# Math

YSU graduates must have at least one approved math class.

General-education course proposals must include **this page**, the **Criteria Response,** and a **syllabus** that includes a calendar. Send the general-education coordinator this sheet, signed by those listed below, via interoffice mail. Send the entire completed form and syllabus electronically to the coordinator, at [ger@ysu.edu](mailto:ger@ysu.edu).

*Note: Cells will expand as you type in them (this is a Word table). You can also copy material into the cells from other documents as needed.*

|  |  |  |
| --- | --- | --- |
| Department or Program: | | |
| Course number, title, and catalog description: | | |
| Faculty teaching the course: | | |
| Estimated number of sections to be offered in | Fall semester: | Spring semester: |

|  |  |
| --- | --- |
|  | |
| Department or program chair signature | Date |
|  | |
| Dean’s signature | Date |
|  | |
| Coordinator, GEC, signature | Date |
|  | |
| Chair, Academic Senate, signature | Date |

# Criteria Response

**Mathematics Learning Outcome**

**Students will demonstrate an understanding ofthe use of mathematics for problem‑solving and decision‑making.**

***CRITERIA FOR MATHEMATICS***

A numerically literate student should be able to apply mathematical methods to the solution of real-world problems. Therefore, the essential skills mathematics course should enable a student to:

1. interpret mathematical models such as formulas, graphs, tables, and schematics, and draw inferences from them;
2. represent mathematical information symbolically, visually, numerically, and verbally;
3. use arithmetical, algebraic, geometric and statistical methods to solve problems**;**
4. estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results;
5. recognize that mathematical and statistical methods have limits;
6. participate in collaborative learning situations, which use a wide variety of writing assignments, study significant mathematical models, conduct explorations using calculators or computers, and employ team projects.

In evaluating courses the committee will consider the frequency with which the course is included in the general education programs at other state universities in Ohio.

Please describe how the course satisfies the criteria above.