0	0	3	6	10	3	3	3	3	3	3		

Table FY.6 Course & Department Type	Percentage of sections taught by																				
	TTE %			OFT %			PT %			GTA %			Unknown %								
	PhD	MA	BA	PhD	MA	BA	PhD	MA	BA	PhD	MA	BA	PhD	MA	BA						
Elementary Stat. (F1) (non-calculus)																					
Lecture / recitation	36	66	43	22	18	3	10	3	32	21	0	0	11	13	21	48	38	30	6	6	34
SE	4	10	6	10	11	2	4	3	12	12	0	0	6	8	11	7	7	4			
Regular section <31	6	39	50	28	22	16	6	35	27	29	1	0	31	3	8	27	20	22	4	4	46
SE	2	10	6	7	6	4	3	16	6	5	1	0	8	3	3	4	3	1			
Regular section >30	23	50	56	25	15	16	20	30	8	31	0	0	1	5	21	65	38	37	28	16	30
SE	4	5	6	6	6	6	3	8	3	5	0	0	1	4	4	10	4	1			
Total Elementary Statistics	22	50	49	25	18	12	15	26	24	29	0	0	9	6	14	55	33	27	38	27	110
SE	3	5	3	4	4	2	2	6	4	4	0	0	3	3	4	7	4	1			
Probability & Statistics (non-Calculus) (F3 + F4)	30	52	47	17	10	7	15	24	21	20	5	7	18	9	18	57	32	25	4	7	9
SE	9	11	10	5	5	4	5	9	13	7	3	6	7	6	9	11	3	3			
Total, all non-calculus elementary probability & statistics courses	23	51	49	24	16	12	15	25	24	28	1	1	10	7	14	55	33	27	42	34	119
SE	3	4	3	4	4	2	2	5	4	4	1	1	3	3	3	6	3	1			

Table FY.7	Mathematics Departments							
	Univ (PhD)	SE	Univ (MA)	SE	College (BA)	SE	Total	SE
Percentage of departments that offer elementary statistics course with no calculus prerequisite	58	3	90	6	87	4	84	3
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%	33	7	29	8	15	5	18	4
21-40%	18	6	15	8	30	5	27	4
41-60%	26	5	14	6	20	5	19	4
61-80%	5	2	12	6	18	4	16	4
81-100%	18	4	30	11	18	4	20	4
Percentage of departments where the majority of sections use in-class demonstrations for the following percentages of class sessions:								
0-20%	36	4	23	7	10	3	14	2
21-40%	21	5	9	5	33	6	29	5
41-60%	20	5	16	6	11	3	13	3
61-80%	6	3	16	8	29	5	25	4
81-100%	16	4	35	10	17	3	19	3
Percentage of departments using the following kinds of technology in the majority of sections:								
Graphing calculators	52	5	79	5	72	5	71	4
Statistical packages	49	5	63	8	54	5	55	4
Educational software	26	5	16	6	18	4	19	3
Applets	20	5	15	6	17	5	17	4
Spreadsheets	57	7	55	8	50	6	51	5
Web-based resources	61	4	53	10	54	8	54	7
Classroom response systems	11	3	9	4	10	4	10	3
Percentage of departments where the majority of sections require assessments beyond homework, exams, and quizzes	24	6	51	8	46	6	45	5

Table FY.8	Statistics Departments					
	Univ (PhD)	SE	Univ (MA)	SE	Total	SE
Percentage of departments that offer Introductory Statistics for non-majors/minors with no calculus prerequisite	90	3	85	7	88	3
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%	6	2	20	9	9	3
21-40%	16	3	20	9	17	3
41-60%	21	3	0	.	16	3
61-80%	24	4	10	7	20	3
81-100%	34	4	50	12	38	4
Percentage of departments where the majority of sections use in-class demonstrations in the following percentages of class sessions:						
0-20%	22	4	10	7	19	3
21-40%	16	3	40	11	22	4
41-60%	21	4	0	.	16	3
61-80%	16	3	20	9	17	3
81-100%	24	4	30	11	26	4
Percentage of departments using following kinds of technology in the majority of sections						
Graphing calculators	45	4	33	12	43	4
Statistical packages	89	3	80	9	87	3
Educational software	38	4	44	12	40	4
Applets	31	4	44	12	34	4
Spreadsheets	45	4	56	12	48	4
Web-based resources	79	4	60	11	74	4
Classroom response systems	26	4	40	11	29	4
Percentage of departments where the majority of sections require assessments beyond homework, exams, and quizzes	31	4	50	12	36	4



Table FY.9	Percentage of sections taught by																
	TTE %		OFT (w PhD) %		OFT (w/o PhD) %		PT %		GTA %		Unk. %		Avg. Sec. Size		Enroll. (1000s)		
	PhD	MA	PhD	MA	PhD	MA	PhD	MA	PhD	MA	PhD	MA	PhD	MA	PhD	MA	
Course & Statistics Department Type																	
Introductory Statistics (non-Calculus for non-majors/minors)																	
Lecture / recitation	19	27	11	5	13	5	11	17	18	5	27	41	65	54	29	9	
SE	2	9	2	3	2	4	2	10	5	4	3	26	8	10			
Regular section <31	32	49	17	1	0	27	13	23	15	0	24	0	16	26	1	4	
SE	6	19	5	2	0	14	4	7	5	0	5	0	2	5			
Regular section >30	17	63	5	0	4	9	4	24	39	0	31	4	47	29	10	4	
SE	3	10	2	0	1	8	2	4	6	0	6	4	2	4			
Total Introductory Statistics (non-Calculus)	19	44	10	2	9	13	9	21	24	2	28	17	55	37	40	17	
SE	2	8	2	1	1	6	1	3	4	1	3	11	4	3			
Introductory Statistics (calculus prerequisite for non-majors/minors)																	
Lecture / recitation	36	32	14	32	4	0	11	5	13	0	23	32	50	34	6	1	
SE	5	13	2	10	2	0	2	9	4	0	4	10	5	22			
Regular section <31	32	67	10	6	1	6	3	3	6	11	47	8	15	44	1	3	
SE	10	22	4	3	0	5	2	2	1	9	16	5	5	15			
Regular section >30	39	76	13	6	1	0	17	6	17	6	13	6	36	42	4	1	
SE	4	8	2	4	0	0	4	5	3	5	2	4	3	9			
Total Introductory Statistics (Calculus)	36	59	13	13	2	3	11	4	12	7	26	15	36	40	11	5	
SE	4	11	1	5	1	2	2	2	2	4	4	5	3	7			

Table TYE.1

See NCES source.

Table TYE.2	2010
Mathematics & Statistics enrollments in TYCs	2,105,000
SE	111,000

Table TYE.3			
Course Number	Type of course	2010	SE
	Precollege level		
1	Arithmetic & Basic Mathematics	146	22
2	Pre-algebra	226	30
3	Elementary Algebra (High School level)	428	38
4	Intermediate Algebra (High School level)	344	25
5	Geometry (High School level)	6	1
	Precalculus level		
6	College Algebra (above Intermediate Algebra)	230	28
7	Trigonometry	45	6
8	College Algebra & Trigonometry (combined)	11	3
9	Introduction to Mathematical Modeling	18	9
10	Precalculus/Elem Functions/Analytic Geometry	64	7
	Calculus level		
11	Mainstream Calculus I	65	5
12	Mainstream Calculus II	29	2
13	Mainstream Calculus III	15	1
14	Non-mainstream Calculus I	20	3
15	Non-mainstream Calculus II	2	1
16	Differential Equations	6	1
	Other mathematics courses		
17	Linear Algebra	5	1
18	Discrete Mathematics	2	1
19	Elementary Statistics (with or w/o Probability)	134	12
20	Probability (with or w/o Statistics)	3	1
21	Finite Mathematics	18	4
22	Mathematics for Liberal Arts	91	12
23	Mathematics for Elementary School Teachers I	21	3
24	Mathematics for Elementary School Teachers II	8	1
25	Other Mathematics Courses for Teacher Preparation	1	0
26	Business Mathematics (not transferable)	16	5
27	Business Mathematics (transferable)	4	2
28	Technical Math (non-calculus-based)	17	8
29	Technical Math (calculus-based)	1	1
30	Other Mathematics Courses (not transferable)	33	17
31	Other Mathematics Courses (transferable)	14	5
Total all Two-year College math courses		2024	109

Table TYE.4		
Course numbers	Type of course	2010
1-5	Precollege Level	1150
	<i>SE</i>	86
6-10	Precalculus Level	368
	<i>SE</i>	31
11-16	Calculus Level	138
	<i>SE</i>	10
19-20	Statistics, Probability	137
	<i>SE</i>	12
17-18 & 21-31	Remaining Courses	231
	<i>SE</i>	25
1-31	Total, all courses	2024
	<i>SE</i>	109

Course number	Type of course	Fall 2010	SE
1	Arithmetic & Basic Mathematics	50	5
2	Pre-algebra	49	6
3	Elementary Algebra (High School level)	82	4
4	Intermediate Algebra (High School level)	79	5
5	Geometry (High School level)	7	2
6	College Algebra (above Intermediate Algebra)	76	7
7	Trigonometry	55	6
8	College Algebra & Trigonometry (combined)	12	3
9	Introduction to Mathematical Modeling	9	3
10	Precalculus/ Elementary Functions/ Analytic Geometry	53	6
11	Mainstream Calculus I	79	6
12	Mainstream Calculus II	61	6
13	Mainstream Calculus III	56	5
14	Non-mainstream Calculus I	25	4
15	Non-mainstream Calculus II	5	2
16	Differential Equations	21	3
17	Linear Algebra	19	3
18	Discrete Mathematics	11	3
19	Elementary Statistics (with or w/o Probability)	73	8
20	Probability (with or w/o Statistics)	5	2
21	Finite Mathematics	27	4
22	Mathematics for Liberal Arts	44	5
23	Mathematics for Elementary School Teachers I	55	5
24	Mathematics for Elementary School Teachers II	27	5
25	Other Mathematics Courses for Teacher Preparation	2	1
26	Business Mathematics (not transferable)	20	5
27	Business Mathematics (transferable)	6	2
28	Technical Mathematics (non-calculus-based)	26	6
29	Technical Mathematics (calculus-based)	3	2
30	Other Mathematics Courses (not transferable)	19	4
31	Other Mathematics Courses (transferable)	18	6

Course number	Type of course	2010	SE
11	Mainstream Calculus I	79	6
16	Differential Equations	21	3
17	Linear Algebra	19	3
18	Discrete Mathematics	11	3
19	Elementary Statistics (with or w/o Probability)	73	8
21	Finite Mathematics	27	4
22	Mathematics for Liberal Arts	44	5
23	Mathematics for Elementary School Teachers I	55	5
28	Technical Mathematics (non-calculus-based)	26	6
29	Technical Mathematics (calculus-based)	3	2

		2010			
Course numbers	Type of course	avg. sec. size	SE	% of sections with size > 30	SE
1-5	Precollege Level	24.0	1	20%	4
6-10	Precalculus Level	26.0	1	34%	4
11-16	Calculus Level	21.0	4	25%	5
19-20	Elem. Statistics, Probability	28.0	1	38%	5
1-31	Total, all courses	24.0	1	23%	3

		2010			
Course numbers	Type of course	avg. sec. size	SE	% of sections with size > 30	SE
1-5	Precollege Level	23	2	23%	6
6-10	Precalculus Level	22	1	12%	4
11-16	Calculus Level	15	2	0%	0
19-20	Elem. Statistics, Probability	24	1	15%	4
1-31	Total, all courses	22	1	10%	3

Table TYE.8							
Course number	Type of course	Avg. sec. size	SE	Course number	Type of course	Avg. sec. size	SE
1	Arithmetic & Basic Mathematics	24	1	17	Linear Algebra	20	1
2	Pre-algebra	21	4	18	Discrete Mathematics	18	2
3	Elementary Algebra (High School level)	24	1	19	Elementary Statistics (with or w/o Probability)	28	1
4	Intermediate Algebra (High School level)	25	1	20	Probability (with or w/o Statistics)	22	4
5	Geometry (High School level)	26	3	21	Finite Mathematics	23	1
6	College Algebra (above Intermediate Algebra)	26	1	22	Mathematics for Liberal Arts	27	1
7	Trigonometry	27	1	23	Mathematics for Elementary School Teachers I	19	2
8	College Algebra & Trigonometry (combined)	22	2	24	Mathematics for Elementary School Teachers II	17	1
9	Introduction to Mathematical Modeling	28	2	25	Other Mathematics Courses for Teacher Preparation	23	3
10	Precalculus/Elem Functions/Analytic Geometry	26	1	26	Business Math (not transferable)	22	2
11	Mainstream Calculus I	20	6	27	Business Math (transferable)	27	2
12	Mainstream Calculus II	24	1	28	Technical Math (non-calculus-based)	21	2
13	Mainstream Calculus III	20	1	29	Technical Math (calculus-based)	22	10
14	Non-mainstream Calculus I	21	5	30	Other Mathematics Courses (not transferable)	21	4
15	Non-mainstream Calculus II	27	3	31	Other Mathematics Courses (transferable)	23	1
16	Differential Equations	23	1				

Course number	Type of course	Avg. sec. size	SE	Course number	Type of course	Avg. sec. size	SE
1	Arithmetic & Basic Mathematics	22	1	17	Linear Algebra	20	-
2	Pre-algebra	23	3	18	Discrete Mathematics	15	6
3	Elementary Algebra (High School level)	24	2	19	Elementary Statistics (with or w/o Probability)	24	1
4	Intermediate Algebra (High School level)	22	2	20	Probability (with or w/o Statistics)	11	-
5	Geometry (High School level)	na		21	Finite Mathematics	20	3
6	College Algebra (above Intermediate Algebra)	23	1	22	Mathematics for Liberal Arts	24	1
7	Trigonometry	24	3	23	Mathematics for Elementary School Teachers I	19	2
8	College Algebra & Trigonometry (combined)	23	2	24	Mathematics for Elementary School Teachers II	18	4
9	Introduction to Mathematical Modeling	17	6	25	Other Mathematics Courses for Teacher Preparation	na	
10	Precalculus/Elem Functions/Analytic Geometry	20	2	26	Business Math (not transferable)	24	1
11	Mainstream Calculus I	15	1	27	Business Math (transferable)	24	4
12	Mainstream Calculus II	8	7	28	Technical Math (non-calculus-based)	17	8
13	Mainstream Calculus III	4		29	Technical Math (calculus-based)	13	15
14	Non-mainstream Calculus I	19	3	30	Other Mathematics Courses (not transferable)	12	12
15	Non-mainstream Calculus II	na		31	Other Mathematics Courses (transferable)	22	5
16	Differential Equations	na					

Table TYE.9		2010					
Course number	Type of course	# of sections	SE	# of sec. taught by PT fac.	SE	% of sec. taught by PT fac.	SE
1-5	Precollege level	45131	4058	26069	2791	58%	5
6-10	Precalculus level	12588	1076	3940	453	31%	3
11-13	Mainstream Calculus	5155	898	558	83	11%	3
14-15	Non-mainstream Calculus	959	223	259	70	27%	8
16-18	Advanced level	616	70	69	25	11%	4
19-20	Statistics, Probability	4090	364	1573	192	38%	3
21-27	Service courses	5673	548	2258	268	40%	3
28-29	Technical mathematics	1533	634	264	83	17%	11
30-31	Other mathematics courses	2272	707	974	533	43%	18
1-31	Total, all courses	78018	5634	35965	3198	46%	4



Table TYE.10		% of sections taught that						Total # of on-campus sec. in fall 2010	SE
Course Nbr.	Type of course	Use computer algebra system %	SE	Use commerc. produced electronic instruct. packages %	SE	taught mostly by the standard lecture method %	SE		
1	Arithmetic & Basic Mathematics	8	4	32	8	66	8	5652	940
2	Pre-algebra	9	5	40	10	54	11	10183	1784
3	Elementary Algebra (High School level)	7	3	33	5	76	4	16236	1443
4	Intermediate Algebra (High School level)	8	3	31	5	69	5	12843	1101
5	Geometry (High School level)	0	0	0	0	77	18	217	64.95
6	College Algebra (above Intermed. Algebra)	6	4	34	6	79	6	7628	962.5
7	Trigonometry	4	3	23	6	91	3	1540	183.9
8	College Algebra & Trigonometry (combined)	12	12	20	11	89	5	413	141.5
9	Introduction to Mathematical Modeling	0	0	11	10	95	6	618	298.8
10	Precalculus/Elem Functions/Analytic Geome	2	1	20	6	84	5	2389	261.9
11	Mainstream Calculus I	9	3	12	5	66	18	3166	823.6
12	Mainstream Calculus II	9	3	11	3	85	5	1223	98
13	Mainstream Calculus III	20	7	8	3	85	5	766	63
14	Non-mainstream Calculus I	0	0	22	10	72	15	895	216
15	Non-mainstream Calculus II	0	0	0	0	83	8	64	24
16	Differential Equations	14	5	6	4	81	7	266	34.34
17	Linear Algebra	8	8	8	8	87	6	239	41.03
18	Discrete Mathematics	0	0	0	0	77	12	111	25
19	Elementary Statistics (with or w/o Probability)	2	1	19	5	81	5	3965	359.2
20	Probability (with or w/o Statistics)	15	17	53	29	100	0	126	61
21	Finite Mathematics	4	4	26	12	82	8	703	126.3
22	Mathematics for Liberal Arts	1	1	12	4	88	5	2857	402.4
23	Mathematics for Elementary School Teachers I	7	3	4	2	71	8	973	148.1
24	Mathematics for Elementary School Teacher	5	5	3	3	80	8	366	66.03
25	Other Mathematics Courses for Teacher Preparation	0	0	0	0	86	11	28	12.03
26	Business Math (not transferable)	3	3	4	2	68	14	602	170.9
27	Business Math (transferable)	0	0	20	13	91	7	143	51
28	Technical Math (non-calculus-based)	1	2	10	8	28	16	1203	449.1
29	Technical Math (calculus-based)	0	0	0	0	3	2	330	231.3
30	Other Mathematics Courses (not transferable)	0	0	46	38	87	14	1488	641
31	Other Mathematics Courses (transferable)	1	1	5	5	54	31	784	325.8

Course Number	Type of course	Accelerated Sections	Slower-Paced Sections	Learning Communities	Summer Boot Camp	Not applicable (course not offered)
1	Arithmetic & Basic Mathematics	22	23	17	13	34
	SE	5	6	3	4	5
2	Pre-algebra	35	22	15	8	30
	SE	5	5	3	2	6
3	Elementary Algebra (High School level)	49	29	16	15	15
	SE	5	6	3	4	5
4	Intermediate Algebra (High School level)	38	22	10	10	15
	SE	5	5	3	3	5

Course Nbr.	Type of course	Most sophisticated technology that is required or allowed:					No Dept. Policy	Not applicable (course not offered)
		No Calculator Allowed	Four-Function Calculator	Scientific Calculator	Graph. Calc.	Computer-Based Tools		
1	Arithmetic & Basic Mathematics	43	7	12	1	3	8	26
	SE	6	2	4	1	1	4	5
2	Pre-Algebra	26	10	22	5	6	7	24
	SE	5	3	4	2	2	2	5
3	Elementary Algebra (High School level)	13	8	32	18	6	19	4
	SE	4	3	5	4	2	5	3
4	Intermediate Algebra (High School level)	4	3	23	42	7	17	4
	SE	2	1	5	5	2	5	3

<b>Table TYE.11.2</b>	<b>% of prog.</b>	<b>SE</b>
A. Percentage of all departments that offer College Algebra	84	5
B. Purpose of College Algebra programs is to		
a. Prepare students for Trigonometry, Engineering, or other Calculus	84	4
b. Prepare students for Business Calculus but not Engineering Calculus	55	6
c. Strengthen general quantitative literacy	73	5
d. Provide an option to students taking no further math	68	6
C. Course content primarily taught through modeling and problem solving	26	5
D. Department policy either requires or allows:		
a. Scientific calculator	59	6
b. Graphing calculator	65	6
c. Calculators with Algebra System	7	2
E. Use of technology		
a. Instructors and/or students use spreadsheets	20	5
b. Students use commercial programs	59	6
c. Students use computer algebra systems	24	5
d. Students are required to submit homework via an online platform	49	5
e. Offer web-based resources	47	5

Table TYE.12		2010					
Course Nbr.	Type of course	Total Enroll. (1000s)	SE	Dist. Enroll. (1000s)	SE	% Dist. Enroll.	SE
1	Arithmetic & Basic Mathematics	146	22	11	5	7	4
2	Pre-algebra	226	30	14	6	6	3
3	Elementary Algebra (High School level)	428	38	37	11	9	2
4	Intermediate Algebra (High School level)	344	25	25	5	7	1
5	Geometry (High School level)	6	1	0	0	0	0
6	College Algebra (above Intermed. Algebra)	230	28	32	8	14	3
7	Trigonometry	45	6	4	2	10	3
8	College Algebra & Trigonometry (combined)	11	3	1	1	12	6
9	Introduction to Mathematical Modeling	18	9	1	0	4	4
10	Precalculus/ Elementary Functions/ Analytic Geometry	64	7	3	1	5	2
11	Mainstream Calculus I	65	5	2	1	3	1
12	Mainstream Calculus II	29	2	0	0	1	1
13	Mainstream Calculus III	15	1	0	0	0	0
14	Non-mainstream Calculus I	20	3	2	1	8	2
15	Non-mainstream Calculus II	2	1	0	0	0	0
16	Differential Equations	6	1	0	0	2	2
17	Linear Algebra	5	1	0	0	4	4
18	Discrete Mathematics	2	1	0	0	12	8

Table TYE.12 (continued)							
19	Elementary Statistics (with or w/o Probability)	134	12	23	4	17	2
20	Probability (with or w/o Statistics)	3	1	0	0	7	8
21	Finite Mathematics	18	4	2	1	11	3
22	Math for Liberal Arts	91	12	15	4	17	3
23	Mathematics for Elementary School Teachers I	21	3	2	1	11	4
24	Mathematics for Elementary School Teachers II	8	1	2	1	20	7
25	Other Mathematics Courses for Teacher Preparation	1	0	0	0	0	0
26	Business Math (not transferable)	16	5	3	1	19	4
27	Business Math (transferable)	4	2	0	0	7	6
28	Technical Math (non-calculus)	17	8	1	1	7	6
29	Technical Math (calculus)	1	1	0	0	37	29
30	Other Math Courses (not transferable)	33	17	2	1	7	2
31	Other Math Courses (transferable)	14	5	3	1	19	9

<b>Table TYE.12.1</b>	<b>% of Progs.</b>	<b>SE</b>
A. Goals of distance learning generally the same as face-to-face courses		
a. Yes	88	4
b. No	0	-
c. Do not have distance learning	12	4
B. Instructional materials created by:		
a. Faculty	10	2
b. Commercially produced materials	12	4
c. Combination of both	78	5
C. Format of majority of distance learning		
a. Complete online	73	6
b. Hybrid	22	5
c. Other	5	3
D. Requirements of distance learning faculty to meet with students		
a. Never	8	3
b. For scheduled meetings	6	3
c. Specified office hours per week	21	5
d. Not applicable	65	5
E. How distance learning students take majority of tests		
a. Complete online and unproctored	11	4
b. At proctored testing site	42	5
c. Combination of both	47	4
F. Exams when there are multiple instructors		
a. No common departmental exams	39	6
b. Common departmental exams for some courses	20	4
c. Common departmental exams for all courses	23	4
G. Are some courses in both non-distance and distance learning formats		
a. Yes	97	2
b. No	3	2
H. Distance learning practices		
a. Same exams as in face-to-face	47	5
b. Same outlines as in face-to-face	96	2
c. Same course projects	49	5
I. Distance learning instructors evaluated in same way		
a. Yes	78	4
b. No	22	4

<b>Table TYE.13</b>		
Opportunity/Service	2010	SE
A. Diagnostic or placement testing	90	4
a. Colleges that usually require placement tests of first-time enrollees	100	0
b. Colleges that use placement tests as part of mandatory placement	98	2
c. Colleges that periodically assess the effectiveness of their placement tests	75	6
B. Mathematics lab or tutorial center	*	
C. Advising by a member of the mathematics faculty	42	5
D. Opportunities to compete in mathematics contests	41	4
E. Honors sections	20	3
F. Mathematics club	31	5
G. Special mathematics programs to encourage minorities	11	3
H. Lectures/colloquia for students, not part of math club	16	4
I. Special mathematics programs to encourage women	6	2
J. K-12 outreach opportunities	32	5
K. Undergraduate research opportunities	14	4
L. Independent mathematics studies	36	5
M. Other	13	6

<b>Table TYE.14</b>		2010	
Course Number	Type of course	Enroll. (1000s)	SE
1-2	Arithmetic & Basic Math, Pre-algebra	48	15
3	Elementary Algebra (High School level)	38	14
4	Intermediate Algebra (High School level)	29	14
19-20	Elementary Statistics, Probability	12	4
26-27	Business Mathematics	19	3
28-29	Technical Mathematics	7	3
	Total	152	40

Table TYE.15		Mathematics Enrollment (in 1000s) in Other Programs			
Course Number	Type of course	Developmental Education Dept/Division	Occupational Programs	Business	Other Depts/ Divisions
1-2	Arithmetic & Basic Math, Pre-algebra	47	1	0	0
	SE	15	0	0	0
3	Elementary Algebra (High School level)	36	0	1	0
	SE	14	0	1	0
4	Intermediate Algebra (High School level)	29	0	0	0
	SE	14	0	0	0
19-20	Elementary Statistics, Probability	0	0	9	3
	SE	0	0	3	1
26-27	Business Mathematics	0	1	18	0
	SE	0	1	4	0
28-29	Technical Mathematics	0	4	1	2
	SE	0	2	1	1
Total		112	5	29	6
SE		40	2	5	2

Table TYE.16			
Mathematics Outside of the Mathematics Department		2010	SE
Percentage of Two-year Colleges with some precollege mathematics courses outside of mathematics department control		29	7
Course number	Type of Course		
1-2	Arithmetic & Basic Math, Pre-algebra	24	7
3	Elementary Algebra (High School level)	13	6
4	Intermediate Algebra (High School level)	7	3

Table TYF.1		
Two-Year Colleges	2010	SE
Full-time permanent faculty	9790	387
Full-time temporary faculty	1083	417
Part-time faculty paid by TYC	23453	1568
Part-time, paid by third party	2323	420

Table TYF.2	Teaching assignment in weekly contact hours					
	<10	10 to 12	13 to 15	16 to 18	19 to 21	>21
Percentage of two-year colleges	3	7	76	8	3	3
<i>SE</i>	3	4	6	2	2	2
Full-time Permanent Faculty					2010	<i>SE</i>
A. Average weekly contact hours:					15	1
B. Percentage who teach extra hours for extra pay at their own two-year college:					65%	3
C. Percentage teaching 1-3 extra hours for extra pay:					47%	4
D. Percentage teaching 4-6 extra hours for extra pay:					39%	3
E. Percentage teaching 7 or more extra hours for extra pay:					14%	2
Part-time Faculty						
F. Percentage who teach 6 or more hours weekly:					54%	5
G. Percentage of two-year colleges requiring part-time faculty to hold office hours:					28%	5

Table TYF.3	Estimate	<i>SE</i>
Number no longer part of 2010-2011 faculty	459	81
Total full-time permanent faculty, fall 2010	9790	387

Table TYF.4	% of full-time permanent faculty	
Highest degree	2010	<i>SE</i>
Doctorate	14	2
Masters	83	2
Bachelors	3	1
Number of full-time permanent faculty	9790	387



Table TYF.5	Percentage having as highest degree			Total Percent in Field
	Doctorate	Masters	Bachelors	
Mathematics	8	60	1	68
<i>SE</i>	1	3	0	2
Statistics	0	2	0	3
<i>SE</i>	0	1	0	1
Mathematics Education	3	17	1	21
<i>SE</i>	1	2	1	2
Other fields	2	5	0	7
<i>SE</i>	1	1	0	1
Total Percentage by highest degree	14	83	3	
<i>SE</i>	2	2	1	

Table TYF.6	% of part-time faculty	
	2010	<i>SE</i>
Highest degree		
Doctorate	5	1
Masters	73	3
Bachelors	22	3
Number of part-time faculty	25775	1592

Table TYF.7	Percentage having as highest degree			Total Percent in Field
	Doctorate	Masters	Bachelors	
Mathematics	2	35	11	48
<i>SE</i>	0	3	2	4
Mathematics Education	1	20	5	26
<i>SE</i>	0	2	2	3
Statistics	0	2	0	2
<i>SE</i>	0	0	0	0
Other fields	1	17	6	24
<i>SE</i>	0	2	2	3
Total Percentage by highest degree	5	73	22	
<i>SE</i>	1	3	3	

<b>Table TYF.8</b>	2010	SE
Men	4866	251
	50%	2%
Women	4924	278
	50%	2%

<b>Table TYF.9</b>	% of Full-time permanent faculty	% of Part-time faculty
Men	50	51
SE	2	2
Women	50	49
SE	2	2
Total Number	9790	23453
SE	387	1568

<b>Table TYF.10</b>	2010	SE
Percentage of ethnic minorities among full-time permanent faculty	16%	2%
Number of full-time permanent ethnic minority faculty	1566	155
Number of full-time permanent faculty	9790	387

<b>Table TYF.11</b>	% of full-time permanent faculty	
Ethnic Group	2010	SE
American Indian/Eskimo/Aleut	0	0
Asian/Pacific Islander	6	1
Black (non-Hispanic)	6	1
Mexican American/Puerto Rican/ other Hispanic	4	1
White (non-Hispanic)	79	2
Status unknown	5	2

<b>Table TYF.12</b>			
Ethnic Group	Number of full-time permanent faculty	% of ethnic group among all full-time permanent faculty	% of women within ethnic group
American Indian, Alaskan Native	20	0	63
<i>SE</i>	12	0	45
Asian	605	6	48
<i>SE</i>	100	1	7
Native Hawaiian, Pacific Islander	42	0	49
<i>SE</i>	16	0	25
Black or African American (non-Hispanic)	544	6	37
<i>SE</i>	75	1	6
Mexican American, Puerto Rican or other Hispanic	356	4	34
<i>SE</i>	53	1	7
White (non-Hispanic)	7733	79	52
<i>SE</i>	408	2	2
Status not known or other	490	5	50
<i>SE</i>	209	2	12

<b>Table TYF.13</b>	Percentage among	
	All full-time permanent faculty	Full-time permanent faculty under age 40
Ethnic Minorities	16	18
<i>SE</i>	2	3
White (non-Hispanic)	79	74
<i>SE</i>	2	5
Unknown	5	8
<i>SE</i>	2	5

<b>Table TYF.14</b>	2010
Percentage of ethnic minorities among part-time faculty	17
<i>SE</i>	2

Ethnic Group	Number of part-time faculty	% of ethnic group among all part-time faculty	% of women within ethnic group
American Indian, Alaskan Native	44	0	6
SE	26	0	9
Asian	1341	6	49
SE	206	1	5
Native Hawaiian, Pacific Islander	59	0	34
SE	34	0	49
Black or African American (non-Hispanic)	1796	8	36
SE	230	1	3
Mexican American, Puerto Rican or other Hispanic	762	3	44
SE	151	1	7
White (non-Hispanic)	18105	77	51
SE	1477	3	2
Status not known or other	1346	6	46
SE	666	3	7

Age	% of full-time permanent faculty		Number of full-time permanent faculty	
	2010	SE	2010	SE
<30	8	2	832	158
30-34	9	1	893	117
35-39	12	1	1189	107
40-44	14	2	1416	142
45-49	15	1	1475	113
50-54	11	1	1085	115
55-59	13	1	1268	149
>59	17	2	1631	176

Table TYF.17	% of full-time permanent faculty		% of women in age group
	Women	Men	
<35	10	8	57
<i>SE</i>	1	1	4
35-44	13	13	53
<i>SE</i>	1	1	3
45-54	13	14	48
<i>SE</i>	1	1	3
>54	14	16	47
<i>SE</i>	1	2	4

Table TYF.18		
Percentage of new faculty from:	2010	<i>SE</i>
A. Graduate School	23	6
B. Teaching in a four-year college or university	3	2
C. Teaching in another two-year college	18	5
D. Teaching in a secondary school	25	9
E. Part-time or full-time temporary employment at the same college	23	5
F. Nonacademic employment	1	1
G. Unemployed	0	0
F. Unknown	6	3
Total Number Hired	777	103

Table TYF.19	% of New Hires	
	2010-2011	<i>SE</i>
Highest Degree		
Doctorate	11	3
Masters	82	4
Bachelors	2	1
Unknown	4	2

<b>Table TYF.20</b>				
Ethnic Group	% of new hires for 2010-2011	SE	% of women in ethnic group	SE
American Indian	0	0	100	-
Asian/Pacific Islander	9	3	70	25
Black (non-Hispanic)	5	2	27	29
Hispanic	4	2	36	14
White (non-Hispanic)	78	5	49	8
Other	1	1	0	-
Unknown	3	2	0	0
Percentage of women among all new hires	47	5		

<b>Table TYF.21</b>	% of two-year colleges in fall 2010	SE
Colleges that require teaching evaluations for all full-time faculty	96	3
Colleges that require teaching evaluations for all part-time faculty	88	5

<b>Table TYF.22</b>	Percentage of programs using evaluation method for			
	Part-time faculty	SE	Full-time faculty	SE
Method of evaluating teaching				
A. Observation of classes by other faculty	69	6	64	6
B. Observation of classes by division head (if different from chair) or other administrator	42	7	55	5
C. Evaluation forms completed by students	97	2	98	1
D. Evaluation of written course material such as lesson plans, syllabus, or exams	53	6	58	6
E. Self-evaluation such as teaching portfolios	19	4	52	6
F. Written Peer Evaluations	11	3	27	5
G. Other methods	2	1	8	3

<b>Table TYF.23</b>		
Faculty Development	Fall 2010	SE
Percentage of institutions requiring continuing education or professional development for full-time permanent faculty	67	4
How Faculty Meet Professional Development Requirements	% of permanent faculty in fall 2010	
A. Activities provided by employer	53	5
B. Activities provided by professional associations	34	3
C. Publishing books or research or expository papers	3	1
D. Continuing graduate education	4	1

<b>Table TYF.24</b>	% of program heads classifying problem as major	
	2010	SE
Problem		
A. Maintaining vitality of faculty	4	2
B. Dual-enrollment courses	11	4
C. Staffing statistics courses	2	1
D. Students don't understand demands of college work	64	4
E. Need to use part-time faculty for too many courses	35	4
F. Faculty salaries too low	21	3
G. Class sizes too large	3	1
H. Low student motivation	50	7
I. Too many students needing remediation	67	6
J. Lack of student progress from developmental to advanced courses	37	7
K. Low success rate in transfer-level courses	13	3
L. Too few students who intend to transfer actually do	11	2
M. Inadequate travel funds for faculty	23	5
N. Inadequate classroom facilities for use of technology	10	4
O. Inadequate computer facilities for part-time faculty use	6	2
P. Inadequate computer facilities for student services	5	2
Q. Commercial outsourcing of instruction	0	-
R. Heavy classroom duties prevent personal & teaching enrichment by faculty	11	3
S. Coordinating mathematics courses with high schools	14	3
T. Lack of curricular flexibility because of transfer rules	5	2
U. Use of distance education	6	2

Problem	Percentage of program heads classifying problems as					
	minor or no problem	SE	somewhat of a problem	SE	major problem	SE
A. Maintaining vitality of faculty	75	6	21	6	4	2
B. Dual-enrollment courses	61	5	16	5	11	4
C. Staffing statistics courses	71	5	13	3	2	1
D. Students don't understand demands of college work	7	2	28	4	64	4
E. Need to use part-time faculty for too many courses	35	5	28	5	35	4
F. Faculty salaries too low	49	5	30	5	21	3
G. Class sizes too large	80	3	17	3	3	1
H. Low student motivation	9	3	41	6	50	7
I. Too many students needing remediation	10	4	23	5	67	6
J. Lack of student progress from developmental to advanced courses	32	6	31	6	37	7
K. Low success rate in transfer-level courses	64	5	23	4	13	3
L. Too few students who intend to transfer actually do	66	4	23	3	11	2
M. Inadequate travel funds for faculty	53	6	23	5	23	5
N. Inadequate classroom facilities for use of technology	77	5	13	3	10	4
O. Inadequate computer facilities for part-time faculty use	79	4	15	3	6	2
P. Inadequate computer facilities for student services	83	3	12	3	5	2
Q. Commercial outsourcing of instruction	66	5	1	1	0	-
R. Heavy classroom duties prevent personal & teaching enrichment by faculty	58	5	31	5	11	3
S. Coordinating mathematics courses with high schools	47	6	39	7	14	3
T. Lack of curricular flexibility because of transfer rules	84	5	12	4	5	2
U. Use of distance education	68	7	15	4	6	2

Administrative structure	% of Mathematics Programs	
	2010	SE
Mathematics Department	46	5
Mathematics and science department or division	14	4
Other department or division structure	31	6
None of the above or unknown	9	4