

ELEMENTARY CERTIFICATION TEACHING MAJOR/MINOR - INTEGRATED SCIENCE

We're helping future generations develop a passion and appreciation for science.

Do you have an innate curiosity about the natural world? Would you like to share that passion with young learners through hands-on experiments? This bachelor's degree program in Science Studies prepares you for leading diverse classrooms in their study of science's fundamental concepts and disciplines.

Pair your studies with elementary teacher certification and you'll be qualified to teach all subjects in grades K-5 with the option to become certified to teach science in grades 6-8. Either way, you'll be part of a balanced program that combines academic studies, professional training, multiple field experiences in local schools, and thorough training in how to use technology in the 21st-century classroom.

And with successful completion of the program, you'll earn both a bachelor's degree and faculty recommendation for the Michigan Elementary Standard Certificate.

Major Requirements

A minimum of 33 semester hours from the following:

Code	Title	Credit Hours
Required Courses ¹		
NSCI 231	Inquiry: Physical Science (see Note #3 below)	3
NSCI 232	Inquiry: Earth/Planet Science (see Note #3 below)	3
NSCI 233	Inquiry: Life Science (see Note #3 below)	3
EXPS 420	Science Capstone	3
NSCI 331	Phy. Sci. & Everyday Thinking	3
NSCI 332	Inquiry: Mich Earth Science	3
NSCI 333	Inquiry: PBL in Life Science	3
Electives		
	Physical Science	4
	Earth/Planetary Science	4
	Life Science	4
Total Credit Hours		33

¹ BIOL 240/BIOL 242 and NSCI 120/NSCI 121 cannot be used for science credit.

Major Notes:

- 15 semester hours required at UM-Dearborn.
- 6 semester hours required in courses at the 300 level or above.
- Transfer students - **2 natural science courses may be transferred to UM-Dearborn:**
 - an introductory physical science will satisfy NSCI 231;
 - an introductory earth/planetary science will satisfy NSCI 232;

c) an introductory life science course will satisfy NSCI 233.

- Astronomy satisfies Earth/Planetary Science requirement.

Program Notes:

- Minimum GPA's are required for program completion: 2.75 cumulative, 2.75 in major, 2.75 in optional minor(s), and 2.75 in Professional Studies.
- Advising Policy:** The student is responsible for complying with requirements described in the Undergraduate Catalog as well as on the Four Phase Checklist. Students are expected to meet with their College of Education, Health, and Human Services advisor at least once per year and in the term prior to graduation.
- Courses taken on a PASS/FAIL basis will NOT be accepted toward program completion.
- The minimum number of semester hours required to graduate is 120.
- CEHHS recommends successful program completers for State of Michigan Certification, however, it is ultimately up to the State of Michigan to issue certificates. Certain offenses on a criminal record can keep individuals from obtaining teacher certification. Please refer to The Revised School Code, Act 451 of 1976, section 380.1539b.
- Students must meet Dearborn Discovery Core (<https://umdearborn.edu/academic-program-and-course-development/dearborn-discovery-core-general-education/>) requirements.

Professional Requirements

The professional sequence of education courses consists of a minimum of 43 semester hours of credit. This concentration of study represents the core of your professional preparation. At least one practicum is required prior to student teaching. The semester hours are distributed as follows:

Code	Title	Credit Hours
Foundations		
EDA 340 or EDA 306	Foundations of American Ed Foundations of Professionalism in Education	3
Multicultural Education		
EXPS 410	Multicult in School and Soc	3
Not Required for Early Childhood Majors		
Psychology		
EDC 300	Educational Psychology	3
EDC 412 or EDC 417	Social Devl/Pos Guidance Techn (required for Early Childhood majors) Mgmt of Classroom Behavior	3
EDC 460	Educating the Exceptional Chld	3
Not Required for Early Childhood Majors		
Methodologies (See Note #1 below)		
EDD 452	Methods of Teaching Math K-8	3
EDD 468	Teach Read/Lang Arts- Elem Grd ¹	3
EDD 467	Practicum in Reading Instruct ¹	1
EDD 471	Reading Instr. Models and Meth ¹	3
EDD 485	Teach Science in the Elem Grd	3
EDD 495	Elementary Social Studies Methods	3
Professional Semester (See Notes #3 & #5 below)		
EDD 435	Dir Teaching: Elementary Sch	10

EDD 437	Seminar: Teaching Elementary Grades	2
Total Credit Hours		43

College of Education, Health, and Human Services. No hand carried scores will be accepted.

¹ EDD 467 and EDD 471 are to be taken concurrently. Both require EDD 468 as a prerequisite.

Notes:

1. Enrollment in all the required EDD courses is open only to those who are officially admitted to and in good academic standing in the Teacher Certification Program at UM-Dearborn. See Four-Phase Checklist for more information.
2. Eligibility for directed teaching requires meeting all the requirements listed on the Four-Phase Checklist.
3. Recommendations for teacher certification and additional endorsements require passing scores on the MTTC Elementary Education (#103) exam and other MTTC subject area tests.
4. Minimum number of hours to graduate is 128 semester hours.

Minor Requirements

A minimum of 21 semester hours from the following:

Code	Title	Credit Hours
Required Courses ¹		
NSCI 231	Inquiry: Physical Science (see Note #2 below)	3
NSCI 232	Inquiry:Earth/Planet Science (see Note #2 below)	3
NSCI 233	Inquiry: Life Science (see Note #2 below)	3
EXPS 420	Science Capstone	3
NSCI 331	Phy. Sci. & Everyday Thinking	3
NSCI 332	Inquiry: Mich Earth Science	3
NSCI 333	Inquiry: PBL in Life Science	3
Total Credit Hours		21

¹ NSCI 120/NSCI 121 and / cannot be used for science credit.

Program Notes:

1. A minimum GPA of 2.75 is required for a minor.
2. Transfer students - **2 natural science courses may be transferred to UM-Dearborn:**
 - a) an introductory physical science will satisfy NSCI 231;
 - b) an introductory earth/planetary science will satisfy NSCI 232;
 - c) an introductory life science course will satisfy NSCI 233.
3. Astronomy satisfies Earth/Planetary Science requirement.
4. Advising Policy: The student is responsible for complying with requirements described in the Undergraduate Catalog as well as on the Four Phase Checklist. Students are expected to meet with their College of Education, Health, and Human Services advisor at least once a year and in the term prior to graduation.
5. Courses taken on a PASS/FAIL basis will NOT be accepted toward program completion.
6. In order to be recommended for endorsements, students must pass the appropriate MTTC exam in addition to completing the coursework.
7. MTTC test scores must be reported by electronic delivery or direct mail from Pearson Evaluation Systems to the University of Michigan-Dearborn

Learning Goals

1. Candidates for certification will be capable in their content specialty areas (teaching major(s)and/or minor(s)).
2. Candidates for certification will be capable users of pedagogical knowledge.
3. Candidates for certification will be reflective about their practice.