

UNIVERSITY OF CALIFORNIA, RIVERSIDE

Student Learning Outcomes for the B.A./B.S. in Mathematics

Students completing the B.A./B.S. major will be able to:

- I. Mastering basic math skills: Manipulate basic algebraic expressions, explain how notions such as rate of change, area, and volume are related and can be expressed in terms of differentiation and integration.
- II. Thinking abstractly: Translate between abstract definitions and specific examples.
- III. Analyzing logical arguments: Parse mathematical statements, determine whether they are true or false, identify and articulate flaws or gaps in mathematical arguments.
- IV. Communicating logical arguments: Express mathematical ideas clearly, both in writing and orally. Construct and write basic mathematical proofs that are clear, organized, syntactically correct, and logically sound. Orally present mathematical ideas clearly.
- V. Formulating real-world problems in mathematical language: Apply appropriate mathematical concepts to model or describe real-world problems.

Program Website: <http://mathdept.ucr.edu/>