## Business Calculus with Corequsite Support Survey Results <br> Fall 2019 and Spring 2020

Under the implementation of AB705, Citrus College made changes to transfer-level math courses with the purpose of increasing completion of transfer-level math within a one-year timeframe. These changes included students' placement in the math course sequence, classroom redesign, and pedagogy. To better understand the student experience as a result of these modifications, students were surveyed about their experience in the newly redesigned Calculus for Business and Social Sciences with Corequsite support (MATH162 + 062) during the fall 2019 and spring 2020 semesters. The following is a summary of the survey results.

| Comparing MATH062/162 Survey Results | Fall 2019 <br> Total $\mathrm{N}=76$ | Spring 2020 <br> Total $\mathrm{N}=47$ |
| :---: | :---: | :---: |
| 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 | 90.8\% | 85.1\% |
| 2b. Working in groups | 90.8\% | 78.7\% |
| 2c. Quality of materials provided (e.g. worksheets, PowerPoint presentations, etc.) | 92.1\% | 89.4\% |
| 2d. Diversity of format for the content delivered (e.g. video, audio, online, etc.) | 82.9\% | 83.0\% |
| 2e. Workbook | 68.4\% | 55.3\% |
| 2f. Textbook | 60.5\% | 42.6\% |
| 2g. Calculator | 88.2\% | 93.6\% |
| 2h. Manipulatives (e.g. dice, coins, cards, etc.) | 43.4\% | 53.2\% |
| 2i. Whiteboard | 98.7\% | 91.5\% |
| 2j. Movable furniture | 85.5\% | 76.6\% |
| 2k. Counselor Visit | 67.1\% | 63.8\% |
| 21. STEM Center Visit (in class) | - | 70.2\% |
| 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\% |


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| :---: | :---: | :---: |
| 3b. Diversity of format for the content delivered in Zoom (e.g. class activity, project, video, audio, online, etc.) | - | 76.6\% |
| 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) | 53.9\% | 70.2\% |
| 4b. Virtual STEM Center tutor (one-on-one) | 71.1\% | 23.4\% |
| 4c. Virtual STEM Center tutor (study group) | 61.8\% | 25.5\% |
| 5. How would you rate the helpfulness of: | \% that rated it moderately or very helpful |  |
| 5a. In-class tutor (before the campus closed) | 72.4\% | 59.6\% |
| 5b. Virtual STEM Center tutor (one-on-one) | 63.2\% | 38.3\% |
| 5c. Virtual STEM Center tutor (study group) | 64.5\% | 42.6\% |
| 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. | 92.1\% | 83.0\% |
| 6b. Diversity of content (e.g. class activity, project, video, audio, etc.) were effective in helping me learn in the online environment. | - | 83.0\% |
| 6 c . My instructor helped me succeed in the online environment by reviewing foundations skills right before we tackled more complex problems. | 90.8\% | 83.0\% |
| 6d. Group work (i.e. working with peers in Zoom breakout rooms) was effective in helping me learn in the online environment. | 92.1\% | 63.8\% |
| 6e. Working in the Canvas Discussion Boards with my peers was effective in helping me learn in the online environment. | - | 55.3\% |
| 6f. Working with the Zoom share screen and Zoom whiteboard with my peers was effective in helping me learn in the online environment. | 94.7\% | 80.9\% |
| 6 g . The collaborative learning environment is one reason I participated in Zoom sessions and breakout rooms. | 80.3\% | 72.3\% |
| 6h. Having tables arranged in groups was effective in helping me learn (before the campus closed). | 82.9\% | 87.2\% |
| 6i. I gained a sense of community by being in the online environment. | 89.5\% | 55.3\% |
| 6 j . I gained a sense of responsibility by being in the online environment. | 92.1\% | 80.9\% |


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| 6 k . I gained a sense of belonging to my class as a learning community in the online environment. | 78.9\% | 68.1\% |
| 7. Which of the following best captures your feeling about this course? | $\qquad$ |  |
| 7a.This course is too easy for me. | $\begin{gathered} \hline 3.9 \% \\ (100 \%) \end{gathered}$ | $\begin{gathered} \hline 6.4 \% \\ (100 \%) \end{gathered}$ |
| 7b. This course is the right level for me. | $\begin{aligned} & \hline 65.8 \% \\ & (92 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 83.0 \% \\ & (100 \%) \\ & \hline \end{aligned}$ |
| 7c. This course is too difficult for me. | $\begin{aligned} & \hline 27.6 \% \\ & (56 \%) \end{aligned}$ | $\begin{gathered} \hline 6.4 \% \\ (100 \%) \end{gathered}$ |
| 8. When offered, how often did you participate in the Zoom meetings? | \% that chose each answer |  |
| 8a. Always | - | 55.3\% |
| 8b. Sometimes | - | 38.3\% |
| 8c. Never | - | 0.0\% |
| 8d. Not offered in these courses | - | 0.0\% |
| 9. Which type of remote learning environment do you prefer? | \% that chose each answer |  |
| 9a. Asynchronous instruction | - | 12.8\% |
| 9b. Synchronous instruction | - | 25.5\% |
| 9c. Combination instruction | - | 57.4\% |

