



# NMU College of Arts & Sciences Overview

2011-16

# Agenda



- Mission Statement
- National enrollment trends with respect to Arts & Sciences
- NMU Scorecard analysis
- Program growth areas within the College of Arts & Sciences
- EEGS- Secrets to success
- Psychology- Behavior Analysis Programs at NMU
- Summary

# Mission Statement/Goals

- The College of Arts and Sciences acts as a catalyst for creative and independent thought. It evokes critical thinking and effective communication through active learning, and stimulates lifelong learning habits and development of career skills. Its varied programs encourage diversity, cultural enrichment, and community engagement.

# National Enrollment Trends

- Overall fall enrollment in public degree post secondary institutions declined by 1.1% between 2009 and 2014 nationally; in Michigan the drop was 6.9% (the second highest rate in the country: Illinois was worse at 10%).

Source: National Center for Education Statistics



# Degrees Conferred 2009-14 (nationally)

- Overall increase of +13%
- Biology/Biomedical sciences +21%
- Communication, journalism +8%
- Computer & Information Sciences +40%
- English Language/Literatures -5%
- Foreign Languages/Literatures -5%



# Degrees Conferred 2009-14 (nationally)

• Mathematics/Statistics	+30%
• Philosophy/Religious Studies	-4%
• Physical Sciences	+25%
• Psychology	+20%
• Social Sciences/History	0%
• Visual & Performing Arts	+5%

Source: National Center for Education Statistics





# Degrees Conferred 2009-14 (nationally) Summary

- Greatest gains in CIS, Mathematics, Physical Sciences, Psychology and Biology.
- Biggest declines in the humanities and minimal growth in social sciences.



# NMU CAS SCORECARD ANALYSIS

- Undergraduate headcount enrollment fall 2015 declined by 7.3%, compared with fall 2011-14 avg. (University decline 10.1%).
- SCH fall 2015 down by 11% compared with fall 2011-14 avg. (University decline 8.9%).
- SCH/FTETF most productive departments (exceed the University avg. of 612.3): EEGS, Economics, History, Political Science, Psychology, Sociology.
- SCH/FTETF least productive departments: Music (364) and MLL (486)



# Program Growth Areas 2015-16\*

(must have + 5 students from 2015) \* preliminary data

- Biology (+63)
- Fisheries & Wildlife Management (+16)
- Forensic Biochemistry (+12)
- Environmental Studies & Sustainability (+7)
- Geomatics (+5)
- International Studies (+5)
- Mobile and Web App Development (+6)



# Program Growth Areas 2015-16\*

(must have + 5 students from 2015) \* preliminary data

- Native American Studies (+7)
- Pre-Med (+15)
- Neuroscience (+7)



- Biggest drops (>10) in enrollment: Art & Design (-55), Biology/Physiology (-48), Zoology (-29), Ecology (-17), Communication Studies (-15), Public Relations (-17), English (-14), History (-16), Political Science (-25), Psychology Grad Prep (-16)



# EEGS' Secrets to Success

Dr. Susy Ziegler, Associate Dean  
College of Arts & Sciences &  
EEGS's Department Head

# EEGS Department's Experiences with Recruiting and Retaining Students

- Environmental and sustainability programs have broad appeal.
- Multiple small personal touches seem to make a difference.
- Recruiting one student at a time is our focus.
- Environmental science camp for high school students helped.
- Recruiting is just the first step: Careful advising, thoughtful mentoring, time spent with individual students, and facilitating internships and volunteer opportunities help students succeed.



# Environmental and Sustainability Programs Have Broad Appeal

## LEARNING BY DOING



**MALEAH GUST**  
MAJOR: ENVIRONMENTAL  
STUDIES AND SUSTAINABILITY  
HOMETOWN: ST. JOHNS, MI  
GRAD. DATE: APRIL 2016

From the time Maleah was a young child, Northern held a special place in her heart. With two alumni for parents, her family vacationed in Marquette where she gained a love for the community and the university she now calls home.



I like how my major focuses on improving the earth and all its inhabitants. The awesome professors and courses offered within the EECS department have made my experience at NMU so much fun. My major has made me a better person, I see the world differently than I did before and have learned to really appreciate how truly amazing and special our planet is.



**JOE NEEB**  
MAJOR: ENVIRONMENTAL  
STUDIES AND SUSTAINABILITY  
HOMETOWN: MENOMONIE, WI  
GRAD. DATE: AUGUST 2016

After completing some coursework for his environmental studies and sustainability major, Joe signed up for an internship at the Marquette County Solid Waste Management Authority. This practical experience led to a paid position, and Joe is now working there in the water division. He is passionate about finding better solutions to handling waste and extending the life of the landfill.



The multifaceted nature of environmental studies and sustainability is what makes the major so exciting. It lends itself well to answering complex and daunting questions, such as problems associated with waste management. As a generation we have been left with many unsolved problems and broken systems. Let's find solutions and clean up the pieces. Education is a catalyst to success and potential job placement. In my experience at NMU and through my involvement at MCSWMA, a degree will lead you to higher achievement at a faster rate. The further you take this education the more rapid this advancement will be.



## NMU's OLA Native Plants

Sponsored by NMU EECS Dept.



Indian Blanket

For more information follow on Facebook:  
NMU Outdoor Learning Area  
or email: [ola@nmu.edu](mailto:ola@nmu.edu)



Located at Summit Street  
and Longyear Avenue  
Marquette, MI, 49855

EECS Garden Club  
([eeesgardenclub@gmail.com](mailto:eeesgardenclub@gmail.com))

Students for Sustainability  
([nmusustainability@gmail.com](mailto:nmusustainability@gmail.com))

## NMU Hoop House



Located on the west side of  
the Jacobetti Complex at  
Northern Michigan University  
Hawley Street  
Marquette, MI 49855



# Academic Appointments for Campus Visit Program



Northern Michigan University

Passionate about the  
**Environment?**

Join us at  
**Northern!**

We're thrilled that you're as curious about the world as we are here in NMU's Earth, Environmental and Geographical Sciences Department. It is a critical and exciting time to explore the workings of our planet and its people. We hope that you will join us to learn ways that you can help understand, use, and protect our natural resources.

Whether your interests are in sustainability, environmental policy, geographic information systems, earth hazards, or any of the other specializations available in the environmental fields at Northern, your learning experience will be hands-on, one-of-a-kind preparation for your career. Come be part of the adventure and discovery! You are welcome to contact us if you have questions.

**Northern Michigan University**  
1401 Presque Isle Avenue  
Marquette, MI 49855  
Earth, Environmental and Geographical Sciences  
906-227-2500 | [eeegs@nmu.edu](mailto:eeegs@nmu.edu)

[www.nmu.edu/eeegs](http://www.nmu.edu/eeegs)



# Environmental Science Camp for High School Students in 2014 and 2015





# Dedicated Faculty, Engaged Students

Welcome to the Department of  
**EARTH, ENVIRONMENTAL AND GEOGRAPHICAL SCIENCES**

 <b>MS. TERESA BEJOWSKI</b> 2010 NEW SCIENCE FACILITY tbejowski@nmu.edu 906-227-2587 Academic Interests: Human Geography, Community Planning, Sustainability, Social Mobility & Education	 <b>MR. RICHARD EATHORNE</b> 2010 NEW SCIENCE FACILITY reathorne@nmu.edu 906-227-2575 Academic Interests: Environmental Studies, Human Geography, World Cultures, Geography of Tourism	 <b>DR. BARBARA FROELICH</b> 2010 NEW SCIENCE FACILITY bfroelich@nmu.edu 906-227-1881 Academic Interests: Physical Geography, Weather and Climate, Coastal Storms, Forest Climate	 <b>MS. ANGELA JOHNSON</b> 2010 NEW SCIENCE FACILITY ajohnson@nmu.edu 906-227-1883 Academic Interests: Environmental Science, Sustainable Food Systems, Permaculture
 <b>DR. WERONIKA KUCZYK</b> 2010 NEW SCIENCE FACILITY wkuczyk@nmu.edu 906-227-2589 Academic Interests: Human Geography, Cultural Geography, Ethnic Geography	 <b>DR. ROBERT LEGG</b> 2010 NEW SCIENCE FACILITY rlegg@nmu.edu 906-227-2577 Academic Interests: Geographic Information Systems, Spatial Analysis, Quantitative Methods, Computer Cartography	 <b>DR. SARAH MITTFELFELDT</b> 2010 NEW SCIENCE FACILITY smittlef@nmu.edu 906-227-1440 Academic Interests: Environmental History, Social History, Environmental Policy, Environmental Justice	 <b>DR. ROBERT REGIS</b> 2010 NEW SCIENCE FACILITY rregis@nmu.edu 906-227-3276 Academic Interests: Geology, Glacial Geomorphology, Resource Geology
 <b>DR. RYAN GREY</b> 2010 NEW SCIENCE FACILITY rgrey@nmu.edu 906-227-3101 Academic Interests: Physical Geography, Water Resources, Carbon Cycling, Biogeosciences	 <b>MR. RICHARD ZIEGLER</b> 2010 NEW SCIENCE FACILITY rziegler@nmu.edu 906-227-3104 Academic Interests: Geology, Maps, Meteorology, Petrology, Hydrogeology	 <b>DR. JODY ZIEGLER</b> 2010 NEW SCIENCE FACILITY jziegl@nmu.edu 906-227-3104 Academic Interests: Physical Geography, Biogeography, Research Methods, Environmental Science	 <b>MS. ANNA MICKSELLS</b> 2010 NEW SCIENCE FACILITY jamicks@nmu.edu 906-227-3208 Student Roles: Principal Secretary and Supporting Member of the EES Department

EES Department, 2010 New Science Facility • Northern Michigan University, 1401 Presque Isle Avenue, Marquette, MI 49855  
 ☎ 906-227-2500 ✉ ees@nmu.edu 📘 facebook.com/NMU.EES 🌐 www.nmu.edu/ees

Join a student organization in the  
**DEPARTMENT OF EARTH,  
ENVIRONMENTAL AND  
GEOGRAPHICAL SCIENCES**

**ENVIRONMENTAL SCIENCE  
ORGANIZATION (ESO)**

Members of the Environmental Science Organization commit to an awareness and appreciation of our natural world. They strive to keep informed on global and local environmental issues and to learn about how to be more environmentally friendly. Students from any department are welcome to join.

Activities include hiking trips, environmental movie nights, local volunteer activities, community speakers, winter hikes and snow shoveling trips, Down to Earth Week, and Earth Day campus clean up.

DR. BARBARA FROELICH, Faculty Advisor ✉ bfroelich@nmu.edu  
 ✉ earthscienceo@gmail.com  
 📘 facebook.com/EnvironmentalScienceOrganization

**NMU ROCK AND  
MINERAL CLUB (RMC)**

The NMU Rock and Mineral Club is an organization of students, faculty, staff, and local residents who are interested in geology, physical geography, and rocks and minerals. Members have fun socializing and learning about the geology of the Marquette area and the upper Midwest region.

The club meets regularly during the academic year, and members meet informally for field trips.

Past activities include:  
 ▶ Taking local field trips to learn about the geological history of the area, and the types of rocks and minerals found here  
 ▶ Going on a mine tour  
 ▶ Visiting the Keweenaw Peninsula

DR. ROBERT REGIS, Faculty Advisor ✉ rregis@nmu.edu  
 ✉ nmurockclub@nmu.edu

**NORTHERN TRAIL HEADS (NTH)**

Northern Trail Heads is a student organization that promotes group hikes and volunteer activities to collect waste on local trails. A goal of NTH is for students of Northern Michigan University and members of the community to provide a valuable service to the ecosystem and the recreation areas we all enjoy.

DR. SARAH MITTFELFELDT, Faculty Advisor ✉ smittlef@nmu.edu

**EEGS GARDEN CLUB**

The EEGS Garden Club is an organization of students with a passion for local plants. Our objective is to educate students and the community, promote health, grow our own food and repopulate native flowers.

"We are changing the world one seed at a time and any student in any major is welcome to come help us grow."

Activities include:  
 ▶ Developing NMU's Superior Acres Permaculture garden  
 ▶ Volunteering at local farms  
 ▶ Working with the Marquette Food Co-op

PROF. RICHARD EATHORNE, Faculty Advisor ✉ reathorne@nmu.edu  
 ✉ engsgardenclub@gmail.com 📘 facebook.com/EEGSgardenClub

**GAMMA THETA  
UPSILON (GTU)**

GTU is an international geographical honor society. Eligible\* students are invited to join. Members of GTU organize events open to all students.

Activities include:  
 ▶ Hosting Career Day and Graduate School Interest Night to explore options for life after college  
 ▶ Contributing to textbooks for Africa  
 ▶ Organizing Earth Day celebration for all EEGS student groups

\*Successful completion of at least 3 semesters of college coursework and 1 GE course, a minimum overall 3.00 GPA at 11 ("B" average)

DR. SUSY ZIEGLER, Faculty Sponsor ✉ sziegler@nmu.edu  
 ✉ gtunmu@gmail.com

**STUDENTS FOR  
SUSTAINABILITY**

Members of Students for Sustainability pursue and promote practices of sustainability. The group's motto is, "Someone can't do everything but everyone can do something."

MS. ANGELA JOHNSON, Faculty Advisor ✉ amjohns@nmu.edu  
 ▶ facebook.com/groups/NMUSFS/



EES Department, 2010 New Science Facility • Northern Michigan University, 1401 Presque Isle Avenue, Marquette, MI 49855  
 ☎ 906-227-2500 ✉ ees@nmu.edu 📘 facebook.com/NMUEEGS 🌐 www.nmu.edu/ees

# Open House for Welcome Week





# Advising Party Held Each Semester



# Summary





# Behavior Analysis Programs at NMU

Dr. Adam Prus, Psychology  
Department Head



# Applied Behavior Analysis

- Most effective and safest therapeutic approach for Autism
  - Trained to provide Early Intensive Behavioral Intervention services to children age 2 and older
  - Effective for other behavioral and emotional disorders
  - Covered by medical insurance in Michigan
- Students currently work in community agencies and provide in-home services
  - Limited practice sites available
- No clinics in the U.P. provide Early Intensive Behavioral Intervention services



# Applied Behavior Analysis

- Programs currently offered
  - Master of Science Applied Behavior Analysis
    - Practicum hours supervised by Dr. Jacob Daar, Assistant Professor in Psychology and a Board Certified Behavior Analyst (BCBA)
    - Graduates can become certified as Board Certified Behavior Analysts
  - Bachelor of Science Behavior Analysis
    - Does not currently meet requirements to become a Board Certified assistant Behavior Analyst (BCaBA)

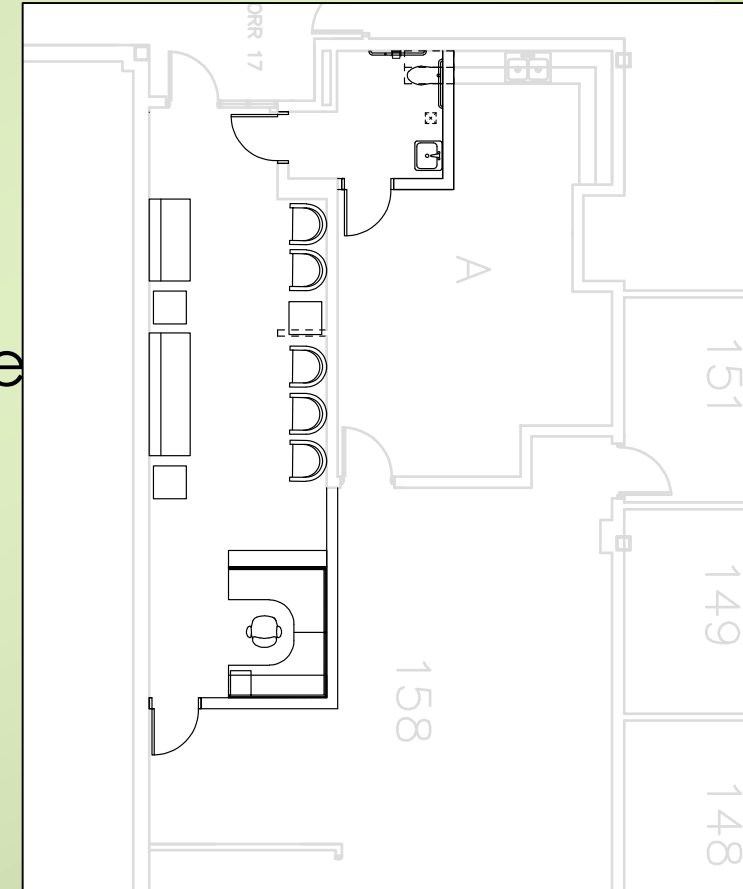


**Jacob Daar, Ph.D., BCBA**  
**Assistant Professor**



# Program Revisions

- Program Revision Objectives : 1) Develop Applied Behavior Analysis clinic at NMU and 2) Provide more certification levels for students in Applied Behavior Analysis
  - ABC News 10 Story: <http://abc10up.com/8310724-2/>
- Applied Behavior Analysis clinic at NMU
  - Meets community treatment needs
  - Clinic allows for training more students, increasing enrollment



**Proposed clinic renovations**

# ABA – Certification Programs

Registered Behavior Technician

- Two undergraduate courses
- 40 hours supervised experience
- (no degree req.)

Board Certified assistant Behavior Analyst (BCaBA)

- Course sequence offered as Certificate in Behavior Analysis
- 500 hours clinical experience
- Bachelor's degree in any area

*Board Certified Behavior Analyst (BCBA)*

- Already offered; master's in Applied Behavior Analysis
- 750 hours clinical experience

# Applied Behavior Analysis

- Expectations
  - Adding clinic increases enrollment
    - Master's ABA program: Increase admission to 20 students per year
    - Undergraduate ABA programs: Increase by 20 students per year
  - Clinic will provide critical services to children in the community
  - Certification levels mean employment for students earning the RBT and then continuing on to become BCaBAs with a bachelor's degree
  - As many as half of students earning a bachelor's degree in behavior analysis will pursue a master's degree in behavior analysis at NMU



# Summary

- College reflects regional and national trends: overall decline in enrollment (regional), growth in selected science (Biology, Environmental, Psychology), and technical programs (Geomatics, Mobile and Web App).
- Importance of 'high touch.'
- Importance of quality programs.