A thematic focus and specific instructional changes enhanced course during switch from in-person to remote teaching.

**BACKGROUND**
Many colleges and universities announced an abrupt transition to remote learning because of the COVID-19 pandemic. This study discusses the instructional changes that were implemented in an undergraduate microbiology course as a result of this transition.

**METHODS**
At the end of the semester, student attitudes about instructional changes were assessed. Students responded to several questions related to specific interventions via both a Likert-type scale and open-ended responses.

**RESULTS**
All respondents (21/21; 100%) agreed or strongly agreed that the switch to thematic instruction enhanced the overall course. A majority of the respondents (17/21; 81%) agreed or strongly agreed that pre-class introductory videos were useful. Most respondents (19/21; 90.5%) agreed or strongly agreed that forums were useful.

**DISCUSSION**
Our results suggest that relatively simple instructional changes can positively affect student engagement in an online environment. We propose that these same changes also could be used to improve in-person classes.

**Figure 1. Student evaluation of the switch to a thematic focus.** At the end of the semester, students were asked if the mid-semester switch to focus almost entirely on SARS-CoV-2 and COVID-19 enhanced the course, using a Likert-type scale (1 = strongly disagree, 5 = strongly agree). Absolute numbers of respondents for each option are shown. Mean = 4.67. SEM = 0.105.