SCIENCE STUDIES

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 optionto 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.

Dearborn Discovery Core

Please see the Dearborn Discovery Core (General Education) (https://umdearborn.edu/dearborn-discovery-core/) webpage or additional information.

Foundational Studies

Writing and Communication (GEWO) – 6 Credits

Upper-Level Writing Intensive (GEWI) – 3 Credits

Quantitative Thinking and Problem Solving (GEQT) – 3 Credits

Critical and Creative Thinking (GECC) – 3 Credits

Areas of Inquiry

Natural Science (GENS) – 7 Credits

- Lecture/Lab Science Course
- Additional Science Course

Social and Behavioral Analysis (GESB) – 9 Credits

Humanities and the Arts (GEHA) – 6 Credits

Intersections (GEIN) – 6 Credits

Capstone

Capstone (GECE) – 3 Credits

Core Course Requirements

Code	Title	Credit Hours
Language Arts		
COMP 105	Writing & Rhetoric I	3
EXPS 298	Exploring Writing to Communicate, Learn, & Teach	3
LING 280	Introduction to Linguistics	3
LIBR 465	Literature for Children	3
or EDA 236	Literacy in Grades 3-9	
Social Studies		
EXPS 282	History & Civics Elem Schools	3
EXPS 283	Geography & Econ Elem Schools	3
or EDM 292	The world around us: Integrated world geography for upper elementary teachers	
Mathematics		
MATH 385	Math for Elemen Teachers I	3
MATH 386	Math for Elem Teachers II	3
MATH 387	Math for Elem Teachers III (Not required for the Early Childhood major.)	3
Science Studies		
NSCI 231	Inquiry: Physical Science [1]	3
NSCI 232	Inquiry:Earth/Planet Science [1]	3
NSCI 233	Inquiry: Life Science [1]	3
EXPS 420	Science Capstone	3
Not required for the Early Childhood major.		
Total Credit Hours		**39**

[1] Two of the three NSCI core 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, and C) an introductory life science course will satisfy NSCI 233.
BIOL 240/BIOL 242 and NSCI 120/NSCI 121 cannot be used for science credit.

Pre-Professional Requirements

Pre-professional courses are generally completed in the freshman and sophomore year.

Code	Title	Credit Hours
EDA 205	Introduction to Education	3
or EDA 200	Social Justice & Community Based Education	
EDA 419	Early Literacy/Language Devel	3
or EDA 219	Early Literacy: PreKindergarten to Grade 3	
Required for Early Childhood and Special Education Majors only		
EDC 240	Psych of Child Development	3
EDF 450	Health, Nutrition and Physical Activity for Children and Families	3
EDT 211	Design Tech-Based Learn Solutn	3
EXPS 250	Elem Ed Vis & Perf Arts	3
EXPS 407	Inquiry-based Math and Science	3
Required for Early Childhood Majors only		
Total Credit Hours		**21**

Major Requirements

A minimum of 36 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 (any CHEM, PHYS)		4
Earth/Planetary Science (any ASTR, GEOL; ENST/GEOG 203, 204; ESCI 301, 305, 332)		4
Life Science (any BIOL; ESCI 275)		4
Total Credit Hours		**33**

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

Major Notes:

1. *15 semester hours required at UM-Dearborn.*
2. *6 semester hours required in courses at the 300 level or above.*
3. *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.
4. *Astronomy satisfies Earth/Planetary Science requirement.*

Program Notes:

1. *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.*
2. *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.*
3. *Courses taken on a PASS/FAIL basis will NOT be accepted toward program completion.*
4. *The minimum number of semester hours required to graduate is 120.*
5. *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.*
6. *Students must meet* Dearborn Discovery Core requirements (https://umdearborn.edu/academic-program-and-course-development/dearborn-discovery-core-general-education/*).*

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