**Appendix Materials**

**Part A: Survey Questions**

Overall Handling of Modality Shifts – (post-test only)

5-point Likert scale (strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree)

1. Overall, my instructor handled the temporary change(s) to delivering the course well.

Handling of Modality Shifts Index – (post-test only)

5-point Likert scale (strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree)

1. When my [course number] course format changed temporarily due to COVID-19, my instructor provided clear instructions.
2. When my [course number] course format changed temporarily due to COVID-19, my instructor effectively used technology (e.g., Canvas, Zoom, etc.) to keep the course running smoothly.
3. When my [course number] course format changed temporarily due to COVID-19, my instructor found ways to make the course material engaging.

Confidence-in-Political Knowledge Questions

5-point Likert scale (extremely confident, very confident, moderately confident, slightly confident, not confident at all)

1. How confident are you that you could explain what distinguishes the two parties from one another?
2. How confident are you that you understand how elections work?
3. How confident are you that you understand what the Constitution says?
4. How confident are you that you understand how laws are made?
5. How confident are you that you understand how power is divided among the three branches of government?

Perceived Active/Interactive Engagement – (post-test only)

5-point Likert scale (strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree)

1. Thinking about your American government course, to what extent do you agree with the following statement: “I believe there were many opportunities for discussion, participation, and/or interaction with the professor.”

Attendance – (post-test only)

1. How would you describe your attendance in the course?
   * I never missed a lesson, whether in person or online
   * I missed very few lessons
   * I missed a few lessons
   * I missed many lessons

Parents’ Education

1. Did at least one of your parents or guardians obtain a 4-year college degree (e.g. bachelor's degree)?
   * Yes
   * No
   * Unsure

GPA

1. Excluding this semester’s course work, what is your college GPA?[[1]](#footnote-1)
   * 3.50 to 4.00
   * 3.00 to 3.49
   * 2.50 to 2.99
   * 2.00 to 2.49
   * Less than 2.00

Female

Female is coded as 1 if response was female and 0 otherwise.

1. What is your gender? (select all that apply)
   * Male
   * Female
   * Transgender
   * Other

Minority

Minority is coded as 1 if response included black, Hispanic, Asian, Native American, or other, and 0 if white.

1. What racial or ethnic group best describes you? (select all that apply)
   * White
   * Black
   * Hispanic
   * Asian
   * Native American
   * Middle Eastern
   * Other

Class Standing

1. What is your class standing?
   * Freshman
   * Sophomore
   * Junior
   * Senior

**Part B: Ethical Principles in Social Science Information**

* Participants were offered extra credit in their Introduction to American Government course for participation in the study. The type and amount of extra credit given to students was determined by individual instructors, depending on their own plans and grading scheme for the course. The recruitment emails and consent form were customized for each section of the course, stating the amount of extra credit available for participating in the study. Students were offered the option to complete an alternative assignment for extra credit should they prefer not to participate in the survey.
* Of those who completed both waves of the survey, 31% identified as minorities, 62% as female
* To our knowledge, the participant pool was not comprised mainly of members of groups we should consider vulnerable or marginalized.
* To our knowledge, the research did not differentially benefit or harm particular groups.

1. “High school” was substituted for “college” for freshman. [↑](#footnote-ref-1)