Two-Year Mathematics Questionnaire
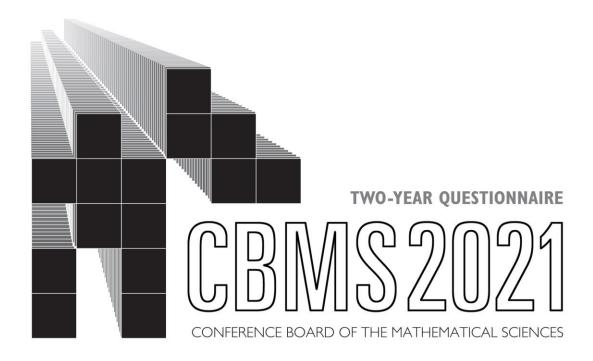
TWO-YEAR QUESTIONNAIRE

CBMS 2021

CONFERENCE BOARD OF THE MATHEMATICAL SCIENCES

SURVEY OF UNDERGRADUATE PROGRAMS IN THE MATHEMATICAL SCIENCES

As part of a random sample, your department has been selected to participate in the CBMS 2021 National Survey, the importance of which has been endorsed by all of our major professional societies. Please read the instructions in each section carefully and complete all of the pertinent item s as indicated.

If your college does not have a departmental or divisional structure, consider the group of all mathematics instructors to be the "mathematics department" for the purpose of this survey.

If you belong to a multi-campus system, please report for the entire multi-campus system to which you belong. If it is not appropriate to report for the entire system (i.e., because at least one campus directly administers its own program), please call Westat at 1-855-770-0558.

This questionnaire should be completed by the person who is directly in charge of the mathematics program or department on your campus. It may be that a different person, such as the college Registrar or a person in Institutional Research, is best equipped to answer Section F on course enrollment; we provide a method for delegating that section to another person in case that will help you. Please contact Westat at 855-770-0558 or send an email to cbms2021@westat.com if you would like to delegate a section to another person.

Report on all of your courses and instructors that fall under the general heading of the mathematics program or department. Include all mathematics and statistics courses taught within your mathematics program or department.

We have classified your department as belonging to a two-year college, to a college or campus within a two-year system, or to a two-year branch of a university system. If this is not correct, please contact Richelle (Rikki) Blair at the email address or telephone number given below.

We recommend completing this questionnaire online because the online system will automatically skip those questions that are not applicable to you (based on the responses you give). However, this survey may be completed using a hard-copy questionnaire.

If you have any questions, please contact Richelle (Rikki) Blair, Associate Director for Two-Year Colleges, by email at richelle.blair@sbcglobal.net or by phone at 440-212-5965. For help with the online questionnaire, call Westat at 855-770-0558 or send an email to cbms2021@westat.com.

Please return your completed questionnaire by October 29, 2021, either online or by mailing a hard copy to:

CBMS Survey
Westat
1600 Research Boulevard
Rockville, MD 20850-3129

Please retain a copy of your responses to this questionnaire in case questions arise.

PLEASE PRINT CLEARLY

A1.   Name of your campus:

A2.   Name of your department:

A3.   Mailing address of the multi-campus organization to which your campus belongs (if any). (Write NA if your campus does not belong to a multi-campus organization.)

A4.   We have classified your department as belonging to a two-year college or to a college campus within a two-year college system, or to a two-year branch of a university system. Do you agree?

Yes.................. ☐ ——————————→ go to the next question.

No .... ☐ ——————————→ please contact Richelle (Rikki) Blair, Survey Associate Director, by email (richelle.blair@sbcglobal.net) or by phone (440-212-5965) before proceeding any further.

A5.   What is the unit (= academic discipline group) that most directly administers the mathematics program on your campus? (Check one box.)

Mathematics Department (department does not offer Computer Science) ....☐

Mathematics and Computer Science Department or Division (department also offers Computer Science, whether or not it is part of the title) ....☐

Mathematics and Science Department or Division ....☐

Other Departments or Division ....☐

A6.   To help us project enrollment for the current academic year (2021–2022), please give the following enrollment figures for the <u>previous academic year</u> (2020–2021) not counting summer enrollment.

    a.   Fall 2020 total student enrollment in your mathematics courses .... ☐

    b.   Entire academic year 2020–2021 enrollment in your mathematics courses .... ☐

    c.   Calculus II total enrollment in winter/spring 2021.. ☐

    d.   Calculus II total number of sections in winter/spring 2021 .... ☐

A7.   Does your college organize its **developmental education**, including mathematics, in a separately administered department or division?

    Yes .... ☐

    No .... ☐

A8.   Your name or contact person in your department:

A9.   Your email address or contact person's e-mail address:

A10. Your phone number or contact person's phone number including area code:

A11. Campus mailing address:

B. Mathematics Faculty in Mathematics Department/Program (Fall 2021)

- If you belong to a multi-campus system, please report for the entire system.
- Bold faculty categories defined in this section will be used in later sections.

B1. For fall 2021, what is the **total number of full-time mathematics faculty in your department/program**, both permanent and temporary, including those on leave, on sabbatical, or have otherwise temporarily left the department?

Number of full-time mathematics faculty ....

B2. Of the number in B1, how many are tenured, tenure-eligible, on a tenure-track, or otherwise considered to be permanent faculty (including appointive and probationary faculty, and those who are on leave or sabbatical)? We will refer to these as "**permanent full-time faculty.**"

Number of permanent full-time faculty ....

B3. Of the number in B1 and excluding those in B2, how many are continuing full-time faculty? We will refer to these as "**non-tenure-track full-time faculty.**"

Number of non-tenure track full-time faculty ....

B4. Give the number of **"other full-time faculty"** by computing B1 minus (B2 and B3)

B5. For the **permanent full-time faculty** reported in B2,

a. give the required teaching assignment in weekly contact hours ....

b. give the number of office hours required weekly in association with the teaching assignment in B5a (count all office hours, including those offered online)...

B6. For the **permanent full-time faculty** reported in B2, how many teach extra credit hours for extra pay at your campus or within your organization?

Number who teach extra credit hours for extra pay at your campus or within your organization ....

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B. Mathematics Faculty in Mathematics Department/Program (Fall 2021) (cont.)

B7. For the **permanent full-time faculty** reported in B2, how many permanent faculty teach extra credit hours per week in the following categories?

    a. Number who teach 1–3 credit hours extra weekly.. ☐

    b. Number who teach 4–6 credit hours extra weekly .... ☐

    c. Number who teach 7 or more credit hours extra weekly .... ☐

B8. For fall 2021, how many **part-time mathematics faculty** are teaching in your department? (Note: none of these were reported above.)

    a. Number of part-time mathematics faculty **paid by your college** .... ☐

    b. Number of part-time faculty paid only by a third party, such as a school district paying faculty who teach dual-enrollment courses (= courses taught in high school by high school teachers for which students may obtain high school credit and simultaneous college credit through your institution) .... ☐

    c. **Total number of part-time faculty** (add B8a and B8b) .... ☐

B9. How many **part-time faculty paid by your college** (reported in B8a) teach 6 or more hours per week?

    Number in B8a teaching 6 or more hours/week .... ☐

B10. Are office hours required by college policy for the **part-time faculty paid by your college** (reported in B8a)?

    Yes .... ☐

    No .... ☐

C. Distance/Remote Learning

Definition: Distance/remote learning courses are courses offered by your institution for credit, in which half or more of the instruction occurs with the instructor and the students separated by time and/or place and facilitated by technology (e.g. courses in which the majority of the course is taught online, or by computer software, or by other technologies). Exclude distance/remote courses that temporarily moved to remote due to the pandemic.

C1.   Overall, how have attitudes towards online learning changed as a result of the COVID-19 experience?

		More favorable	No change	Less favorable
a.	Faculty interest in online teaching	☐	☐	☐
b.	Faculty use of online tools	☐	☐	☐
c.	Student interest in online teaching	☐	☐	☐
d.	Student use of online tools	☐	☐	☐

C2. Many colleges have conducted online instruction as a way of addressing the COVID-19 pandemic, offering online instruction either as an alternative to face-to-face instruction or as a supplement to face-to-face instruction. How is that instruction coordinated with what has normally been called distance education? Please indicate which of the following applies to your department for each listed time period, using the following definitions.

- On-campus (face-to-face) learners—students who would be expected to attend most classes in person.
- Remote learners—students who would be expected to attend most classes remotely.

Policy	Prior to pandemic (prior to spring 2020)		During pandemic (spring 2020-summer 2021)		Fall 2021	
	Yes	No	Yes	No	Yes	No
a. We offer some course sections only to on-campus (face-to-face) learners; remote learners might be offered the same course, but the students would not normally be in the same section.	☐	☐	☐	☐	☐	☐
b. We offer some course sections only to remote learners; on-campus (face-to-face) learners might be offered the same course, but the students would not normally be in the same section.	☐	☐	☐	☐	☐	☐
c. We offer some "hybrid" courses to on-campus (face-to-face) learners and remote learners in the same section.	☐	☐	☐	☐	☐	☐

C3. Has your department taught any distance/remote learning courses **(other than courses moved online in response to the COVID-19 pandemic)** in 2018-2021?

Yes.................. ☐ ⟶ go to C4.

No .... ☐ ⟶ skip to D1.

C4. Which best characterizes the delivery format of the majority of your distance/remote learning courses (not including courses moved online in response to the COVID-19 pandemic)? (Check one box.)

Sections are taught only online, and only asynchronously .... ☐

Sections are taught only online, with an opportunity to meet synchronously online........ ☐

Sections use a mixture of online and face-to-face sessions... ☐

Other .... ☐

C5. In most of your distance/remote learning courses, how and where do students take the majority of their tests (not including courses moved online in response to the COVID-19 pandemic)? (Check one box.)

Online, not monitored .... ☐

Online, but using some kind of monitoring technology .... ☐

At a monitored testing site .... ☐

Combination of the above... ☐

C6. Give the maximum number of hours of the weekly teaching assignment that

can be met by teaching distance/remote learning classes (prior to the COVID-

19 pandemic) <u>as defined above</u>.

No limit ☐

C7. Rate the following challenges that your department faces when creating and/or offering distance/remote learning mathematics courses. (Please check one box in each line.)

Challenge	Not a challenge	Somewhat of a challenge	Very significant challenge
a. Designing appropriate assessments of student learning.	☐	☐	☐
b. Maintaining academic integrity on assessments.	☐	☐	☐
c. Grade inflation.	☐	☐	☐
d. Building/maintaining community among faculty and students.	☐	☐	☐
e. Maintaining academic quality instruction.	☐	☐	☐
f. Engaging students online.	☐	☐	☐
g. Replicating active learning in a virtual environment.	☐	☐	☐
h. Availability of equipment and technical support for faculty/students.	☐	☐	☐

D. Pathways and Instructional Strategies

D1.   Has your mathematics department or developmental education department offered a "pathways" course sequence within the last five years?

> ("Pathways" is defined to be a single course or course sequence that enables students to complete a college-level gateway mathematics or statistics course that is aligned to students' academic and/or career goals within one academic year.)

Yes …………………………☐   Go to D2
No……………………….…☐   Go to D3

D2.   Which of the following pathways courses or course sequences have you offered within the last five years?

	Implemented?		Intermediate Algebra a pre-requisite?	
	Yes	No	Yes	No
a. Quantitative Reasoning/Quantitative Literacy	☐	☐	☐	☐
b. Statistics	☐	☐	☐	☐
c. STEM	☐	☐	☐	☐
d. Other (specify)	☐	☐	☐	☐

_____

D3.   How often are each of the following instructional strategies used in courses below the level of Calculus (courses F1-F10 in Section F) you offered for credit in Fall 2021?

	At least once a week	Occasionally	Almost never
a. Focusing on conceptual understanding to support the acquisition and understanding of formulas and procedures	☐	☐	☐
b. Integrating real-world applications	☐	☐	☐
c. Using student-centered active learning strategies	☐	☐	☐
d. Using assessments such as regular graded homework or quizzes used to inform teaching	☐	☐	☐

D4. How often are each of these instructional strategies used in the Introductory Statistics courses taught in your department in Fall 2021?

		At least once a week	Occasionally	Almost never
a.	Focusing on conceptual understanding to support the acquisition and understanding of formulas and procedures	☐	☐	☐
b.	Integrating real-world applications	☐	☐	☐
c.	Using student-centered active learning strategies	☐	☐	☐
d.	Using assessments such as regular graded homework or quizzes used to inform teaching	☐	☐	☐

D5. Technology used in teaching Introductory Statistics could include graphing calculators, statistical software, or online applets. How successful is your program in adopting each of the following use of technology in your Introductory Statistics (no calculus prerequisite) courses taught Fall 2021?

		Very Successful	Somewhat Successful	Not Successful
a.	Students use technology to explore concepts	☐	☐	☐
b.	Instructors use technology to demonstrate concepts	☐	☐	☐
c.	Students use technology to analyze data	☐	☐	☐
e.	Students' ability to use technology to solve problems is assessed	☐	☐	☐

- If you belong to a multi-campus system, please report for the entire system.

- **Definition**: We use the term "dual/concurrent-enrollment courses" to refer to courses conducted <u>on a high school campus</u> **by high school teachers,** for which students may obtain high school credit and, simultaneously, college credit through your institution.

E1. Does your department participate in any dual-enrollment program of the type defined above?

Yes.................. ☐ ────────────────→ go to E2.

No .... ☐ ────────────────→ go to Section F.

E2. Please provide the head-count enrollment for your dual-enrollment program (as defined above) for the spring term of 2021 and for the current fall term of 2021.

Course	Total Dual Enrollments Last Term = Spring 2021	Total Dual Enrollments This Term = Fall 2021
a. College Algebra		
b. Precalculus		
c. Calculus I		
d. Statistics		
e. Other		

E3. Does your department assign any of <u>its own</u> full-time or part-time faculty to teach courses <u>in a high school</u> for which high school students may receive both high school and college credit through your institution?

Yes.................. ☐ ────────────────→ go to E4.

No .... ☐ ────────────────→ go to Section F.

E4. In fall 2021, how many students are enrolled in the courses conducted <u>on a high school campus</u> and taught by your full-time or part-time faculty (who are not employees of the high school) and through which high school students may receive both high school and college credit through your institution?

Number of students........................ ☐

F. Mathematics Courses (Fall 2021)

Which of the following courses are taught in your department in Fall 2021? You may use different titles for these courses and may have multiple courses that match a particular course name. Choose the course in the list that best matches the mathematical content of your course(s). If you belong to a multi-campus system, please report for the entire system.

- Do **not** include courses taught in other departments, learning centers, or developmental/remedial programs separate from your mathematics program or department.
- For each course that you offer, please indicate whether co-requisites are available (supports for underprepared students so they may be placed directly into college-level courses).
- Please also indicate which catalog codes are used to identify those courses. This information will be used to generate a reduced course list suitable for your department so reporting on enrollments will be easier.

Name of Course (or equivalent)	Offer course in Fall 2021		Co-requisite available		Catalog code(s) used (use comma to separate codes)
	Yes	No	Yes	No	
Developmental/Pre-College Courses					
F1. Course(s) that are primarily Arithmetic/Basic Mathematics content	☐	☐	☐	☐	
F2. Course(s) that are primarily Pre-Algebra content	☐	☐	☐	☐	
F3. Course(s) that are primarily Elementary Algebra (high school level) content	☐	☐	☐	☐	
F4. Course(s) that are primarily Intermediate Algebra (high school level) content	☐	☐	☐	☐	
F5. Geometry (high school level)	☐	☐	☐	☐	
F6. Other developmental mathematics courses	☐	☐	☐	☐	
College Algebra/Trigonometry/Precalculus					
F7. College Algebra (level beyond intermediate Algebra)	☐	☐	☐	☐	
F8. Trigonometry	☐	☐	☐	☐	
F9. College Algebra and Trigonometry, combined	☐	☐	☐	☐	
F10. Introduction to Mathematical Modeling	☐	☐	☐	☐	
F11. Precalculus/Elementary Functions/Analytic Geometry	☐	☐	☐	☐	
Calculus/Differential Equations/Linear Algebra					
F12. Mainstream Calculus I[a]	☐	☐	☐	☐	
F13. Mainstream Calculus II[a]	☐	☐	☐	☐	
F14. Mainstream Calculus III[a]	☐	☐	☐	☐	
F15. Non-Mainstream Calculus I[b]	☐	☐	☐	☐	
F16. Non-Mainstream Calculus II[b]	☐	☐	☐	☐	
F17. Differential Equations	☐	☐	☐	☐	
F18. Linear Algebra	☐	☐	☐	☐	
Discrete Math/Statistics/Probability/Finite Math					
F19. Discrete Mathematics	☐	☐	☐	☐	
F20. Elementary Statistics (with or without probability) [c]	☐	☐	☐	☐	
F21. Probability (with or without statistics) [c]	☐	☐	☐	☐	
F22. Finite Mathematics	☐	☐	☐	☐	

[a] Typically a trigonometry-based course for mathematics, physical sciences, and engineering majors.
[b] Typically non-trigonometry-based, for business, life sciences, and social science majors.
[c] Do **not** count the same course in both lines F20 and F21.

Name of Course (or equivalent)	Offer course in Fall 2021		Co-requisite available		Catalog code(s) used (use comma to separate codes)
	Yes	No	Yes	No	
Mathematics for Liberal Arts/Quantitative Literacy					
F23. Mathematics for Liberal Arts/ Math Appreciation	☐	☐	☐	☐	
F24. Quantitative Literacy/Quantitative Reasoning	☐	☐	☐	☐	
Mathematics Courses for Teacher Preparation					
F25. Mathematics for Elementary School Teachers I	☐	☐	☐	☐	
F26. Mathematics for Elementary School Teachers II	☐	☐	☐	☐	
F27. Other Mathematics Courses for Teacher Preparation	☐	☐	☐	☐	
Business/Technical Mathematics					
F28. Business Mathematics	☐	☐	☐	☐	
F29. Non-Calculus-Based Technical Mathematics	☐	☐	☐	☐	
F30. Calculus-Based Technical Mathematics (transfer course)	☐	☐	☐	☐	
Other Mathematics Courses					
F31. Other Mathematics Courses (non-transfer)	☐	☐	☐	☐	
F32. Other Mathematics Courses (transfer)	☐	☐	☐	☐	

- For each course code (or set of course codes) listed, please provide the requested information. Do **not** include dual-enrollment sections taught in high school by high school teachers for which students receive simultaneous high school and college credit through your institution.

◆ **Cells left blank will be interpreted as zeros**

Your catalog course codes	Credit hours (a)	Fall 2021 only			
		On-campus sections		Distance/remote learning	
		Total **students** enrolled[a] (b)	Total number of **sections**[a] (c)	Total **students** enrolled[b] (d)	Total number of **sections** (e)

[a] Do not include distance/remote learning students, who are counted in column d.
[b] Distance/remote learning courses are courses offered by your institution for credit, in which half or more of the instruction occurs with the instructor and the students separated by time and/or place and facilitated by technology (e.g., courses in which the majority of the course is taught online either synchronously or asynchronously, or by computer software or other technologies).

You reported a total of # sections in fall 2021, distributed by course type as shown below. For each course type, please provide the number of sections taught by part-time faculty.

◆ **Cells left blank will be interpreted as zeros**

Type of course and your applicable catalog course codes	Total number of sections (a)	Number of sections taught by part-time faculty (b)
Precollege level (courses F1-F6) (course code list)		
Precalculus level (courses F7-F11 (course code list)		
Mainstream calculus (courses F12-F14) (course code list)		
Non-mainstream calculus (courses F15-F16) (course code list)		
Advanced level (courses F17-F19) (course code list)		
Statistics, Probability (courses F20-F21) (course code list)		
Service courses (courses F22-F28) (course code list)		
Technical mathematics (courses F29-F30) (course code list)		
Other mathematics courses (courses F31-F32) (course code list)		

G1. For the **permanent full-time faculty** (including those on leave or sabbatical) reported in B2 (_____), complete the following table showing the area of each faculty member's highest earned degree. The total of all faculty listed in this table should equal _____, the number reported in B2 (on page 3).

- If you belong to a multi-campus system, please report for the entire system.

Highest Degree	Number of Full-Time Faculty by Major Field of Highest Degree			
	Mathematics	Statistics	Mathematics Education	Other
a. Doctorate				
b. Master's				
c. Bachelor's				

G2. For the **part-time faculty** reported in B8c (_____) (including those paid by your college and those paid by a third party), complete the following table showing the area of each faculty member's highest earned degree. The total of all faculty listed in this table should equal _____, the number reported in B8c (on page 4).

- If you belong to a multi-campus system, please report for the entire system.

Highest Degree	Number of Part-Time Faculty by Major Field of Highest Degree			
	Mathematics	Statistics	Mathematics Education	Other
a. Doctorate				
b. Master's				
c. Bachelor's				

Instructions:

- If you belong to a multi-campus system, please report for the entire system.

- Include the data for the mathematics courses that are considered to be within YOUR mathematics department.

- For the **permanent full-time faculty** (including those on leave) reported in B2 and for the **part-time faculty** reported in B8a (those paid by your college), complete the following table giving data about gender and ethnicity/race.

- The total of full-time faculty should equal the figure given in B2. The total of part-time faculty should equal ____, the figure reported in B8a.

Ethnic/Racial Status and Gender Identity		Number of Faculty		
		Permanent Full-Time Faculty From B2		Part-Time Faculty From B8a
		Age < 40	Age > 40	
1. American Indian, Alaskan Native	Men			
	Women			
	Non-binary			
2. Asian	Men			
	Women			
	Non-binary			
3. Black or African American (non- Hispanic)	Men			
	Women			
	Non-binary			
4. Mexican-American, Puerto Rican, or other Hispanic	Men			
	Women			
	Non-binary			
5. White (non-Hispanic)	Men			
	Women			

	Non-binary			
6. Native Hawaiian, Pacific Islander	Men			
	Women			
	Non-binary			
7. Status not known or other	Men			
	Women			
	Non-binary			

I1.   Complete the following table showing the number of faculty who belong in each of the age categories below.

- Consider only the ▮▮▮▮▮ **permanent full-time faculty** (including those on leave) reported in B2 (on page 3).

- If you belong to a multi-campus system, please report for the entire system.

- The total faculty listed should equal the number reported in B2.

Age	Number of Faculty		
	Men	**Women**	**Non-binary**
a. Under 30			
b. 30-34			
c. 35-39			
d. 40-44			
e. 45-49			
f. 50-54			
g. 55-59			
h. 60-64			
i. 65-69			
j. 70 and over....................................			

- If you belong to a multi-campus system, please report for the entire system.

J1.   How many of the █████ **permanent full-time faculty** members you reported in B2 (on page 3) were newly appointed to a permanent full-time position this year (2021–2022)?

Number of faculty newly appointed on a permanent full-time position this year (2021-2022)?

if 0   ⟶   go to J3.

if 1 or more   ⟶   go to J2.

J2.   Of the faculty members counted in J1, how many had the following as their main activity in the academic year preceding their appointment? Report only **one** main activity per person.
The total in J2 should equal █████ , the number reported in J1 above.

a.	Attending graduate school	
b.	Teaching in a four-year college or university	
c.	Teaching in another two-year college	
d.	Teaching in a secondary school	
e.	Part-time or full-time temporary employment by your college	
f.	Nonacademic employment	
g.	Unemployed	
h.	Status unknown	

J3.   How many of your faculty who were **permanent full-time faculty** in the previous year (2020-2021) are no longer part of your **permanent full-time faculty**? ....

J4.   For each newly appointed **permanent full-time faculty** member reported in J1, give the following data. Copy this page to add more faculty if necessary. For each new hire, check one box in each column.

	Gender Identity	Ethnicity/Race	Highest Degree Earned
New Hire #1	Man ☐ Woman ☐ Other ☐	Am Indian ☐ Asian ☐ Black ☐ Hispanic ☐ White ☐ Other ☐	Bachelor's ☐ Master's ☐ Doctorate ☐
New Hire #2	Man ☐ Woman ☐ Other ☐	Am Indian ☐ Asian ☐ Black ☐ Hispanic ☐ White ☐ Other ☐	Bachelor's ☐ Master's ☐ Doctorate ☐
New Hire #3	Man ☐ Woman ☐ Other ☐	Am Indian ☐ Asian ☐ Black ☐ Hispanic ☐ White ☐ Other ☐	Bachelor's ☐ Master's ☐ Doctorate ☐
New Hire #4	Man ☐ Woman ☐ Other ☐	Am Indian ☐ Asian ☐ Black ☐ Hispanic ☐ White ☐ Other ☐	Bachelor's ☐ Master's ☐ Doctorate ☐
New Hire #5	Man ☐ Woman ☐ Other ☐	Am Indian ☐ Asian ☐ Black ☐ Hispanic ☐ White ☐ Other ☐	Bachelor's ☐ Master's ☐ Doctorate ☐
New Hire #6	Man ☐ Woman ☐ Other ☐	Am Indian ☐ Asian ☐ Black ☐ Hispanic ☐ White ☐ Other ☐	Bachelor's ☐ Master's ☐ Doctorate ☐

K1. Is professional development required of your faculty?

	Yes	No
a. Permanent full-time	☐	☐
b. Part-time	☐	☐

K2. In general, how frequently are mathematics faculty evaluated? (Check one in each row.)

	At least once a year	At least once every other year	Occasionally	Never	Not applicable
a. Full-time (tenured)	☐	☐	☐	☐	☐
b. Full-time (non-tenured)	☐	☐	☐	☐	☐
c. Part-time	☐	☐	☐	☐	☐

K3. Check all evaluation methods that are used for **part-time faculty** paid by your college (reported in B8(a)) and for **permanent full-time faculty** (reported in B2). *(*Check yes or no for both part-time and full-time faculty on each line.)

Evaluation Mode	Full-Time Faculty in B2		Part-Time Faculty in B8a	
	Yes	No	Yes	No
a. Observation of classes by other faculty members or department chair	☐	☐	☐	☐
b. Observation of classes by division head (if different from chair) or other administrator..				
c. Evaluation forms completed by students	☐	☐	☐	☐
d. Evaluation of written course material such as lesson plans, syllabi, or exams..	☐	☐	☐	☐
e. Self-evaluation such as teaching portfolios...........................	☐	☐	☐	☐
f. Written peer evaluations	☐	☐	☐	☐
g. Other (specify)	☐	☐	☐	☐

L. Academic Support and Enrichment Opportunities for Students

- If you belong to a multi-campus system, please report for the entire system.

L1.   Is some form of placement process in mathematics <u>required</u> for first-time enrollees?

Yes.................. ☐ ───────────→ go to L2

No .... ☐ ───────────→ go to L3.

L2.   If placement is required, check all the components/criteria that would be considered.

a. Placement Test alone ☐
b. Self-placement ☐
c. Counseling/advisement ☐
d. Scores on State test ☐
e. High School record ☐
f. ACT/SAT ☐
g. Scores on national assessment ☐

L3.   Does your college/department periodically assess the effectiveness of the mathematics placement program?

Yes.................. ☐ ───────────→

No .... ☐ ───────────→

L4.   Check all opportunities available to your mathematics students. (Please check one box in each line.)

	Yes	No
a. Mathematics club	☐	☐
b. Special mathematics programs to encourage women	☐	☐
c. Special mathematics programs to encourage minorities	☐	☐
d. Special mathematics lectures/colloquia not part of a mathematics club	☐	☐
e. Mathematics outreach opportunities in local K–12 schools	☐	☐
f. Opportunities to participate in undergraduate research in mathematics	☐	☐
g. Independent study opportunities in mathematics	☐	☐
h. Assigned faculty advisors in mathematics	☐	☐
i. Other (specify)	☐	☐

- If you belong to a multi-campus system, please report for the entire system.

M1. Does your department have any mathematics courses or programs that lead to obtaining credentials to teach mathematics in public elementary schools (any license that includes grades K-5) in your state?

> Yes..☐ If yes, go to M2
>
> No ....☐ If no, go to M3.

M2. Does your department have a faculty member assigned to coordinate mathematics program courses for pre-service elementary school teachers?

> Yes .... ☐
>
> No .... ☐

M3. Does your department have any mathematics courses or programs that lead to obtaining credentials to teach mathematics in public middle schools (any license that includes grades 6-8) in your state?

> Yes, and the program has different requirements from those for
> teaching mathematics at the elementary or high school levels...........☐   If yes, go to M4.
>
> Yes, but the program is identical to that for either the high school
> mathematics teacher preparation program or the elementary
> mathematics teacher preparation program. ....☐   If yes, go to M4.
>
> No ....☐   If no, go to M5.

M4. Does your department have a faculty member assigned to coordinate mathematics courses or programs for pre-service middle school teachers?

> Yes .... ☐
>
> No .... ☐

M5. Does your department have any mathematics courses or programs that leads to obtaining credentials to teach mathematics in public high schools (any license that includes grades 9-12) in your state?

> Yes..☐ If yes, go to M6
>
> No ....☐ If no, go to M7.

M6. Does your department have a faculty member assigned to coordinate mathematics courses or programs for pre-service secondary school teachers?

> Yes .... ☐
>
> No .... ☐

M7. Other than the courses "Mathematics for Elementary School Teachers I, II, and other Mathematics courses for Teacher Preparation" reported on lines F23, F24, and F25, do you designate any sections of your other mathematics program courses as "especially designed for pre-service elementary school teachers"?

Yes .... ☐

No .... ☐

M8. Which of the following groups can meet their <u>entire</u> mathematics course or licensure requirement for teaching via an <u>organized</u> program in your department? Consider "pre- service" and "career switchers" as distinct categories. "Career switchers" usually are post- baccalaureate older adults returning for teaching licensure after a non-teaching career and often under state-approved special licensure rules. *(Check one on each row.)*

	Yes	No
a. Pre-service elementary school teachers	☐	☐
b. Pre-service middle school teachers	☐	☐
c. Pre-service secondary school teachers	☐	☐
d. In-service elementary school teachers	☐	☐
e. In-service middle school teachers	☐	☐
f. In-service secondary school teachers	☐	☐
g. Career switchers moving to elementary school teaching	☐	☐
h. Career switchers moving to middle school teaching	☐	☐
i. Career switchers moving to secondary school teaching	☐	☐

M9. Does your institution offer pedagogical courses in mathematics for teacher licensure for any of the three grade levels listed below? (Check all that apply.)

Grades PK-5 .... ☐

Grades 6-8 .... ☐

Grades 9-12 .... ☐

If any or all are checked, Go to M10

No .... ☐ go to N1

M10. Where are the pedagogical courses in mathematics for teacher licensure taught?

	Yes	No
a. In the mathematics department	☐	☐
b. Elsewhere in the institution	☐	☐

N1.   Below are concerns often cited by two-year college mathematics departments. Please read each item carefully and check the box in each row that best reflects your view.

		Minor or no concern for us	Somewhat of a concern for us	Major concern for us
a.	Faculty staying current regarding effective teaching strategies	☐	☐	☐
b.	Courses taken for both high school and college credit)	☐	☐	☐
c.	Staffing statistics courses	☐	☐	☐
d.	Unrealistic student understanding of the demands of college work............	☐	☐	☐
e.	Part-time faculty teach too many courses	☐	☐	☐
f.	Faculty salaries too low	☐	☐	☐
g.	Class sizes too large	☐	☐	☐
h.	Low student motivation	☐	☐	☐
i.	Too many students needing remediation	☐	☐	☐
j.	Successful progress of students through developmental courses to more advanced mathematics courses is too low	☐	☐	☐
k.	Student success rate in transfer-level math courses is too low	☐	☐	☐
l.	Too few students who intend to transfer actually do transfer	☐	☐	☐
m.	Inadequate travel funds for faculty ..	☐	☐	☐
n.	Learning disabilities are not adequately supported	☐	☐	☐
o.	Inadequate classroom facilities for teaching with technology	☐	☐	☐
p.	Inadequate classroom facilities for teaching with active learning			
q.	Inadequate computer facilities for part-time faculty use	☐	☐	☐
r.	Inadequate computer facilities for student use	☐	☐	☐

N1.   Continued

		Minor or No problem for us	Somewhat of a problem for us	Major problem for us
s.	Classroom and other duties make it difficult for faculty to engage in professional development	☐	☐	☐
t.	Curriculum alignment between high schools and college	☐	☐	☐
u.	Lack of curricular flexibility because of transfer requirements	☐	☐	☐
v.	Other barriers that inhibit curricular changes	☐	☐	☐
w.	Maintaining high and consistent expectations of students across different sections of the same course	☐	☐	☐
x.	High cost of textbooks	☐	☐	☐
y.	Lack of flexibility in curricular redesign	☐	☐	☐
z.	Maintaining common standards between distance/remote learning courses and related courses	☐	☐	☐

N2. Many departments today use a spectrum of <u>program</u> assessment methods. Please check all that apply to your department's program assessment efforts <u>during the last six years.</u>

		Yes	No
a.	A review of our mathematics program was conducted that included one or more reviewers from outside our institution	☐	☐
b.	Students in our mathematics program were asked to comment on and suggest changes in the program....................................	☐	☐
c.	Other departments at our institution were invited to comment on the preparation that their students received in our courses........	☐	☐
d.	Data on students' progress in subsequent mathematics courses were gathered and analyzed	☐	☐
e.	Data on the placement system for first-year students were analyzed for effectiveness	☐	☐
f.	Department's program assessment activities led to changes in the mathematics program	☐	☐
g.	A process is in place to analyze data and assess achievement of student learning outcomes......................................	☐	☐

N3. Please indicate the extent to which the following activities have taken place in the past year in your department in response to increased national attention to equity, diversity, and inclusion issues (here the term "demographic" includes race, ethnicity, gender, disability status, and other characteristics of individuals).

	None	Some	A lot
a. Faculty discussion designed to increase awareness of equity, diversity, and inclusion issues	☐	☐	☐
b. Student discussion designed to increase awareness of equity, diversity, and inclusion issues	☐	☐	☐
c. Program or policy changes to affect the demographic balance of faculty in the mathematical sciences.	☐	☐	☐
d. Program or policy changes to affect the demographic balance of undergraduate students in mathematical sciences.	☐	☐	☐
e. Consideration of existing or new programs to assist underrepresented groups and/or at-risk students in the mathematical sciences.	☐	☐	☐

g. Please describe any other steps your department or institution has taken in the past year that deal with equity, diversity, and inclusion as they pertain to the study of and employment in the mathematical sciences.

_____

If you found some question(s) difficult to interpret or answer, please let us know. We welcome suggestions to improve future surveys (e.g., CBMS 2025).

Comments: _____

_____

_____

_____

_____

_____

Thank you for completing this questionnaire. We know it was a time-consuming process and we hope that the resulting survey report, which we hope to publish in spring 2023, will be of use to you and your department.

Please keep a copy of your responses to this questionnaire in case questions arise.