INTEGRATED SCIENCE, BS

Program Description

The Secondary Education program for Integrated Science prepares educators to teach in grades 6-12 all courses in science, life science, physical science, biology, chemistry and physics. The degree program prepares individuals to qualify for Michigan Teacher certification in Integrated Science (program code DI).

Contact the School of Education for more information.

In addition to classroom teaching, graduates can pursue careers as science educators, curriculum specialists or enter graduate study in science, science education or related fields.

Program Learning Outcomes

- Candidates will make instructional choices that emphasize the hands-on, minds-on, real-world, phenomenon-based approach to science learning.
- Candidates will accurately describe the principals and procedures of scientific investigation and the safe use of investigation processes.
- Candidates will describe and give examples of the role of science in fostering and satisfying curiosity, in solving human problems, and in informing human decision-making.
- Candidates will synthesize knowledge of the interrelationships among the life, earth/space, and physical sciences and the cross-cutting themes that connect the sciences to technology, math, and engineering.
- Candidates will apply scientific research understanding and critical analysis skills to lead students in discussions of global and local aspects of issues such as the environment and human health.
- With the guidance of a faculty mentor, candidates will develop a well-designed, well-executed, and clearly communicated research project that contributes to scientific knowledge.

Degree Requirements

Code	Title	Hours
Science Core		
BIOL 105	Function of the Human Body	4
BIOL 131	General Biology: Cells	4
BIOL 132	General Biology: Organisms	4
BIOL 220	Genetics	4
BIOL 337	General Ecology	3
CHEM 115	General Chemistry I	5
CHEM 116	General Chemistry II	5
CHEM 208	Survey Organic Chem/Biol Apps	4
CHEM 231	Quantitative Analysis	4
CHEM 395	Junior Seminar	1
CHEM 499	Senior Seminar	1
GEOL 121	Physical Geology	4
GEOL 122	Historical Geology	4
MATH 111	College Algebra	3
MATH 207	Prin of Statistical Methods	3
NSCI 119	Descriptive Astronomy	4
PHYS 221	Principles of Physics I	4
PHYS 222	Principles of Physics II	4
GEOG 108	Phy Geog: Meteorology/Climatol	4
or NSCI 116	Introduction to Oceanography	
Total Hours		**69**

Professional Education Sequence and Education Cognates- see Secondary Education.

General Education: All LSSU bachelor's degree candidates must complete the LSSU General Education Requirements.

A minimum of 124 credits (at the 100 level or higher) must be earned for graduation with a cumulative gpa of 2.70 or higher. A gpa of 2.70 or higher is required in your Major, and a gpa of 2.00 or higher is required in your General Education Requirements.