

Survey Results for Mathematics Corequisite Support Courses Spring 2020

Under the implementation of AB705, Citrus College made changes to the following transfer-level math courses: Calculus for Business and Social Sciences (MATH162 + 062), Introductory Statistics (MATH165 + 065), and Pre-Calculus (MATH175 + 075). These changes included students' placement in the math course sequence, classroom redesign, and pedagogy. The purpose of these changes was to increase completion of transfer-level math within a one-year timeframe. To better understand the student experience as a result of these modifications, students were surveyed about their experience in the newly redesigned corequisite support math courses during the spring 2020 semester. Additionally, due to the COVID-19 pandemic and the transition to remote learning during the spring 2020 semester, we were interested in understanding students' experience before the campus closed, as well as with remote learning. The following is a summary of the survey results.

Survey results for spring 2020 corequisite math classes	MATH062 Total N=47	MATH065 Total N=306	MATH075 Total N=87
2. How would you rate the helpfulness of each of the following teaching methods and materials used in this course before the campus closed?	% that rated it moderately or very helpful		
2a. Instructor's lectures	85.1%	94.4%	95.4%
2b. Working in groups	78.7%	82.7%	88.5%
2c. Quality of materials provided (e.g. worksheets, PowerPoint presentations, etc.)	89.4%	96.7%	94.3%
2d. Diversity of format for the content delivered (e.g. video, audio, online, etc.)	83.0%	89.5%	88.5%
2e. Workbook	55.3%	61.8%	57.5%
2f. Textbook	42.6%	66.0%	73.6%
2g. Calculator	93.6%	95.4%	95.4%
2h. Manipulatives (e.g. dice, coins, cards, etc.)	53.2%	72.2%	48.3%
2i. Whiteboard	91.5%	86.3%	90.8%
2j. Movable furniture	76.6%	72.9%	71.3%
2k. Counselor Visit	63.8%	57.8%	48.3%

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2l. STEM Center Visit (in class)	70.2%	69.3%	57.5%
3. How would you rate the helpfulness of each of the following teaching methods and materials used in this course after the campus closed?	% that rated it moderately or very helpful		
3a. Working in groups (Zoom breakout rooms)	68.1%	63.4%	43.7%
3b. Diversity of format for the content delivered in Zoom (e.g. class activity, project, video, audio, online, etc.)	76.6%	82.4%	64.4%
4. During this semester, how often did you use:	% that used it at least once		
4a. Virtual Instructor Office Hours (including via email, WebAssign, Connect, MyOpenMath, MyMathLab)	70.2%	64.1%	54.0%
4b. Virtual STEM Center tutor (one-on-one)	23.4%	24.5%	23.0%
4c. Virtual STEM Center tutor (study group)	25.5%	19.0%	11.5%
5. How would you rate the helpfulness of:	% that rated it moderately or very helpful		
5a. In-class tutor (before the campus closed)	59.6%	68.6%	71.3%
5b. Virtual STEM Center tutor (one-on-one)	38.3%	36.3%	25.3%
5c. Virtual STEM Center tutor (study group)	42.6%	33.7%	20.7%
6. How much do you agree or disagree with the following statements (in the online environment)?	% that rated agree or strongly agree		
6a. The instructor's lectures were effective in helping me learn in the online environment.	83.0%	88.2%	73.6%
6b. Diversity of content (e.g. class activity, project, video, audio, etc.) were effective in helping me learn in the online environment.	83.0%	84.3%	74.7%
6c. My instructor helped me succeed in the online environment by reviewing foundations skills right before we tackled more complex problems.	83.0%	86.3%	77.0%
6d. Group work (i.e. working with peers in Zoom breakout rooms) was effective in helping me learn in the online environment.	63.8%	60.8%	43.7%
6e. Working in the Canvas Discussion Boards with my peers was effective in helping me learn in the online environment.	55.3%	63.1%	44.8%

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6f. Working with the Zoom share screen and Zoom whiteboard with my peers was effective in helping me learn in the online environment.	80.9%	73.2%	47.1%
6g. The collaborative learning environment is one reason I participated in Zoom sessions and breakout rooms.	72.3%	67.0%	40.2%
6h. Having tables arranged in groups was effective in helping me learn (before the campus closed).	87.2%	80.7%	77.0%
6i. I gained a sense of community by being in the online environment.	55.3%	66.3%	52.9%
6j. I gained a sense of responsibility by being in the online environment.	80.9%	77.5%	67.8%
6k. I gained a sense of belonging to my class as a learning community in the online environment.	68.1%	68.6%	54.0%
7. Which of the following best captures your feeling about this course?	% that chose each answer (% that were successful in the course)		
7a. This course is too easy for me.	6.4% (100%)	2.6% (100%)	2.3% (100%)
7b. This course is the right level for me.	83.0% (100%)	79.7% (95%)	73.6% (100%)
7c. This course is too difficult for me.	6.4% (100%)	10.8% (67%)	14.9% (100%)
8. When offered, how often did you participate in the Zoom meetings?	% that chose each answer		
8a. Always	55.3%	55.2%	34.5%
8b. Sometimes	38.3%	29.4%	14.9%
8c. Never	0.0%	6.9%	14.9%
8d. Not offered in these courses	0.0%	1.6%	26.4%
9. Which type of remote learning environment do you prefer?	% that chose each answer		
9a. Asynchronous instruction	12.8%	12.1%	20.7%
9b. Synchronous instruction	25.5%	25.5%	14.9%
9c. Combination instruction	57.4%	53.9%	49.4%