

# Student Survey

Choose the **best** choice.

1. In 2022-2023, I will be a \_\_\_\_\_ in high school.
  - Freshman
  - Sophomore
  - Junior
  - Senior

Check **all** that apply.

2. I have completed the following math classes.
  - Algebra 1/Math 1
  - Geometry Math 2
  - Algebra 2/Math 3
  - Precalculus
  - Calculus
  - Statistics and Probability
  - Other \_\_\_\_\_

## COLLEGE MAJORS THAT REQUIRE CALCULUS

Actuarial Science, Accounting, Agribusiness, Anthropology, Architecture, Astronomy, Astrophysics, Aviation (Bachelor of Science), Biology, Biochemistry, Bioinformatics, Biomedical Science, Botany, Business (Bachelor of Science), Chemistry, City and Regional Planning, Computer Science (Bachelor of Science), Data Analytics (Bachelor of Science), Earth Science, Economics, Engineering, Environmental Science, Finance, Forensic Science, Forestries, Fisheries, and Wildlife, Geology, Information Science, Logistics Management, Marketing (Bachelor of Science), Mathematics, Math or Science Teacher, Microeconomic Theory, Neuroscience, Nutrition Science (Bachelor of Science), Operations Management, Physics, Physiological Optics, Public Health, Pre-Health Professional (Doctor, Veterinarian, Pharmacy), Psychology (Bachelor of Science), Real Estate and Urban Analysis

3. Some college majors require calculus. See the text box above. Are you interested in a college major that requires calculus?
  - Yes, I am interested in a college major that requires calculus.
  - No, I am not interested in a college major that requires calculus.

Choose the **best** choice.

4. After high school, I plan to
  - Earn a four-year bachelor's degree at an Ohio public college.
  - Earn a four-year bachelor's degree at either a private college or an out-of-state college.
  - Earn a two-year associate degree at a community college.
  - Enter an apprenticeship program.
  - Join the military.
  - Enter directly into a career upon graduation.

5. Check your top **three** career interests:

| Career Cluster  | Interest |
|---|----------|
| Agriculture & Natural Resources                             |          |
| Anthropology & Geography                                    |          |
| Art, Drama & Music  |          |
| Business & Finance  |          |
| Computer Science, Information Technology & Programming      |          |
| Construction  |          |
| Economics   |          |
| Education (math or upper-level science teacher)             |          |
| Education (non-math or upper-level science teacher)         |          |
| Engineering, Biology, Chemistry, Geology, Physics & Pre-Med |          |
| English, Communications & Journalism                        |          |
| Food & Beverage   |          |
| Government, History & Public Administration                 |          |
| Hospitality & Tourism                                       |          |
| Law, Public Safety, Corrections & Security                  |          |
| Marketing, Sales & Advertising                              |          |
| Nursing, Dietetics & Exercise Science,                      |          |
| Social Work & Human Services                                |          |
| Transportation, Distribution & Logistics                    |          |

6. Read the description of the courses and indicate which ones you may be interested in. Check all that apply.

- Algebra 2.** Did you love the symbolic manipulation and abstract reasoning of Algebra 1? Do you plan to pursue a Calculus-based STEM (science, technology, engineering and math) career? Then Algebra 2 might be for you! This course extends the use of functions to include advanced polynomial, rational, radical and trigonometric functions where solutions to problems in real-world situations are formulated, validated and analyzed. You will use mental, paper-and-pencil, algebraic and technology-based techniques as appropriate with a variety of mathematical notation.
- Quantitative Reasoning.** Do you like to work and communicate with others? Do you enjoy hands-on activities using real-world contexts? Then Quantitative Reasoning might be for you! Quantitative Reasoning is designed to promote reasoning, problem-solving and modeling through thematic units focused on mathematical practices. The course builds upon previous knowledge and extends that knowledge to new situations to create a deeper understanding. Critical thinking and communicating about mathematics are the primary objectives of the course.

- **Data Science Foundations.** In today's society, data is all around you. Whether you go online or to the supermarket, data about you is continuously being collected and used to make decisions. Data Science Foundations will teach you how to collect, analyze and make decisions using data. You will build graphical and statistical models to describe and communicate data using your newly acquired computer programming skills. This course is perfect for beginners! *Note: The big difference between data science and statistics is that where statistics focuses on explaining the data, data science focuses on uncovering insights that help make predictions and decisions.*
- **Statistics and Probability.** Data is all around you. Do you want to collect and analyze data and see how it represents the world around you? Do you like to do research? Are you interested in health care or economics? Then Statistics and Probability might be for you! The purpose of this course is to introduce you to the major concepts and tools for collecting, analyzing and drawing conclusions from data. You will be exposed to broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, Statistical Inference and Probability. *Note: The big difference between data science and statistics is that where statistics focuses on explaining the data, data science focuses on using data to make predictions and decisions.*
- **Computer Science/Discrete Math.** Are you interested in exploring the skills needed for a technology-based field? Then Computer Science/Discrete Math might be for you! This course builds upon concepts in algebra, geometry and probability and shows how these ideas apply to a digital world. Through hands-on computer programming, you will actively engage with discrete math. Discrete math is the study of "counting" problems, for example, the number of unique handshakes in a room full of people; the way viruses spread from contact to contact; or the optimum strategies for board games. Discrete math is the language of computer science. This course is perfect for beginners! No prior programming experience is necessary.