Program Overview

The Master of Science (M.S.) in Science Content and Process program provides K-9 teachers and other science educators integrated content knowledge in general science by utilizing the resources of the local scientific community. Participants will use the pedagogy of inquiry-based learning and knowledge of technology to create an effective teaching/learning environment for science education. This program is intended for those teachers who want to increase their science knowledge and confidence in science teaching.

Designed for the working professional, the degree program is taught in a learning team model and meets evenings and some Saturdays during the academic year. Day courses take place during the summer. Teachers can manage full-time employment while completing the degree in two years. Each new learning team begins in June.

There is only one learning team of 24 students each year. Applicants must hold a valid Professional Educator License or work as a science educator.

Benedictine University, in partnership with Brookfield Zoo, Fermilab, the Forest Preserve District of DuPage County, The Morton Arboretum and the Golden Apple Foundation, offers a M.S. in Science Content and Process program.

The courses in this unique program are taught at Benedictine University and the partner organizations. Participants in the program are immersed in learning opportunities available at each site, and complete research internships with scientists at the host organizations in order to better understand the process of science and the rewards for doing it well.

Benedictine University

Benedictine University is located in Lisle, Illinois just 25 miles west of Chicago. Founded in 1887 by the Benedictine monks of St. Procopius Abbey, Benedictine provides 55 undergraduate majors and 17 graduate and four doctoral programs. Forbes magazine named Benedictine among “America’s Top Colleges” for the third consecutive year in 2013. Benedictine University’s Master of Business Administration (M.B.A.) program is listed by Crain’s Chicago Business as the fifth largest in the Chicago area in 2013. For more information, call the Enrollment Center at (630) 829-6300, email admissions@ben.edu or visit www.ben.edu.

Benedictine University

Benedictine University
5700 College Rd.
Lisle, IL 60532

The graduate and doctoral programs at Benedictine University.
The program requires 33 semester credit hours of graduate coursework.

**Core**
- MSSCP 501 Pedagogy of Inquiry Science Teaching
- MSSCP 503 Nature of Science
- MSSCP 504 Research Internship

**Content**
- MSSCP 510 Zoology (Brookfield Zoo)
- MSSCP 512 Animal Behavior (Brookfield Zoo)
- MSSCP 515 Field Ecology (Forest Preserve District of DuPage County)
- MSSCP 517 Environmental Science (The Morton Arboretum)
- MSSCP 518 Prehistoric Life (Forest Preserve District of DuPage County)
- MSSCP 520 Basic Physics (Fermilab)
- MSSCP 522 Astronomy (Fermilab)
- MSSCP 524 Human Biology and Nutrition (Benedictine University)

**Objectives**
- Integrate general science content using themes of regional biodiversity and systems interactions.
- Provide content and pedagogy based on the “Next Generation Science Standards” (NGSS) and “Common Core Framework for K-12 Science Education.”
- Model the use of the eight science and engineering practices promoted in the NGSS.
- Develop inquiry-based teaching practices that promote learning of scientific content.
- Build self-confidence in science knowledge and teaching.
- Understand and use technology in investigations and analysis.
- Increase the use of the educational facilities of the partnership organizations.

**Requirements**
- Be a K-9 school teacher or an informal science educator.
- Have unlimited computer and Internet access.
- Be able to attend classes held in the evenings and some Saturdays during the academic year.
- Be able to attend day classes during the summer.

**Faculty**
- **Allison Wilson**
  Program Director, Science Content and Process
  Professor, Biological Sciences, Benedictine University
- **Jim Effinger**
  Golden Apple Fellow in Science
- **Bill Grosser**
  Golden Apple Fellow in Science
- **Louise Huffman**
  Education and Outreach Coordinator, ANDRILL
  Golden Apple Fellow in Science
- **Scott Iliff**
  Golden Apple Fellow in Science
- **John Lewis**
  Golden Apple Fellow in Science
- **Spencer Pasero**
  Education Program Leader, Fermilab
- **Lanis Petrik**
  Teacher Education Program, Brookfield Zoo
- **Hannah Rennard**
  Manager of Curriculum and Instruction
  Morton Arboretum
- **Carl Strang**
  Naturalist, Forest Preserve District of DuPage County
- **Wayne Wittenberg**
  Golden Apple Faculty

“Teachers can use the unique, high-quality courses in this program to improve their science knowledge. Discovering that science is fun is contagious—their enthusiasm for science will spill into their classrooms.” – John Mickus, Professor Emeritus, Founder of the M.S. in Science Content and Process program, Benedictine University

“Teachers become more open minded. They realize they are not the purveyor of information; that they are actually a facilitator of learning.” – Wayne Wittenberg, Golden Apple Faculty