

# STEM EDUCATION

SCIENCE, TECHNOLOGY, ENGINEERING + MATH



STEM Education at Newberry College will prepare you to be a confident, competent, and effective educator. You will work with faculty who have earned the highest degrees in their fields and explore the theories and techniques that will help you to become an outstanding teacher.

In addition to developing mastery in your area of interest in math and science, you will explore classroom management and lesson planning. You will learn how to teach to different learning styles, conduct student assessments, and communicate with professionals. We will also help you identify opportunities for student teaching, support your job search, and invite you back to campus for workshops.

## PROGRAM OF STUDY

Biology, Chemistry, and Math education candidates must complete 54-75 credit hours in their major and 30 credit hours in Teacher Education courses. You will also complete 100 field experience hours in local high school classrooms under the supervision of experienced educators.

## PROGRAM CONCENTRATIONS

Program concentrations allow you to specialize in a specific area that supports your career interests. With our unique approach to Teacher Education, you will earn a Bachelor of Science degree in Biology, Chemistry, or Mathematics in order to develop content expertise. The addition of the Secondary Education concentration allows you to develop the skills and abilities you will need to be an effective teacher.

**BIOLOGY** Secondary Education concentration – 105 Credit Hours

**FACULTY MENTOR:** Charles Horn, Ph.D., Professor of Biology, is a botanist and ecologist who is published in peer-reviewed scientific journals and books. He is curator of the Newberry College Herbarium and is an integral part of a regional National Science Foundation grant-funded program to digitize the thousands of plants specimens and make that data available to researchers around the world.

**CHEMISTRY** Secondary Education concentration – 100 Credit Hours

**FACULTY MENTOR:** Laura Lanni, Ph.D., Assistant Professor of Chemistry, is a polymer chemist. She has a decade of experience as a high school chemistry teacher, including teaching and grading Advanced Placement Chemistry. She has presented at education conferences and published in the *Journal of Chemical Education*.

**MATHEMATICS** Secondary Education concentration – 84 Credit Hours

**FACULTY MENTOR:** Renee Stubbs, M.Ed., Associate Professor of Mathematics, has 28 years of experience as a high school teacher and curriculum coach. She has presented at numerous conferences on topics in teaching with technology and best practices for instruction. She co-authored *Making the Most of Instruction*, a curriculum for the National Dropout Prevention Network.

## STEM SCHOLARSHIPS

The REMAST program provides scholarships and academic support for students who want to teach high school science or math.

- Scholarships from \$10-30,000 per year
- Field experiences guided by experienced REMAST mentors
- Conferences, research, and other professional development opportunities
- Professional networking opportunities
- South Carolina scholarship enhancement is available

**Do science.  
Teach science.  
Do math.  
Teach math.**

## ACTIVE LEARNING ENVIRONMENT

During 100 hours of field experience, STEM Education candidates observe experienced teachers, practice teaching strategies, and become comfortable in front of a classroom.

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## OVERVIEW

Newberry College established the REMAST (*Recruit and Engage Math and Science Teachers*) program in response to the critical need for highly qualified STEM teachers with a passion for, and knowledge of, their subject matter to inspire their students.

REMAST is funded by a National Science Foundation [DUE-149839] five-year grant from the Robert Noyce Teacher Scholarship Program to prepare more science and math teachers for high-need South Carolina school districts.

## REMAST PROGRAM FEATURES & BENEFITS

REMAST Scholars receive a variety of support as they hone their teaching skills and develop content mastery.

- Scholarships ranging from \$10,000 - \$30,000 per year
- Field experiences
- Mentoring and advising from industry professionals
- Regular professional development meetings with the REMAST community of fellow Scholars, Teaching Fellows, and Mentor Teachers
- Travel to conferences
- Summer research opportunities

## EXPANDED CAREER OPTIONS

REMAST students pursue a degree in Biology, Chemistry, or Mathematics with a Secondary Education concentration. As a result, our teachers are prepared with the content knowledge for employment in science and math professions or for teacher licensure or to attend graduate school.

## REMAST SCHOLARSHIPS & ELIGIBILITY

REMAST Scholars are eligible for annual scholarships stackable on financial aid from other sources.

- Juniors, seniors and fifth-year students are eligible
- Minimum 60 hours of completed coursework to enter the REMAST program
- Grade Point Average of 2.75 or higher
- Declare a STEM major with Secondary Education concentration



**Do science. Teach science.  
Do math. Teach math.**

“ A REMAST summer internship ultimately led me to becoming a Chemistry Teacher. I've attended workshops and conferences across the country and built lifelong relationships with my professors and other education professionals that have allowed me to hone my craft and enjoy what I do for my students. ”



**KEYERRIA HOWARD '12**  
Chemistry with Secondary Education concentration  
Employer: C.A. Johnson High School

“ By being a Noyce Scholar, I have been able to learn about new concepts and technology that I have utilized in my classroom and shared with other teachers in my school. ”



**BILL GLACE '12**  
Mathematics with Secondary Education concentration  
Employer: Abbeville High School

“ REMAST changed my life. Teaching is a calling and I am thankful that REMAST helped me realize my passion for teaching. REMAST's networking, professional development, and resources helped me more than I ever could have imagined. ”



**JORDAN WHITE '13**  
Chemistry with Secondary Education concentration  
Employer: James F. Byrnes High School

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