

APPENDIX I

ENROLLMENT NUMBERS IN ALL DEPARTMENTAL COURSES IN FOUR-YEAR COLLEGES SINCE 1970

Enrollment in Mathematics Courses (hundreds)

COURSES	1970	1975	1980	1985	1990	1990 Enrollment												
						Math Dept.				Stat. Dept.				Comp. Sc. Dept.				
						Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Math Dept.	Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Stat Dept.	Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Com.Sc. Dept.	
REMEDIAL																		
1. Arithmetic	40	60	140	150	62	16	30	15	62									
2. Gen. Math (Basic Skills)	190	260	490	310	167	28	64	76	167									
3. High School Elem. Alg.	250	260	740	750	684	138	238	307	684									
4. High School Int. Alg.	500	810	1040	1300	1691	500	594	598	1691									
Subtotal Remedial	980	1390	2410	2510	2604	682	926	996	2604									
PRECALCULUS																		
5. Coll. Alg.	920	800	1600	1500	2015	644	643	729	2015									
6. Trigonometry	310	310	380	370	369	164	151	54	369									
7. Comb. Coll. Alg. & Trig.	1130	790	610	780	353	176	95	82	353									
8. Elem. Function Precalculus	380	290	720	740	720	327	161	232	720									
9. Math for Lib. Arts	740	1030	630	590	534	163	193	178	534									
10. Finite Math	470	740	950	880	803	306	257	235	798	3			3	2				2
11. Bus. Math	180	470	480	370	370	120	220	30	370									
12. Math for Ele. Sch. Teachers	890	680	440	540	623	115	250	258	623									
13. Anal. Geo.	100	40	80	30	58	32	22	4	58									
14. Other Precalc	300	42	140	130	83	8	27	48	83									
Subtotal Precalculus	5420	5192	6030	5930	5928	2055	2019	1850	5923	3			3	2				2

NOTE: Read numbers in braces from top to bottom. For example, on p. 126 $\left\{ \begin{matrix} 2 \\ 0 \end{matrix} \right\}$ is 20 (in hundreds). The numbers represent total enrollment for all courses included within the upper and lower horizontal lines.

Enrollment in Mathematics Courses (hundreds)

COURSES	1990 Enrollment																
	1970	1975	1980	1985	1990	Math Dept.				Stat. Dept.				Comp. Sc. Dept.			
						Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Math Dept.	Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Stat Dept.	Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Com.Sc. Dept.
62. Int. to Oper. Research		N/A			45	15	4	19	38	1			1		1	5	6
63. Int. to Lin. Programming		N/A	$\left\{ \begin{array}{l} 2 \\ 0 \end{array} \right.$	$\left\{ \begin{array}{l} 6 \\ 0 \end{array} \right.$	28	18	4	6	28								
64. Other Oper. Research		N/A			10	0	5	10	5								
Subtotal Advanced Math	1350	760	910	1390	1218	583	289	326	1198	13	0	0	13	1	1	5	7
Mathematics Total	11880	11832	15250	16200	16226	6690	4450	5054	16193	21	0	0	21	5	1	6	12

Enrollment in Statistics Courses (hundreds)

						1990 Enrollment											
						Math Dept.				Stat. Dept.				Comp. Sc. Dept.			
COURSES	1970	1975	1980	1985	1990	Univ.	Univ.	Coll.	Sub	Univ.	Univ.	Coll.	Sub	Univ.	Univ.	Coll.	Sub
						(PhD)	(MA)	(BA)	total	(PhD)	(MA)	(BA)	total	(PhD)	(MA)	(BA)	total
									Math				Stat				Comp.Sc.
									Dept.				Dept.				Dept.
Statistics Courses																	
ELEM. LEVEL																	
51. Ele. Stat. (no Calc. Prereq.)	360	740	870	1150	867	95	190	326	611	201	23	1	225	0	0	31	31
52. Prob. & Stat. (no Calc. Prereq.)	$\left\{ \begin{matrix} 2 \\ 1 \\ 0 \end{matrix} \right.$	$\left\{ \begin{matrix} 2 \\ 5 \\ 0 \end{matrix} \right.$	$\left\{ \begin{matrix} 1 \\ 7 \\ 0 \end{matrix} \right.$	$\left\{ \begin{matrix} 2 \\ 9 \\ 0 \end{matrix} \right.$	307	42	76	128	246	43	18	0	61	0	0	0	0
53. Probability (no Calc. Req.)					13	1	2	6	9	4	0	0	4	0	0	0	0
Subtotal Elem. Level	570	990	1040	1440	1187	138	268	460	866	248	41	1	290	0	0	31	31
UPPER LEVEL																	
54. Math. Stat. (Calculus)	160	140	160	240	169	45	50	38	133	34	0	1	35	1	0	0	1
55. Probability Calculus	110	80	130	150	135	60	27	25	112	21	2	0	23	0	0	0	0
56. Stochastic Processes	0	N/A	N/A	0	7	6	0	0	6	1	0	0	1	0	0	0	0
57. Appl. Stat. Analysis	70	100	80	110	114	14	18	13	45	48	1	1	50	0	0	19	19
58. Design & Anal. of Experiments	10	20	20	10	13	4	5	0	9	3	0	1	4	0	0	0	0
59. Regression (and Correlation)	N/A	N/A	10	10	28	6	7	1	14	12	0	1	13	0	0	1	1
60. Sen. Seminar/ Ind. Studies in Stat.	N/A	N/A	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0
61. Other Statistics	10	80	30	120	84	41	16	4	61	19	1	0	20	0	0	3	3
Subtotal Upper Level	360	420	430	640	552	176	123	81	380	140	4	4	148	1	0	23	24
Statistics Total	920	1410	1470	2080	1739	314	391	541	1246	388	45	5	438	1	0	54	55

Enrollment in Computer Science Courses (hundreds)

						1990 Enrollment												
						Math Dept.				Stat. Dept.				Comp. Sc. Dept.				
COURSES	1970	1975	1980	1985	1990	Univ.	Univ.	Coll.	Subtotal	Univ.	Univ.	Coll.	Subtotal	Univ.	Univ.	Coll.	Subtotal	
						(PhD)	(MA)	(BA)	Math Dept.	(PhD)	(MA)	(BA)	Stat Dept.	(PhD)	(MA)	(BA)	Com.Sc. Dept.	
Computer Science Courses																		
LOWER LEVEL																		
65. Computers & Society	N/A	N/A	N/A	N/A	690	18	74	244	336					67	180	106	353	
66. Intro. to Software Packages	N/A	N/A	N/A	N/A	729	15	91	175	281					281	244	100	448	
67. Issues in Comp. Sci.	N/A	N/A	N/A	N/A	86	0	0	9	9					55	3	19	77	
68. Com. Prog. I (CS1 '78 or CS1 '84)	380	500	1540	1290	797	30	95	208	333					240	141	83	464	
69. Com. Prog. II (CS2 '78)	N/A	130	320	280	230	5	24	46	75					79	46	30	155	
70. Adv. Prog. & Data Str. (CS2 185)	N/A	N/A	N/A	150	163	8	17	25	50					62	28	23	113	
71. Database Man. Systems	N/A	N/A	N/A	70	82	0	4	25	29					6	15	32	53	
72. Discrete Mathematics	N/A	N/A	N/A	120	89	4	4	25	33					37	5	14	56	
73. Other lower level service courses	N/A	N/A	N/A	900	523	9	108	77	194					210	86	33	329	
Subtotal Lower Level	380	630	1860	3500	3388	89	417	834	1340					1000	604	444	2048	
MIDDLE LEVEL																		
74. Intro. to Comp. Systems (CS3)	260	130	160	180	74	3	6	9	18					18	20	18	56	
75. Assembly Lang. Prog.	N/A	N/A	N/A	240	157	6	19	34	59					45	27	26	98	
76. Intro. to Comp. Organization	30	30	120	140	90	4	11	8	23					34	20	13	67	
77. Intro. to File Processing (CS5)	N/A	30	70	100	55	0	4	18	22					13	15	5	33	
Subtotal Middle Level	290	190	350	660	376	13	40	69	122					110	82	62	254	
UPPER LEVEL																		
78. Oper. Sys. & Comp. Arch.	N/A	N/A	70	40	51	2	1	9	12					17	6	16	39	
79. Operating Systems	N/A	N/A	N/A	110	97	4	10	10	24					37	18	18	73	
80. Computer Architecture	N/A	N/A	N/A	60	60	3	7	9	19					31	5	5	41	

Enrollment in Computer Science Courses (hundreds)

COURSES	1990 Enrollment																
	1970	1975	1980	1985	1990	Math Dept.				Stat. Dept.				Comp. Sc. Dept.			
						Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Math Dept.	Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Stat Dept.	Univ. (PhD)	Univ. (MA)	Coll. (BA)	Subtotal Com.Sc. Dept.
81. Compiler Design	10	10	N/A	40	41	4	3	4	11					17	10	3	30
82. Computer Graphics	N/A	N/A	N/A	N/A	50	3	6	5	14					26	8	2	36
83. Data Structures (CS7)	20	30	120	240	95	5	7	22	34					40	17	4	61
84. Survey of Prog. Languages	50	70	60	90	48	1	5	7	13					12	10	13	35
85. Computers & Society (CS9)	N/A	N/A	160	10	22	0	1	14	15					0	4	3	7
86. Oper. Sys. & Comp. Arch. II (CS10)	N/A	N/A	20	20	11	0	1	3	4					4	2	1	7
87. Principles of Data. Design	N/A	10	40	70	66	2	9	11	22					23	10	11	44
88. Artificial Intelligence (CS12)	N/A	10	10	50	53	4	7	4	15					28	7	3	38
89. Other topics in A.I. (e.g., vis. neural nets)	N/A	N/A	N/A	N/A	7	0	1	1	2					2	2	1	5
90. Expert Systems	N/A	N/A	N/A	N/A	7	0	1	1	2					2	2	1	5
91. Discrete Structures	10	30	90	40	24	3	2	3	8					9	1	6	16
92. Algorithms (CS13)	10	10	20	50	42	3	4	7	14					23	3	2	28
93. Software Design & Dev. (CS14)	N/A	N/A	20	80	54	0	4	5	9					29	11	5	45
94. Principles of Prog. Languages	20	20	10	60	71	2	6	17	25					30	7	9	46
95. Other topics in Prog. Lang. (e.g., vis. lang.)	N/A	N/A	N/A	N/A	11	0	2	7	9					2	0	0	2
96. Auto. Comp. & Formal Lang. (CS16)	0	10	20	40	39	3	4	0	7					19	8	5	32
97. Automata Theory	N/A	N/A	N/A	20	11	0	0	1	1					8	1	1	10

Enrollment in Computer Science Courses (hundreds)

						1990 Enrollment											
						Math Dept.				Stat. Dept.				Comp. Sc. Dept.			
COURSES	1970	1975	1980	1985	1990	Univ.	Univ.	Coll.	Subtotal	Univ.	Univ.	Coll.	Subtotal	Univ.	Univ.	Coll.	Subtotal
						(PhD)	(MA)	(BA)	Math Dept.	(PhD)	(MA)	(BA)	Stat Dept.	(PhD)	(MA)	(BA)	Com.Sc. Dept.
98. Numerical Math. Anal. (CS17)	80	10	50	40	31	4	4	9	17					11	2	1	14
99. Numerical Methods	30	30	N/A	20	16	0	1	0	1					9	5	1	15
100. Num. Math. Linear Alg. (CS18)	N/A	N/A	10	20	9	3	1	4	8					1	0	0	1
101. Computer Networks	N/A	N/A	N/A	30	29	0	2	0	2					14	9	4	27
102. Modeling & Simulation	N/A	N/A	N/A	10	11	4	2	0	6					2	1	2	5
103. Parallel Arch. or Algorithms	N/A	N/A	N/A	6	3	0	0	0	0					1	1	1	3
104. Other topics in graphics (e.g., geo.met.)	N/A	N/A	N/A	0	0	0	0	0	0					0	0	0	0
105. Semantics & Verification	0	0	0	0	0	0	0	0	0					0	0	0	0
106. Complexity	N/A	N/A	N/A	3	0	0	0	0	0					1	0	2	3
107. Computational Linguistics	N/A	N/A	N/A	0	1	0	0	0	0					0	0	1	1
108. Senior Sem./ Ind. Study in CS	N/A	40	20	40	30	1	3	3	7					8	6	9	23
109. Other Computer Science	160	250	280	180	156	11	27	7	45					52	29	30	111
Subtotal Upper Level	390	530	1000	1420	1155	62	122	162	346					464	186	159	809
Total Computer Science	1060	1350	3210	5580	4919	164	579	1065	1808					1574	872	665	3111