SURVEY OF PROGRAMS IN MATHEMATICS
IN
TWO-YEAR COLLEGES

1975-76

General Instructions

This questionnaire should be completed by the person who is directly in charge of the mathematics program at your institution.

You are asked to report on all the mathematics courses and faculty in your institution. For some colleges this may involve courses in statistics, applied mathematics, and computers that, althought mathematical in nature, are taught outside a mathematics department. Please include data on part-time and evening students and faculty as well as data on occupational and terminal programs. Include non-credit and remedial courses. Do not, however, include data concerning campuses jurisdictionally separate from yours, if such exist.

Please return completed questionnaire by 1 March 1976 to:

Conference Board of the Mathematical Sciences
2100 Pennsylvania Avenue, N.W., Suite 832
Washington, D. C. 20037

* * * * * * * *

I. A. Name of institution _____

If this two-year institution is part of a larger organization, identify this relationship: _____

B. Year institution was established _____

C. Plan under which your institution operates:

1. _____ semester
2. _____ quarter
3. _____ trimester
4. _____ four-one-four
5. _____ other (specify): _____

D. How is the mathematics program administered at your institution?

_____ Mathematics department
_____ Mathematics and science department or division
_____ No departmental structure
_____ Other (specify_: _____

II. Institutional enrollment (approximate):

	College-Transfer Program		Occupational/Training	
	Full-time Students	Part-time Students	Full-time Students	Part-time Students
Freshmen				
Sophomores				
Unclassified or other				
Total				

III. Student training and ability

A. We are trying to find out changes in mathematical ability of undergraduates in various categories of institutions. Do you feel that such changes have occurred in your students? _____ Yes _____ No

B. If "Yes", has the change been upwards or downwards?

	training	ability
up		
down		

IV. Courses in the Mathematical Sciences:

Instructions for preparing table on pages 3-4:

a. The courses in column (1) in the following table are listed with typical course titles (which may not necessarily coincide with the titles you use). They are listed in approximate "catalogue order", beginning with remedial and freshman courses. Additional blank spaces are provided to permit you to write in names of courses which do not fit reasonably under some listed title.

For the purpose of this survey, consider as a single course, instruction in a particular area of mathematics which you offer as a sequence of two or more parts (e.g., calculus).

b. For each course in column (1) that is offered, write in column (2) the title(s) of the text(s) used and the name(s) of its author(s). In column (3) write the total number of students who enrolled in (any part of) the course in the fall term of 1975. For a course not offered in Fall 1975 but offered sometime, write "0".

c. In column (4) give the total number of sections in the course.

IV. Courses in Mathematics

Name of Course (or equivalent) (1)	Title and Author(s) of Text (2)	Total No. of Students Enrolled Fall 1975 (3)	Total No. of Sections (4)
1. Arithmetic			
2. High School Geometry			
3. Elementary Algebra (H.S.)			
4. Intermediate Algebra (H.S.)			
5. College Algebra			
6. Trigonometry			
7. College Algebra and Trigonometry, combined			
8. Elem. Functions			
9. Math. for Liberal Arts			
10. General Mathematics (basic skills, operations)			
11. Finite Mathematics			
12. Mathematics of Finance			
13. Business Mathematics			
14. Math. for Elementary School Teachers			
15. Technical Mathematics			
16. Technical Mathematics (calculus level)			

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IV. Courses in Mathematics

Name of Course (or equivalent) (1)	Title and Author(s) of Text (2)	Total No. of Students Enrolled Fall 1975 (3)	Total No. of Sections (4)
17. Analytic Geometry			
18. Analytic Geometry and Calculus			
19. Calculus (math.,phys. & eng. sciences)			
20. Calculus (bio., soc. & mgt. sciences)			
21. Differential Equations			
22. Linear Algebra			
23. Diff. Equations & Linear Algebra			
24. Elementary Statistics			
25. Probability (and statistics)			
26. Programming of Digital Computers			
27. Other Computer Science Course			
28. Use of Hand Calculators			
29. Slide Rule			
30.			
31.			
32.			

V. To what extent are courses in mathematics taught in division or departments of your institution other than that division or department having primary responsibility for mathematics? If your institution does not have a departmental or divisional structure, consider the group of all mathematics professors to be the "mathematics department" for the purpose of this question. Enter in the relevant boxes an estimate of the total course enrollments for the year.

	Enrollment in courses given by division specializing in:				
Courses	Natural Sciences	Occupational Programs	Business	Social Sciences	Other (specify)
1. Arithmetic					
2. Business Mathematics					
3. Statistics					
4. Probability					
5. Pre-calculus College Math.					
6. Calculus or Diff. Equations					
7. Computer Science & Programming					
8. Other: specify					

VI. Do you offer specific certificate programs or associate degrees in mathematical subjects:

	Certificate Program	Associate Degree Program	Number of Awards 1975
1. Computer programming			
2. Data Processing			
3. Statistical assistant			
4. Other mathematical specialty: specify: _____			

VII. Does your institution require an admission examination _____ Yes _____ No

If applicable, check type of test(s) required, or optionally required:

(1) _____ College Entrance Examination Board Aptitude Examination
(2) _____ College Entrance Examination Board Achievement Examination
(3) _____ American College Testing examination
(4) _____ State examination (e.g., New York State Regents examination)
(5) _____ Other: specify

VIII. Does your department or college use or administer a placement examination in mathematics? _____ Yes _____ No

If Yes, check appropriate items:

A. Placement examination is taken by:
1. _____ All entering freshmen
2. _____ Students taking mathematics in college for the first time
3. _____ Students in special curricula only (e.g., engineering, etc.)
4. _____ Other; specify:

B. This placement examination tests for a knowledge of:
1. _____ Arithmetic
2. _____ Algebra
3. _____ Geometry
4. _____ Trigonometry
5. _____ Other; specify:

C. The objectives or purposes of this placement examination are:
1. _____ To determine which students have the necessary mathematical knowledge to undertake regular college courses
2. _____ To determine the mathematical aptitude of the student
3. _____ To section students by ability level
4. _____ To determine which course the student may enroll in
5. _____ Other; specify:

D. Are standardized or nationally distributed exams used? _____Yes _____No

IX. Use of Computers and Pocket Calculators

A. Does your department have access to a computer or to computer terminal facilities? _____Yes _____No

B. What percentage of your departmental full-time faculty makes substantial use of computer facilities --
1. in research _____%
2. in teaching _____%

C. Are there courses taught by your department, other than those in computer science, in which the use of a computer is specified? _____Yes _____No.

D. Are there courses taught in your department in which the use of a pocket calculator is recommended for:
1. homework? _____Yes _____No
2. taking exams? _____yes _____No

E. If the answer to either part of D is yes, list the relevant courses, using the numbers from Question IV:

X. Check any techniques of instruction, other than the standard or traditional lecture-recitation system, used by your department:

1. _____ Large lecture classes with smallquiz sections
2. _____ Large lecture classes with help sessions
3. _____ Organized program of independent study
4. _____ Courses by television (closed-circuit or broadcast)
5. _____ Courses by film
6. _____ Courses by programmed instruction
7. _____ Courses by computer-assisted instruction (CAI)
8. _____ Modules
9. _____ Audio-tutorial
10. _____ PSI
11. _____ Other; specify

XI. Coordination of transfer programs with four-year institutions:

1. Are your course offerings and/or curricula subject state control or approval? _____ Yes _____ No
2. Is there official state-wide coordination of your mathematical offerings with those of four-year institutions? _____ Yes _____ No
3. Do you, or your mathematics staff, consult regularly with the mathematics department of four-year colleges on course offerings designed for transfer credit? _____ Yes _____ No
4. Are there other coordination activities involving your mathematics staff and mathematics departments of four-year colleges or universities in your area? _____ Yes _____ No
   If so, please describe these:

XII. Questions on Mathematics Faculty

A. Full-time faculty: indicate the numbers of full-time mathematical sciences faculty members in your department in the table below, according to their highest degrees and subject fields in which these were earned:

Highest degree	In math.	In stat.	In computer science	In math. ed.	In another field (specify)
Doctor's degree					
Master's degree in math., plus 1 year					
Master's degree					
Master's degree (spec. program) e.g., MAT, MST					
Bachelor's degree					

B. Part-time faculty: other than graduate students; indicate the numbers of part-time mathematical sciences faculty members in your department in the table below, by highest degrees and subject fields:

Highest degree	In math.	In stat.	In computer science	In math. ed.	In another field (specify)
Doctor's degree					
Master's degree in math., plus 1 year					
Master's degree					
Master's degree (spec. program) e.g., MAT, MST					
Bachelor's degree					

C. What is the approximate percentage of the total teaching activity in mathematics which is borne by the part-time faculty? _____ %

D. What is the expected (or typical) teaching load in credit hours for members of your full-time faculty? _____

E. If there are significant departures from this expected teaching load for certain classes of individuals, please specify:

XIII. Faculty Employment and Mobility

A. For full-time faculty members who were first employed on a full-time basis this year, how many were during the previous year 1974-75?

	Ph.D. (math)	Ph.D. (math. ed.)	Non Ph.D.
1. enrolled in graduate school			
2. teaching in a 4-year college or university			
3. teaching in another 2-year college			
4. teaching in a secondary school			
5. employed by you part-time			
6. employed in non-academic positions			
7. otherwise occupied; specify:			

B. Of the full-time faculty last year, who are no longer part of your full-time faculty, how many --

	Ph.D. (math)	Ph.D. (math. ed.)	Non Ph.D.
1. died, or retired			
2. are teaching in a four-year institution			
3. are teaching in a two-year institution			
4. left for a non-academic position			
5. returned to graduate school			
6. left for secondary school teaching			
7. are otherwise occupied; specify			

C. How many of your full-time faculty have been employed as secondary-school teachers during the last ten years? _____

	Ph.D. (math.)	Ph.D. (math. ed.)	Non-Ph.D.
1. How many faculty members did you employ full-time for the first time in 1975-76?			
2. How many additional full-time faculty members do you plan to seek for 1976-77?			
3. If you are successful in 2, how many additional faculty members would you need for 1977-78?			

XIV. Age, Sex and Ethnic Group of Full-time Faculty

A. Record the number of full-time faculty members in each category:

Age	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60 & Over
Bachelors								
Masters								
Doctors								
Men								
Women								
Caucasian								
Oriental								
Hispanic								
Black								
Amerindian								

XV. Professional Activities

A. Memberships: For each organization listed, indicate the number of full-time members of your department who belong to:

MAA	AMATYC (State Affiliate)	NCTM	AMS	SIAM	City Org.	State Org.	Other

B. Estimate the number of full-time members of your department who

1. _____ attend at least one mathematics conference per year
2. _____ take additional graduate mathematics courses during the year or summer
3. _____ give talks on mathematics at conferences
4. _____ give talks on mathematics education at conferences
5. _____ regularly read journal articles on mathematics
6. _____ regularly read journal articles on mathematics eduction
7. _____ write journal articles on mathematics
8. _____ write journal articles on mathematics education
9. _____ write textbooks

II. If you have found some question(s) difficult to interpret or to secure data for, please supply elucidating comments or suggestions which would be helpful to the Committee in future surveys:

Information supplied by: _____

Title: _____

Date: _____

Telephone: _____
Area Number Extension