UNIVERSITY OF
SAN FRANCISCO
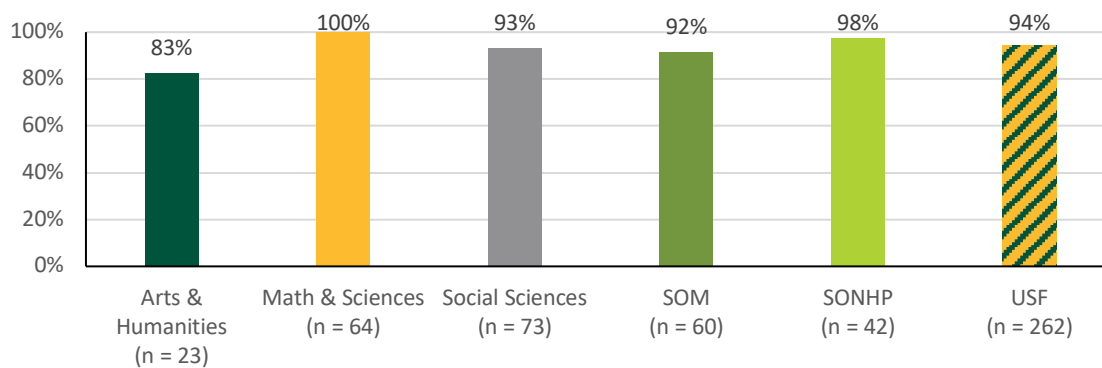
Office of Assessment
and Accreditation Support

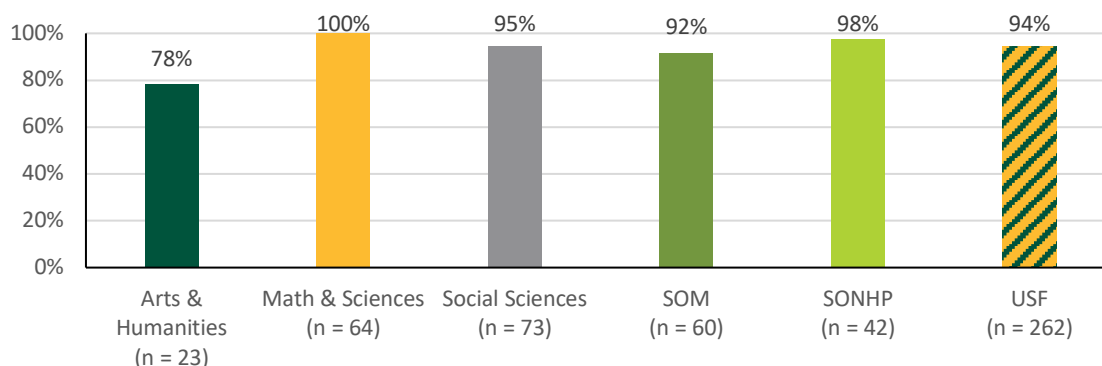# Quantitative Reasoning Core Graduation Competency Content and Item Analysis Report 2022

Questions 1 – 5

The first five questions tested students' ability to identify basic statistical terms: mean (Q1), median (Q2), mode (Q3), standard deviation (Q4), and correlation coefficient (Q5).
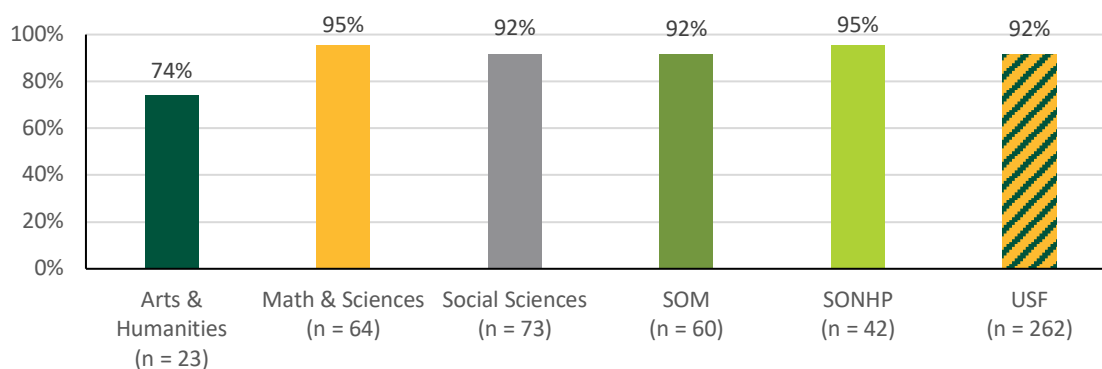
Q1. 94% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (**100%**) and Arts & Humanities students earned the lowest proportion of correct answers (**83%**).
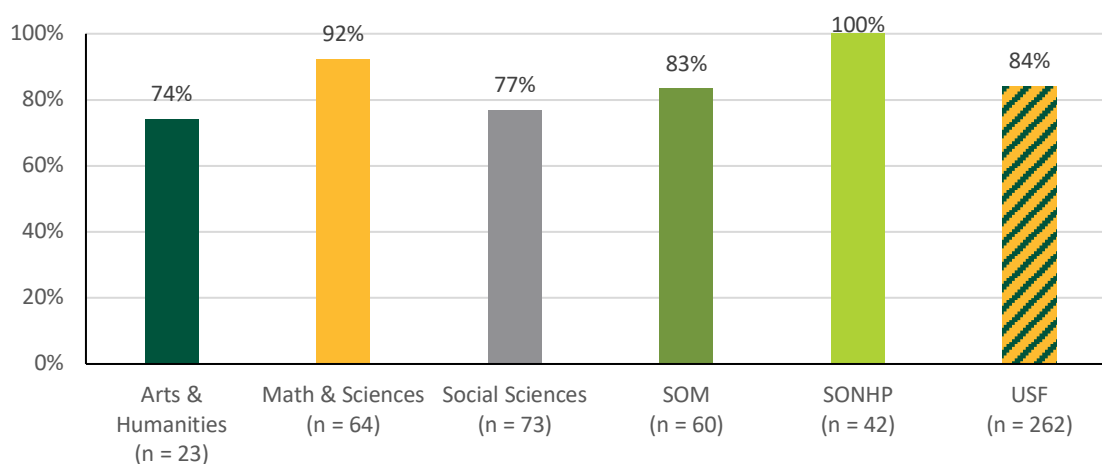

Q2. 94% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (**100%**). Arts & Humanities students earned the lowest proportion of correct answers (**78%**).
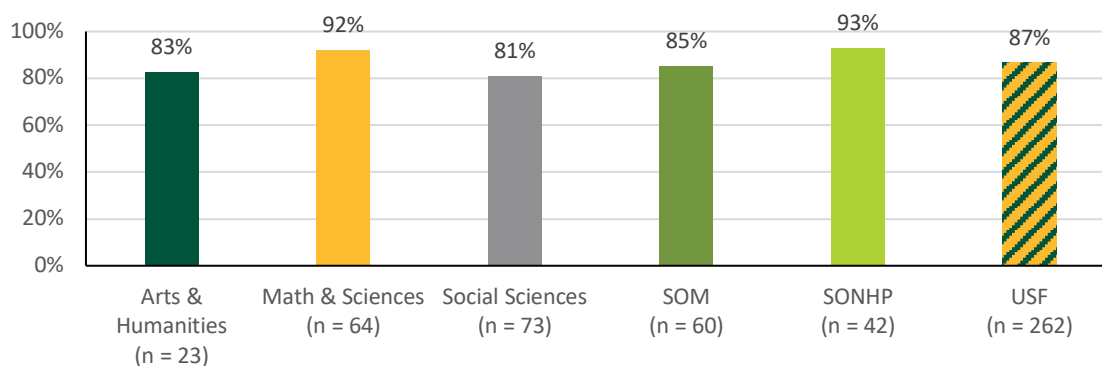

Q3. 92% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (**95%**) and Arts & Humanities students earned the lowest proportion of correct answers (**74%**).

Q4. **84**% of students correctly answered this question. School of Nursing & Health Professions students earned the highest proportion of correct answers (**100%**) and Arts & Humanities students earned the lowest proportion of correct answers (**74%**).
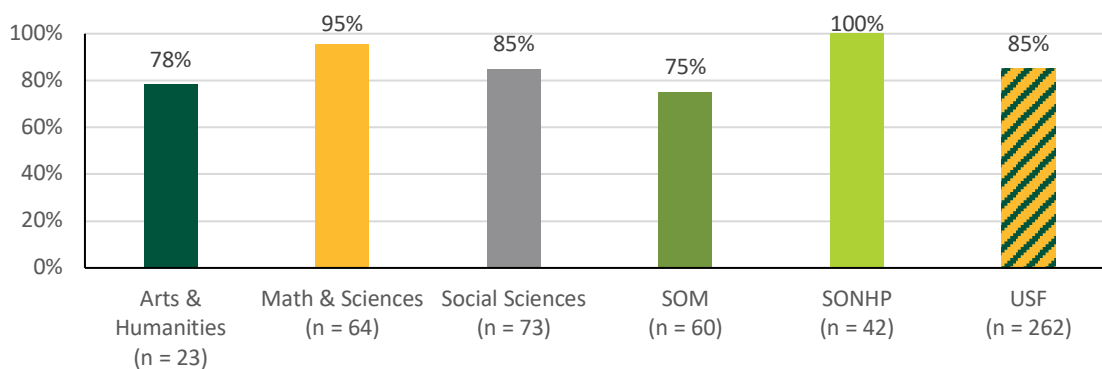

Q5. **87%** of students correctly answered this question. School of Nursing & Health Professions students earned the highest proportion of correct answers (**93%**) and Social Sciences students earned the lowest proportion of correct answers (**81%**).
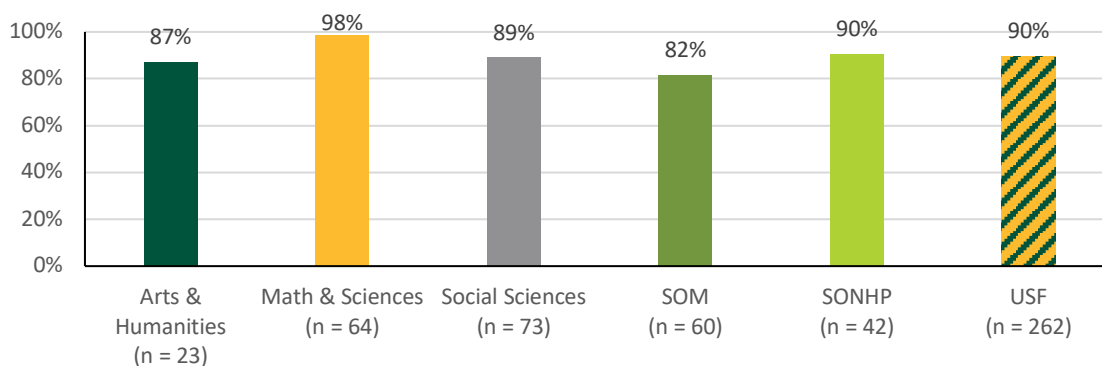
Questions 6 - 9

The next four items tested students' understanding of basic statistics (mean, frequency distribution), and the ability to apply this knowledge to a histogram, and draw accurate conclusions.
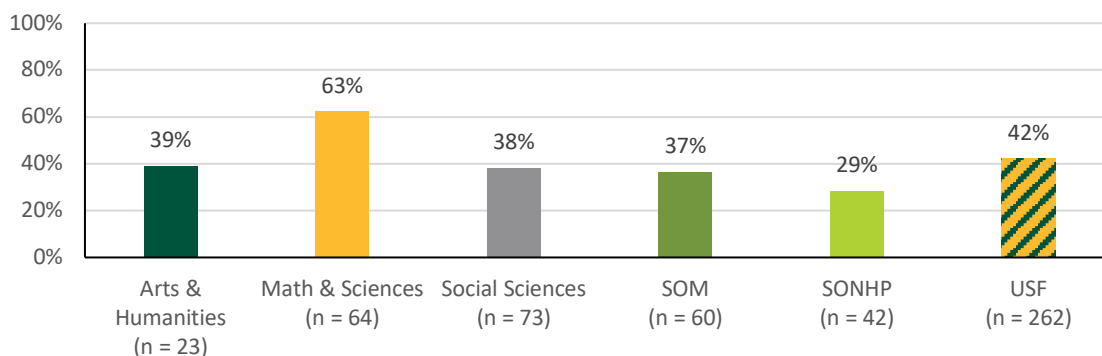
Q6. 85% of students correctly answered this question. School of Nursing & Health Professions students earned the highest proportion of correct answers (**100%**). School of Management students earned the lowest proportion of correct answers (**75%**).
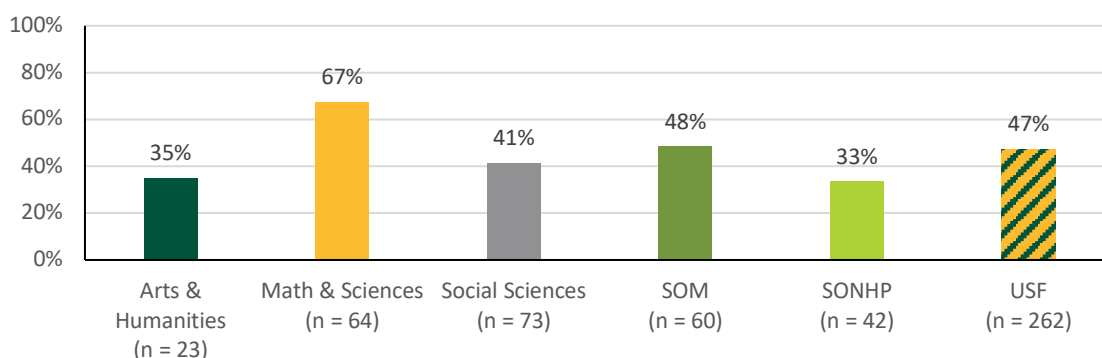

Q7. 90% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (**98%**) and School of Management students earned the lowest proportion of correct answers (**82%**).

Q8. 42% of students correctly answered this question. Math & Science students earned the highest proportion of correct answers (**63%**) and School of Nursing & Health professions students earned the lowest proportion of correct answers (**29%**).

Q9. 47% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (**67**%) and School of Nursing & Health Professions students earned the lowest proportion of correct answers (**33%**).
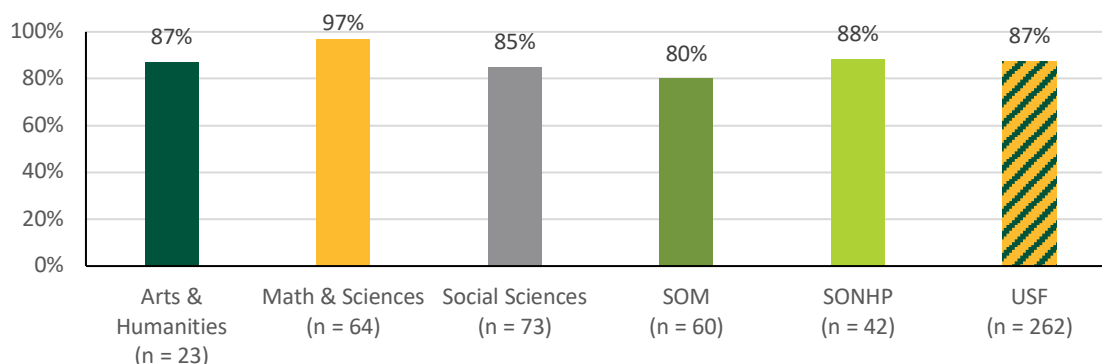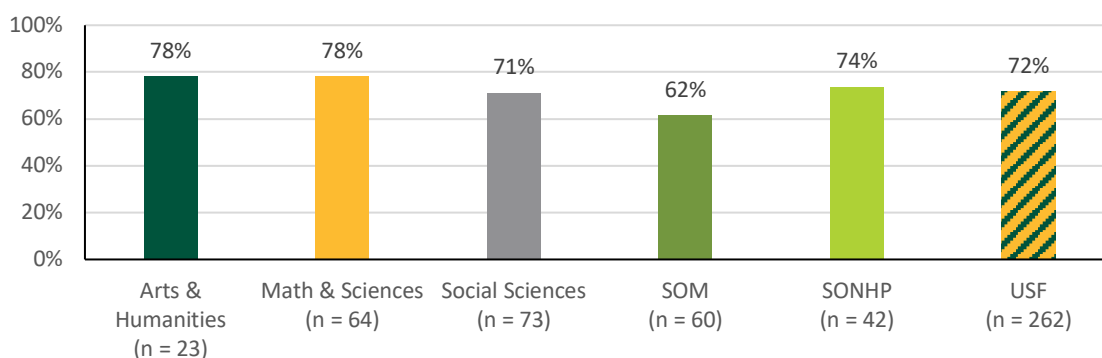

Questions 10-11. These questions tested students' ability to identify functional growth as it applies to environmental atmospheric CO_2 levels (depicted as figures) and draw accurate conclusions based on these figures.

Q10. 87% of students correctly answered this question. Math & Sciences students earned the highest proportion correct answers (**97%**) and School of Management students earned the lowest proportion of correct answers (**80%**).
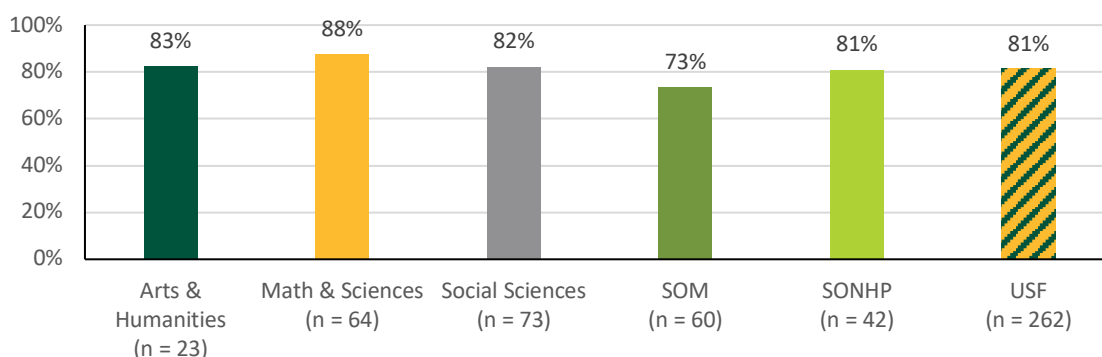
Q11. 72% of students correctly answered this question. Arts & Humanities and Math & Sciences students each earned the highest proportion of correct answers (**78%**) and School of Management students earned the lowest proportion of correct answers (**62%**).
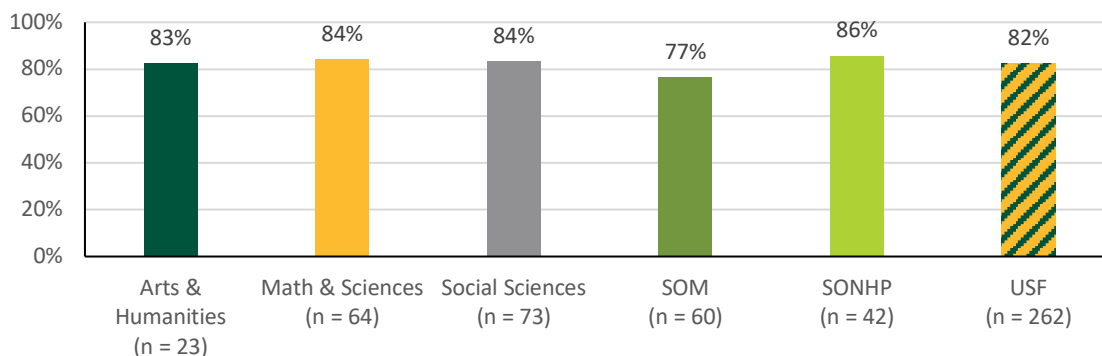

Questions 12 – 13. These two questions tested students' ability to identify components of a table that outline sexual health data and explain the interrelations from the data depicted in that table.

Q12. 81% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (**88%**) and School of Management students earned the lowest proportion of correct answers (**73%**).
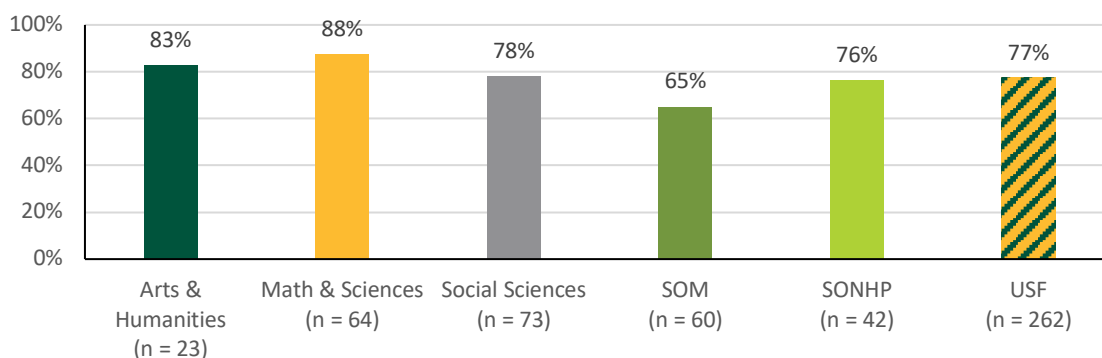

Q13. 82% of students correctly answered this question. School of Nursing & Health Professions students earned the highest proportion of correct answers (**86%**) and School of Management students earned the lowest proportion of correct answers (**77%**).

Questions 14-15. These two questions presented students with a pie chart that outlined a couple's budget, and tested students' ability to make judgements and draw conclusions to a specified problem based on the information communicated in the pie chart.

Q14. 77% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (**88%**) and School of Management students earned the lowest proportion of correct answers (**65%**).

Q15. 54% of students correctly answered this question. Arts & Humanities students earned the highest proportion of correct answers (**65%**) and School of Nursing & Health Professions students earned the lowest proportion of correct answers (**43%**).