

Appendix I

Enrollments in Departmental Courses in Four-Year Colleges and Universities: 1995, 2000, 2005, 2010

TABLE A.1 Enrollment (in 1000s) in mathematics courses in fall 1995, 2000, 2005, and 2010 [with SE for 2005 and 2010 totals].
Round off may cause marginal totals to appear incorrect.

Courses	Fall 2010 Enrollment (in 1000s)										
	Mathematics Departments										
					Total (Including Distance Courses)			Total (Non-Distance Courses)			
	1995	2000	2005	2010 Total	Univ (PhD)	Univ (MA)	Coll (BA)	Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal
Precollege Level											
1 Arithmetic	7	10	14 [4.7]								
2 Gen Math (Basic Skills)	13	13	16 [4.6]								
3 High School Elem Algebra	56	70	59 [9.8]								
4 High School Intermed Alg	131	117	105 [11.6]								
5 Other Precollege Level	15	8	7 [2.4]								
Subtotal Precollege Level	222	218	201 [18.8]	209 [22.0]	57 [8.7]	64 [13.6]	88 [15]	56 [8.7]	61 [12.7]	84 [15.1]	201 [21.5]
Introductory (Including Pre-Calc) Level											
6 College Algebra	195	211	201 [17.2]	251 [15.9]	91	57	103	88	55	99	243 [15.3]
7 Trigonometry	42	33	30 [3.5]	42 [5.2]	17	9	16	16	9	16	41 [5.0]
8 Coll Alg & Trig Combined	45	37	34 [6.8]	35 [7.6]	16	8	12	16	7	12	35 [7.4]
9 Elementary Functions ¹	86	105	93 [8.9]	114 [8.2]	46	29	39	46	28	39	112 [8.1]
10 Intro Math Modeling		13	8 [3.1]	9 [2.2]	4	1	3	4	1	3	9 [2.1]
11 Math for Liberal Arts	74	86	123 [11.7]	147 [14.4]	44	39	64	43	38	60	141 [13.8]
12 Finite Math	59	82	94 [16.1]	62 [6.7]	28	8	26	27	8	25	61 [6.6]
13 Business Math	40	53	38 [5.8]	47 [7.7]	22	13	12	22	12	11	46 [7.5]
14 Math Elem Sch Tchrs	59	68	72 [6.5]	85 [7.2]	16	29	40	15	29	36	80 [7.3]
15 Other Intro Level Math	14	36	12 [2.5]	69 [10.5]	15	19	35	15	18	33	66 [9.9]
Subtotal Introductory Level	614	723	706 [29.0]	863 [35.0]	299 [17.0]	214 [20.7]	350 [22.4]	292 [17.1]	206 [20.0]	336 [21.3]	834 [33.8]

¹ Elementary Functions, Precalculus, and Analytic Geometry.

TABLE A.1, Cont. Fall term mathematics course enrollment (in 1000s) [with SE for 2005 and 2010 totals].

					Fall 2010 Enrollment (in 1000s)						
					Mathematics Departments						
					Total (Including Distance Courses)			Total (Non-Distance Courses)			
Courses	1995	2000	2005	2010	Univ (PhD)	Univ (MA)	Coll (BA)	Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal
Calculus Level											
16 Mainstream Calc I	192	192	201 [9.6]	235 [14.2]	111	42	82	110	41	82	234 [14.1]
17 Mainstream Calc II	83	87	85 [4.9]	129 [13.7]	61	24	44	61	23	44	128 [13.7]
18 Mainstream Calc III, IV	62	73	74 [4.0]	104 [6.2]	59	25	20	58	25	20	103 [6.2]
19 Non-Mainstream Calc I	98	105	108 [8.6]	99 [6.4]	60	22	17	60	22	17	99 [6.3]
20 Non-Mainstream Calc II	14	10	11 [2.0]								
20.5 Non-Mainstream Calc II, III, etc.				22 [3.3]	12	5	5	12	5	5	22 [3.3]
21a Diff Eq & Lin Alg (comb)	na	na	9 [2.2]	15 [2.6]	11	1	3	11	1	3	15 [2.6]
21b Differential Equations	33	34	36 [2.8]	56 [5.3]	33	10	13	33	9	13	56 [5.3]
22 Discrete Math	16	20	17 [1.9]	25 [3.7]	7	6	12	7	6	12	25 [3.7]
23 Linear/Matrix Algebra	33	41	37 [2.6]	46 [4.0]	23	9	14	23	9	14	45 [4.0]
24 Other Calculus Level	9	7	9 [2.7]	17 [3.1]	6	1	10	6	1	10	17 [3.1]
Subtotal Calculus Level	539	570	586 [23.6]	748 [35.2]	383 [13.2]	145 [19.1]	221 [26.5]	380 [13.0]	143 [18.5]	220 [26.5]	743 [34.8]

TABLE A.1, Cont. Fall term mathematics course enrollment (in 1000s) [with SE for 2005 and 2010 totals].

Courses	1995	2000	2005	2010	Fall 2010 Enrollment (in 1000s)		
					Math Departments		
					Univ (Phd)	Univ (MA)	Coll (BA)
Advanced Level							
25 Intro to Proofs	7	10	12 [1.3]	15 [1.2]	7	3	5
26-1 Modern Algebra I				13 [1]	4	3	6
26-2 Modern Algebra II				1 [0.1]	1	0	0
26 Modern Algebra I & II	13	11	11 [1.1]	14 -	5	3	6
27 Number Theory	2	4	3 [0.5]	4 [0.5]	1	1	2
28 Combinatorics	2	3	3 [0.5]	3 [0.5]	2	1	1
29 Actuarial Mathematics	1	1	2 [0.5]	2 [0.3]	2	0	0
30 Logic/Foundations	3	2	1 [0.4]	1 [0.2]	1	0	0
31 Discrete Structures	3	5	3 [0.7]	4 [0.9]	1	1	2
32 History of Mathematics	3	2	6 [1.0]	7 [1.4]	1	2	4
33 Geometry	6	6	8 [1.0]	10 [1]	3	2	5
34 Math for HS Teachers	5	7	8 [2.2]	8 [1]	2	3	2
35-1 Advanced Calculus I, Real Analysis I				16 [1.6]	7	3	6
35-2 Advanced Calculus II, Real Analysis II				2 [0.8]	1	0	1
35 Advanced Calculus I & II, Real Analysis I & II	11	10	15 [1.2]	18 -	8	3	7
36 Advanced Math for Engr and Physical Sci.	8	5	6 [1.1]	11 [5.3]	5	6	0
37 Advanced Linear Algebra	4	3	4 [0.7]	4 [0.5]	3	1	0
38 Vector Analysis	3	2	2 [0.8]	3 [0.5]	2	0	0
39 Advanced Differential Equations	3	2	1 [0.2]	3 [0.6]	2	1	0
40 Partial Differential Equations	1	2	3 [0.5]	4 [0.5]	2	1	0
41 Numerical Analysis I & II	6	5	5 [0.5]	7 [1.1]	4	1	2

Note: 0 means less than 500 enrollments.

TABLE A.1, Cont. Fall term mathematics course enrollment (in 1000s) [with SE for 2005 and 2010 totals].

Courses	1995	2000	2005	2010	Fall 2010 Enrollment (in 1000s)		
					Mathematics Departments		
					Univ (Phd)	Univ (MA)	Coll (BA)
(Advanced Level Contd.)							
42 Applied Math (Modeling)	4	2	2 [0.3]	3 [0.5]	1	1	1
43 Complex Variables	2	3	3 [0.5]	3 [0.3]	1	1	1
44 Topology	1	2	1 [0.3]	2 [0.2]	1	0	0
45 Math of Finance	na	na	1 [0.4]	2 [0.4]	1	0	0
46 Codes & Cryptology	na	na	0 [0.2]	0 [0.1]	0	0	0
47 Biomathematics	na	na	1 [0.2]	1 [0.2]	1	0	0
48 Senior Sem / Ind Study in Math	3	3	3 [0.5]	5 [0.5]	1	1	3
49 Other Adv Level Courses	5	10	5 [0.7]	14 [3.8]	5	6	2
Operations Research							
58 Intro Oper Res	1	1	1 [0.2]				
59 Int to Linear Programming	1	1	1 [0.4]				
60 Other Oper Research	0	0	0 [0.2]				
61 Operations Research (all courses)				2 [0.4]	1	1	1
Subtotal Advanced Level	96	102	112 [6.2]	150 [6.6]	64	39	47
Mathematics Total	1471	1614	1606 [45.3]	1971 [72.5]	803	462	706

Note: 0 means less than 500 enrollments.

TABLE A.2. Enrollment (in 1000s) in statistics courses in fall 1995, 2000, 2005, and 2010 in mathematics and statistics departments [with SE for totals]. Roundoff may cause marginal totals to appear incorrect.

Statistics Courses	1995	2000	2005	Total 2010	Fall 2010 Enrollment (in 1000s)															
					Mathematics Departments					Statistics Departments										
					Total (Including Dist. Courses)					Total (Non-Dist. Courses)					Total (Inc. Dist. Courses)					Total (Non-Dist. Courses)
Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal	Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal	Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal	Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal	Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal	
Lower Level Statistics																				
Elem Statistics (no Calc prereq)	132	155	167 [14.3]	243 -	39	27	117	183 [15.6]	38	27	110	174 [15.6]	41	20	0	60 [4.9]	40	17	0	56 [3.9]
Introductory Statistics (Calc prereq, for non-majors)				42 -	8	5	13	26 [4.8]	8	5	11	23 -	11	5	0	16 [1.6]	11	5	0	16 [1.6]
Prob. & Statistics (no Calc prereq)	26	17	21 [5.5]	19 -	4	6	9	19 [3.8]	4	5	9	18 [3.7]								
Statistics for pre-service elementary or middle grade teachers				66 -									0	66	0	66 [0.1]	0	66	0	66 [0.1]
Statistics for pre-service high school teachers				122 -									29	93	0	122 [0.1]	29	93	0	122 [0.1]
Other Elem. Level Statistics	6	17	13 [2.5]	8 -	1	2	1	4 [1.1]	1	2	1	3 [0.9]	3	2	0	4 [1.4]	3	2	0	4 [1.4]
Subtotal Elem. Level Statistics	164	190	202 [14.9]	312 -	51	40	140	231 [15.8]	50	39	130	218 [15.9]	54	27	0	81 [5.5]	53	24	0	77 [4.7]

TABLE A.2. Enrollment (in 1000s) in statistics courses in fall 1995, 2000, 2005, and 2010 in mathematics and statistics departments [with SE for totals]. Roundoff may cause marginal totals to appear incorrect.

Statistics Courses	1995	2000	2005	Total 2010	Fall 2010 Enrollment (in 1000s)							
					Mathematics Departments				Statistics Departments			
					Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal	Univ (PhD)	Univ (MA)	Subtotal	
Upper Level Statistics												
Math. Statistics (Calc prereq)	16	18	12 [2.1]	8 -	2	1	2	5 [0.9]	2	0	3 [0.4]	
Probability (Calc prereq)	10	17	10 [1.0]	12 -	5	1	3	9 [1.1]	2	1	3 [0.3]	
Prob & Statistics Combined			16 [2.0]	12 -	5	1	3	9 [1.3]	2	1	3 [0.5]	
Stochastic Processes	0	1	1 [0.2]	1 -	0	0	0	0 [0.1]	0	0	0 [0.1]	
Applied Statistical Analysis	9	6	7 [1.2]	5 -	1	0	1	2 [0.4]	2	1	3 [0.4]	
Design & Anal of Experiments	1	2	1 [0.2]	2 -	0	0	0	1 [0.2]	1	0	1 [0.2]	
Regression & Correlation	1	2	3 [0.5]	4 -	0	1	1	2 [0.5]	2	0	2 [0.2]	
Biostatistics		2	2 [0.6]	1 -	0	0	0	0 [0.2]	1	0	1 [0.2]	
Nonparametric Statistics		1	0 [0.1]	0 -	0	0	0	0 [0.1]	0	0	0 [0.0]	

Note: 0 means less than 500 enrollments.

TABLE A.2, Cont. Fall term statistics enrollment (in 1000s) [with SE for 2005 and 2010 totals].

Statistics Courses					Fall 2010 Enrollment (in 1000s)								
	1995	2000	2005	Total 2010	Mathematics Departments				Statistics Departments				
					Univ (PhD)	Univ (MA)	Coll (BA)	Subtotal	Univ (PhD)	Univ (MA)	Subtotal		
(Upper Level Statistics, Continued)													
12 Categorical Data Analysis	na	0	0 [0.1]	0 -	0	0	0	0 [0.0]	0	0	0	0 [0.1]	
13 Survey Design & Analysis	na	0	1 [0.2]	0 -	0	0	0	0 [0.0]	0	0	0	0 [0.1]	
Statistical Computing				0 -					0	0	0	0 [0.1]	
Statistical Software				1 -					0	0	1	0 [0.1]	
14 Stat Software & Computing	na	1	1 [0.2]	1 -	0	0	0	1 [0.2]					
15 Data Management	na	0	0 [0.0]	0 -	0	0	0	0 [0.0]	0	0	0	0 [0.0]	
16 Senior Sem / Indep Stdy in Statistics	0	0	0 [0.1]	1 -	0	0	0	0 [0.2]	0	0	0	0 [0.0]	
Bayesian Statistics				0 -					0	0	0	0 [0.1]	
Statistical Consulting				0 -					0	0	0	0 [0.1]	
17 Other Upper Level Statistics	7	5	3 [0.5]	4 -	1	0	0	2 [0.4]	1	0	2	0 [0.3]	
All departmental courses other than Prob. or Stat.	7	5	3 [0.5]	8 -					0	8	8	4 [4.9]	
Subtotal Upper Level Statistics	44	45	57 [3.7]	60 -	15	6	11	32 [2.5]	16	13	29 [5.0]		
Statistics Total	208	235	259 [15.4]	372 -	66	45	151	262 [16.3]	70	40	110 [6.7]		

Note: 0 means less than 500 enrollments.

TABLE A.3. Enrollment (in 1000s) in computer science courses in fall 1995, 2000, 2005, and 2010 [with SE for 2005 and 2010 totals]. Roundoff may cause marginal totals to appear incorrect.

CS Courses	Fall 2010 Enrollment (in 1000s)				Mathematics Departments											
	1995	2000	2005	Total 2010	Total (Including Distance Courses)					Total (Non-Distance Courses)					Subtotal	
					Univ (PhD)	Univ (MA)	Coll (BA)	Univ (PhD)	Univ (MA)	Coll (BA)	Univ (PhD)	Univ (MA)	Coll (BA)	Univ (PhD)	Univ (MA)	Coll (BA)
General Education CS Courses																
Computers & Society, Issues in Computer Science	14	4	5 [1.8]	10.1 [5.3]	0.0	0.0	10.1	0.0	0.0	9.8	0.0	0.0	0.0	0.0	9.8	5.2
Intro to Software Pkgs	18	25	12 [4.1]	11.1 [3.6]	0.2	0.0	10.9	0.2	0.0	7.8	0.0	0.0	0.2	0.0	7.8	2.3
Other CS general ed courses	6	6	11 [4.8]	9.4 [3.6]	0.3	1.1	8.0	0.3	1.1	8.0	0.3	1.1	0.3	1.1	8.0	3.6
Subtotal general education courses	38	35	28 [6.2]	30.6 [7.3]	0.5 [0.2]	1.1 [0.9]	28.9 [7.3]	0.5 [0.2]	1.1 [0.9]	25.6 [6.6]	0.5 [0.2]	1.1 [0.9]	0.5 [0.2]	1.1 [0.9]	25.6 [6.6]	27.2 [6.7]
Lower-Level CS Courses																
Computer Programming I *	17	23	10 [1.8]	15.2 [1.9]	1.0	1.4	12.8	1.0	1.4	12.4	1.0	1.4	1.0	1.4	12.4	1.9
Computer Programming II *	5	6	2 [0.6]	4.2 [1.0]	1.0	0.3	3.0	1.0	0.3	2.9	1.0	0.3	1.0	0.3	2.9	1.0
Discrete Structures for CS	2	4	1 [0.5]	1.5 [0.5]	0.1	0.3	1.1	0.1	0.3	1.1	0.1	0.3	0.1	0.3	1.1	0.5
Other Lower-level CS Courses	13	22	4 [1.1]	4.4 [1.3]	0.3	0.1	4.0	0.3	0.1	3.4	0.3	0.1	0.3	0.1	3.4	1.1
Subtotal Lower-Level CS	37	55	18 [2.9]	25.4 [3.2]	2.5 [1.3]	2.1 [0.6]	20.9 [2.9]	2.5 [1.3]	2.1 [0.6]	19.8 [2.9]	2.5 [1.3]	2.1 [0.6]	2.5 [1.3]	2.1 [0.6]	19.8 [2.9]	24.3 [3.2]
All intermediate-level courses	13	18	8 [1.4]	11.7 [1.8]	0.9 [0.5]	1.4 [0.5]	9.4 [1.6]	0.9 [0.5]	1.4 [0.5]	9.0 [1.6]	0.9 [0.5]	1.4 [0.5]	0.9 [0.5]	1.4 [0.5]	9.0 [1.6]	1.8
All upper-level CS courses	12	17	5 [1.3]	9.8 [2.4]	0.7 [0.4]	1.1 [0.5]	7.9 [2.3]	0.7 [0.4]	1.1 [0.5]	7.9 [2.3]	0.7 [0.4]	1.1 [0.5]	0.7 [0.4]	1.1 [0.5]	7.9 [2.3]	2.4
Total Computer Science	100	123	59 [9.9]	77.4 [11.2]	4.6 [2.1]	5.7 [1.8]	67.1 [10.9]	4.6 [2.1]	5.7 [1.8]	62.3 [10.1]	4.6 [2.1]	5.7 [1.8]	4.6 [2.1]	5.7 [1.8]	62.3 [10.1]	72.6 [10.5]

* For 1995 and 2000, this course category was described in the 1991 ACM/IEEE CS curriculum report. For 2005, these courses were described in the 2001 ACM/IEEE report "Model Curricula for Computing."