

2009-2010

B.A.Ed. in General Science- Elementary

**College of Sciences and Technology
Woodring College of Education**

What Is the Study of General Science-Elementary?

The Science, Mathematics and Technology Education Program (SMATE) is a visionary and practical program designed to enrich the training and education of K-12 pre-service teachers and, through them, their students. From a collaboration of the disciplines, Chemistry, Geology, Biology, Physics/ Astronomy, Mathematics and Engineering Technology, the Science, Mathematics and Technology Education Program offers an opportunity for teachers and future teachers to gain specific skills and broaden talents within their chosen discipline.

This program is designed to prepare future teachers at the elementary and middle school level with an emphasis in Science.

Why Should I Consider This Major?

If you want a broad base of knowledge in the field of science to prepare you for teaching at the elementary level, this major will provide it. You will take a range of introductory courses from different areas of science, including Biology, Chemistry, Physics and Geology. Other Science majors focus on a single subject such as Biology or Chemistry (*see WWU Catalog*).

Completion of this program results in a highly qualified status for elementary or middle school science under the federal NCLB guidelines.

How to Declare:

Consult with an advisor in the Science, Mathematics and Technology Education Department for direction on declaring a General Science major.

Mid-Program Checkpoint:

Students intending to complete a Bachelor's of Arts in Education degree in General Science–Elementary within four years should complete the following courses by the start of their junior year. Students are expected to follow all prerequisite requirements for courses and seek early departmental advisement.

Coursework:

MATH 115
BIOL 204
CHEM 121
SCED 201, 202, 203

Contact Information:

Science Education Dept. Website:
<http://www.smate.wvu.edu/smate/>

Director and Advisor:

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Sample Careers:

Elementary Teacher



General Science-Elementary Major Requirements: 51 Credits

This major must be accompanied by the Professional Preparation Program in Elementary Education. It does not result in a Science endorsement. See the *Elementary Education* section of the WWU bulletin.

PHYS 101 Physics Analysis (4)

Or Physics 104 Physics Applications (4)

ASTR 103 Introduction to Astronomy (4)

CHEM 121 General Chemistry 1 (5)

GEOL 211a Physical Geology Review (2)

GEOL 212 Historical Geology (4)

GEOL 311 Earth Materials (4)

BIOL 204 Intro to Evolution, Ecology & Biodiversity (4)

MATH 114 Precalculus I (5)

SCED 201 Matter and Energy in Physical Systems (4)

SCED 202 Matter and Energy in the Earth Systems (4)

SCED 203 Matter and Energy in Life Systems (4)

SCED 294 Investigative Science (4)

SCED 370 Science and Society (3)

Electives under advisement to complete the 45 credits required for major

Other General Science Options:

B.A. Ed. in General Science—Secondary (88-99 credits plus Certification Program)

These courses are offered within this major and may be used to satisfy GUR or Writing Proficiency requirements.

LSCI: BIOL 101, 204; CHEM 115, 121; GEOL 212
PHYS121; SCED 201, 202, 203, 294

SCI: ASTR 103; PHYS 114

WP: Three Writing Proficiency points are required for graduation (they are noted as WP1, WP2, and WP3). Check [Classfinder](#) or [Online Timetable](#) for departmental offerings each quarter.