



Life Science South Florida

STEM Strategic Priorities



Broward College

- **Teacher Education Program**
 - Middle Grades General Science
 - Middle Grades Mathematics
 - Secondary Mathematics
 - Secondary Biology
- **STEM Charter School feasibility study**



Florida Atlantic University

- **College Of Education**
 - PRIORITY 1: Teacher Preparation Programs
 - PRIORITY 2: Grant Awards
 - PRIORITY 3: Pine Job Environmental Education Center
 - PRIORITY 4: STEM Education Center (proposed)
- **College of Engineering & Computer Science**
 - Working with Industry Partners
 - Working with Schools – creating a pipeline
 - Academic Programs

Florida Atlantic University

- College of Science
 - Interdisciplinary graduate programs
 - NSF Undergraduate Mentoring Program in Biology and Chemistry
 - Innovative “peer-tutoring” programs in Biology, Chemistry and Mathematics
 - Interdisciplinary Research Centers NSF funded Math and Chemical Education for students and teachers
 - Undergraduate and Graduate Certificate Programs to meet the needs of the local industries (Biotechnology, Climate Change, Environmental Science, Geo-Information Systems, Medical Physics (now a PSM) and Neuroscience)
 - Partnerships with industry (biotech, pharmaceutical and IT)



Florida Gulf Coast University

- Collaboration of Education, Arts and Sciences, and Engineering
 - Strong legacy in STEM education with the Whitaker Center for STEM Education (since 2000). The Center is overseen by the Deans from Arts & Sciences, Education & Engineering and has the mission is to promote a comprehensive model of inquiry and innovation in STEM education, serving as a nexus of expertise and leadership for Southwest Florida. Highlights include the GEMs program, an outreach for middle school girls; the Florida Learns STEM Scholars Program and the Engineering Summer Challenge.
- Engineering
 - Recent priorities and initiatives
 - Build enrollments in existing undergraduate programs in Bioengineering, Civil and Environmental Engineering based on integrated lecture-lab instruction
 - Added additional new UG degree program in Software Engineering
 - Strong Partnership with the SW Chapter of BioFlorida
 - New initiatives and future plans
 - Plan to add new UG degree program in Renewable Energy Engineering, working closely with regional industry (e.g. Algenol Biofuels)
 - Plan to add the M.S. Engineering degree with majors in sub-disciplines

Florida International University

- **Implement research-driven curricula in the classroom** (includes faculty professional development and incentives, fostering similar adoptions in K12 and college partners)
- **Building partnerships across the p-20-industry continuum** (includes building workforce pathways, federal and foundation partnerships, and partnerships across institutions and professional societies)
- **Develop and strengthen educational programs and promote policies to establish a strong P-12 STEM teacher leader corps**
- **A research mission that provides evidence on successful practices in 1), 2) and 3)**

Indian River State College

- **Teacher Education Programs**
 - Middle School Science and Math
 - Secondary Science and Math
- **Florida COSEE Center**
 - One of thirteen National Centers whose mission is to spark and nurture ocean discovery and research
- **STEM Sector Partnerships**
 - Information Technology
 - Clean Energy
 - Life Sciences
 - Manufacturing
 - Ocean Science
- **Partnerships with STEM and K-12**
 - Connections through Academic and Career Pathways Consortium
- **NSF-ATE Funded Regional Center for Nuclear Education and Training**

Miami Dade College

- Curricular redesign to promote student retention, completion, and career placement.
 - Developmental math redesign to streamline entry into college-level STEM courses
 - Integration of project-based learning into STEM curricula
- Strengthen and/or develop industry-driven degree programs in STEM fields such as engineering, biological sciences, and information systems
- Systematic promotion of research experiences and/or industry internships during the STEM college experience

Nova Southeastern University

- Enhance student performance, engagement and retention in STEM fields
- Enhance STEM program quality
- Enhance targeted recruitment in STEM fields



Palm Beach State College

- In cooperation with school district(s), 1) create new teacher preparation paths that result in highest quality math and science teachers, 2) enhance teacher professional development efforts that provide teachers with improved skills and access to online 'learning objects' to assist in the classroom
- Improve student preparation for transition to College math and science, comparing competencies needed in high school to enable success in college
- Develop additional career path based programming from adult vocational through bachelor's degrees, with focus on Information Technology and Sciences; include articulation with career academies



University of Miami

WELCOME

to



Miami Dade
College

North Campus

