# **Appendix**

**Supplemental Appendix A: Survey items**

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| --- | --- | --- | --- |
|  | FALL | Winter | Spring |
| Q1 | What course section are you in? |
| Q2 | Are you a transfer student (yes/no)? |
| Q3 | Did your instructor communicate about **[example resources]** resources to you in class?  | Has your instructor communicated **[example resources]** to you in class (yes/no)? | Has your instructor communicated **[example resources]** to you in class (yes/no)? |
| Q4 | How did your instructor communicate about **[example resources]**? | How did your instructor communicate about **[example resources]**? | How didyour instructor communicate about **[example resources]**? |
| Q5 |  | Please select your level of agreement with the following statement: After my instructor communicated about **[example resources]** in class, I was motivated to use them | Please select your level of agreement with the following statement: After my instructor communicated about **[example resources]** in class, I was motivated to use them |
| Q6 | Please select the option that best fits your level of agreement with each of the following statements. For this set of questions, staff includes the instructional team (instructional assistants and teaching assistants). (**sense of belonging statements from validated surveys**)-Faculty and staff in the biology department notice when I am good at something.\*-Faculty and staff in the biology department value my opinions.\*-Most faculty and staff in the biology department are interested in me.\*-Faculty and staff in the biology department know I can do good work. \*-Faculty and staff in the biology department give me compliments when I do something good.\*-Students in the biology department help each other to succeed.\*-I am treated with as much respect as other students.\*-I have a good relationship with other students in the biology department.\*-I can really be myself in the biology department.\* -I feel proud of belonging to the biology department.\* -Other students in the biology department like me the way I am.\* -I am able to discuss my academic performance with biology faculty or staff outside of class.\*-[institution] demonstrates a strong institutional commitment to diversity. (own)-I can really be myself at [institution].\* -I wish I were in a different school.\*-I see myself as part of the [institution] community.⁺-I feel valued by the [institution] community. (own) |
| Q7 | I most closely identify as: -Female-Male-Non-binary-Other-Prefer not to answer |
| Q8 | Highest level of education completed by at least one of your parents: -Did not complete high school-High school/GED  -Some college (but did not complete college)  -Associate's degree (2-year degree)-Bachelor's degree  -Master's degree  -Advanced graduate degree (e.g. DVM, MD, PhD)-All parental education was obtained outside of the US  -Unknown-Prefer not to answer |

*Notes:*

Q5 items were on a four-point agreement scale; Q6 iterms were on a six-point agreement scale

\* represents items adapted from Knekta et al., 2020; ⁺ represents items adapted from Hurtado et al, 1997

**Supplemental Appendix B: Data processing and response rates**

|  |  |  |  |
| --- | --- | --- | --- |
| Data processing | Fall 2021 | Winter 2022 | Spring 2022 |
| Initial total number of responses | 1597 | 1210 | 858 |
| Students who did not finish | 93 | 32 | 24 |
| Students who were under 18 | 24 | 10 | 5 |
| Students who did not consent to share grade data | 178 | 113 | 88 |
| Removed duplicate responses within each course section | 22 | 13 | 4 |
| Final number of responses (survey data) | 1280 | 1042 | 737 |
| Final number of responses with grade data | 1255 | 1025 | 737 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Quarter | Course | Course level | N of student responses | Response rate |
| Fall 2021 | Course 1 Instructor A | Upper | 194 | 84% |
| Fall 2021 | Course 1 Instructor B | Upper | 206 | 75% |
| Fall 2021 | Course 1 Instructor C | Upper | 147 | 98% |
| Fall 2021 | Course 1 Instructor C | Upper | 92 | 62% |
| Fall 2021 | Course 1 Instructor C | Upper | 96 | 62% |
| Fall 2021 | Course 2 Instructor D | Lower | 271 | 73% |
| Fall 2021 | Course 2 Instructor E | Lower | 274 | 72% |
| Winter 2022 | Course 1 Instructor F | Upper | 150 | 97% |
| Winter 2022 | Course 1 Instructor F | Upper | 133 | 86% |
| Winter 2022 | Course 1 Instructor F | Upper | 127 | 84% |
| Winter 2022 | Course 1 Instructor C | Upper | 77 | 100% |
| Winter 2022 | Course 1 Instructor C | Upper | 67 | 61% |
| Winter 2022 | Course 1 Instructor C | Upper | 51 | 68% |
| Winter 2022 | Course 2 Instructor D | Lower | 139 | 74% |
| Winter 2022 | Course 2 Instructor E | Lower | 148 | 82% |
| Winter 2022 | Course 2 Instructor G | Lower | 130 | 70% |
| Winter 2022 | Course 2 Instructor G | Lower | 20 | 50% |
| Spring 2022 | Course 1 Instructor H | Upper | 137 | 73% |
| Spring 2022 | Course 1 Instructor H | Upper | 119 | 63% |
| Spring 2022 | Course 1 Instructor H | Upper | 110 | 58% |
| Spring 2022 | Course 1 Instructor C | Upper | 76 | 67% |
| Spring 2022 | Course 1 Instructor I | Upper | 135 | 76% |
| Spring 2022 | Course 2 Instructor D | Lower | 94 | 53% |
| Spring 2022 | Course 2 Instructor J | Lower | 66 | 35% |

*Notes:*

Response rates were calculated by dividing the number of student responses out of total course enrollment