

APPENDIX C
QUESTIONNAIRE FOR TWO-YEAR INSTITUTIONS

III. Prerequisite Instruction:

- A. Is prerequisite instruction in mathematics (for credit or without credit) offered by your institution, now or in some following term, to correct the deficiencies of students who are beginning to take college mathematics for the first time? Yes No
- B. If prerequisite instruction is not offered now, has it been offered at any time during the past 5 years as part of the regular college mathematics program? Yes No
- C. If answer to (B) is Yes, in what year and for what reason was such prerequisite instruction as a part of the regular college mathematics program discontinued? Yes No
- D. If prerequisite instruction is offered now, is this a new or additional offering begun during the last 5 years? Yes No
- E. If answer to (D) is Yes, in what year and for what reason was prerequisite instruction introduced? Yes No

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 number of credit hours given for the courses (total number of credit hours if the course is given in two or more parts). In column (4) write the total number of students who enrolled in (any part of) the course in the fall term of 1970. For a course not offered in Fall 1970 but offered sometime, write "0".
- c. In column (5) give the approximate number of freshmen who are included among those counted in column (4).
- d. In column (6) give the approximate number of students from vocational (occupational) curricula who are included among those counted in column (4). For this purpose, consider a vocational or occupational curriculum as one which is intended to prepare students for employment rather than transfer to a four-year college.
- e. Indicate here the units in which credit is measured:

_____ semester-credit hours
_____ quarter-credit hours
_____ other; specify: _____

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SURVEY OF PROGRAMS IN MATHEMATICS
IN
TWO-YEAR COLLEGES
1970-71

General Instructions

This questionnaire should be completed by that 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, although 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 do indeed exist.

Please complete and return one copy by December 15, 1970

* * * * *

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

B. Plan under which your institution operates:
1. _____ semester
2. _____ quarter
3. _____ trimester
4. _____ other (specify) _____

C. 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/Terminal	
	Full-time Students	Part-time Students	Full-time Students	Part-time Students
Freshmen				
Sophomores				
Unclassified or other				
Totals				

IV. Courses in Mathematics

Name of Course (or equivalent)	Title and Author(s) of Text	No. of Credit Hours for the Course	Total No. of Students Enrolled in Fall 1970	No. of Freshmen Included in No. in Col. 4	No. of Vocational Students Included in Col. 4
(1)	(2)	(3)*	(4)	(5)	(6)
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. Math Analysis (algebra, etc.)					
9. Basic Concepts (structure, logic, sets)					
10. General Mathematics (basic skills, operatns)					
11. Finite Mathematics					
12. Mathematics of Finance					
13. Business Mathematics					
14. Math for Elementary School Teachers					
15. Technical Mathematics (pre-calculus)					

*If this is a remedial or prerequisite course, put "R" in this column after the number of credits.

Name of Course (or equivalent)	Title and Author(s) of Text	No. of Credit Hours for the Course	Total No. of Students Enrolled in Fall 1970	No. of Freshmen Included in No. in Col. 4	No. of Vocational Students Included in Col. 4
(1)	(2)	(3)*	(4)	(5)	(6)
16. Analytic Geometry					
17. Analytic Geometry & Calculus					
18. Calculus					
19. Technical Mathematics (calculus level)					
20. Differential Equations					
21. Elementary Statistics					
22. Probability (& Stat.)					
23. Programming of Digital Computers					
24. Other Computer- Oriented Mathematics					
25. Linear Algebra					
26. Modern Algebra					
27. Slide Rule					
28.					
29.					
30.					

V. To what extent are courses in mathematics taught in divisions 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:

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

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

	Certificate Program	Associate Degree Program	Number of Awards 1970
1. Computer programming			
2. Data Processing			
3. Statistical assistant			
4. Other mathematical specialty; specify:			

VII. Does your institution require an admissions examination of some sort which includes mathematics as a part of it? 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. 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 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 ___

If so, list here the relevant courses, using the course 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 small quiz 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. ___ Other; specify: _____

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

1. Are your course offerings and/or curricula subject to 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 departments 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 one of the math. sciences	In mathematics education	In a different field (specify)
Doctor's degree			
Master's degree plus 1 year			
Master's degree			
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 one of the math. sciences	In Mathematics education	In a different field (specify)
Doctor's degree			
Master's degree plus 1 year			
Master's degree			
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. 1. How many faculty members did you employ full-time for the first time in 1970-71? _____
2. How many additional full-time faculty members do you plan to seek for 1971-72? _____
3. If you are successful in 2, how many additional faculty members would you need for 1972-73? _____

B. For full-time faculty members who were first employed on a full-time basis this year, how many were during the previous year 1969-70--

	Ph.D.'s	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: _____	_____	_____

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

D. Do you have difficulty in recruiting and keeping an adequate mathematics faculty? Yes No

If so, please comment: _____

XIV. During the course of the academic year the total student course enrollment load of your department changes. Based upon your previous years' experience, make an estimate of these changes:

Total student course enrollments, fall 1970 (essentially the sum of all items in Column (4) in question IV)	_____
Estimated total student course enrollments for the second semester or second quarter	_____
Estimated total student course enrollments for the third quarter (if applicable)	_____

XV. 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