

# Impact of COVID-19 on Mathematical Sciences Instruction

Sponsored by the Conference Board of Mathematical Sciences (CBMS)

This short survey asks about your department's experiences and perspectives in dealing with the COVID-19 pandemic. These data will be made available to mathematics and statistics departments to help them in their planning for their future.

This survey is being conducted under the aegis of the Conference Board of the Mathematical Sciences (CBMS), which has conducted a survey of mathematics and statistics departments at two- and four-year colleges every five years since 1965. The quinquennial survey had been planned for fall 2020, but is being postponed to 2021 because statistics for 2020 may be atypical. Findings from this survey will be used to help update the regular repeating survey. The survey is funded by the National Science Foundation.

Your prompt response will help to assure that we are able to publish results that are timely and useful to the mathematical and statistical communities.

Enter Pin here: \_\_\_\_\_

For more information about the CBMS Survey project, visit <http://www.ams.org/profession/data/cbms-survey/cbms2020>.

1. **Based on your current plans for the fall 2020 term, what proportion of your department's mathematical sciences sections are taught in the following formats?** A section is any class that is listed independently on the course schedule. For example, Calculus 1 might be taught in multiple sections in the same term. Do not classify recitation sessions as sections.

	Almost all	More than half	Less than half	Almost none
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- a. Sections are taught only online, and only asynchronously.
- b. Sections are taught only online, with an opportunity to meet synchronously online.
- c. Sections are taught only face-to-face (physically in person).
- d. Sections use a mixture of online and face-to-face sessions.

2. **Which of these changes have occurred in your department in response to the COVID-19 pandemic?**

	Yes	No
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- a. Fall term is subdivided into two or more blocks of fewer weeks.
- b. Fall term was shortened to span fewer weeks.
- c. Some class sizes have been reduced.
- d. Some class sizes have been increased.
- e. Some classes were cancelled from the Fall 2020 offerings.
- f. Additional full-time faculty were hired to meet the needs of additional sections of classes.
- g. Additional part-time faculty were hired to meet the needs of additional sections of classes.
- h. The number of full-time faculty was reduced.
- i. The number of part-time faculty was reduced.
- j. Full-time faculty were asked to teach more classes.

3. **During the summer and/or fall of 2020, what proportion of instructional staff in your department received training in the following?**

	Almost all	More than half	Less than half	Almost none
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- a. Online teaching effectiveness.
- b. Face-to-face teaching with social distancing.

**4. Please state how strongly you personally agree or disagree with the following statements about your department's experiences and plans relating to the COVID-19 pandemic in fall 2020.**

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Not applicable
a. Students' learning outcomes from a face-to-face course experience are better than those from an online experience.						
b. Students have a choice of which mode of instruction they receive.						
c. Students taking courses online have the equipment and internet connections required for taking courses online.						
d. Instructional staff teaching online have access to adequate equipment and technology for teaching online.						
e. Instructional staff prefer to teach face-to-face classes.						
f. Instructional staff have a choice of which mode of teaching they provide.						

**5. During the terms listed below, what proportion of your department's instructional staff were/are adequately prepared to teach online?**

	Almost all	More than half	Less than half	Almost none
a. In winter/spring 2020 (before pandemic-caused pivoting).				
b. In fall 2020.				

**6. How has the COVID-19 experience influenced your department's plans for the future (after fall 2020)?** Only report on changes that your department is considering because of your COVID-19 experience. Do not consider changes that you would have made anyway.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Not applicable
a. We are considering offering a greater number of distance learning mathematical sciences classes.						
b. We are considering offering a broader range of distance learning formats in mathematical sciences classes (e.g., more types of mathematics courses).						
c. Additional faculty are showing interest in participating in distance learning.						

7. **What are the total Fall enrollments in mathematics and statistics courses in your department for 2019 and 2020?** If your Fall term has been split into shorter blocks, combine enrollments for all of the blocks in the term.

Fall 2019 mathematics enrollment \_\_\_\_\_  
Fall 2020 mathematics enrollment \_\_\_\_\_

8. **What stands out to you as the greatest difficulty your department has faced with relation to the COVID-19 pandemic?** Describe only one.

9. **What is the greatest benefit, if any, that you see as arising because of the COVID-19 pandemic?** Describe only one.

**Thank you for completing this survey. Please email the completed questionnaire to [CBMS@westat.com](mailto:CBMS@westat.com).**