

# INSTITUTE FOR MATH & SCIENCE (IMS)

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## IMS 162 Explorations in Science and Mathematics I

This integrated science and mathematics course is designed for the early elementary and middle level pre-service teachers. It focuses on an interconnected set of scientific knowledge, skills, and pedagogy that are needed by teachers to ensure successful student learning. The main purpose of the course is to expose the teacher candidates—at a university level—to fundamental scientific/mathematical ideas and processes of science, and develop their skills in critical thinking and communication. In addition, the course aims to improve the teacher candidates' attitudes toward science and mathematics and their confidence in teaching integrated science and mathematics in the school.

## IMS 262 Explorations in Science and Mathematics II

This integrated science/math course, with a focus on advanced subject matter content and pedagogy, is the second part of the 8-credit IMS course sequence designed for the Pre K-4 and middle level (4-8) education majors. Special attention is given to how children learn science and math, and how science/math should be taught in line with the academic standards documents and research findings. The course also aims to expose the teacher candidates—at a university level—to fundamental scientific/mathematical ideas and processes of science, and develop their skills in critical thinking and communication.

Prerequisite(s): IMS 162