



BAKER COLLEGE
STUDENT LEARNING OUTCOMES

**ECE 2210 Math, Science, Technology and Engineering
for Early Childhood
3 Semester Credit Hours**

Student Learning Outcomes and Enabling Objectives

1. Investigate the connections between cognitive development theories/research findings and science, technology, engineering and mathematics (STEM) content for learners ages birth to 12 years.
 - a. Explain how cognitive theories/research findings influence STEM curriculum development and implementation.
 - b. Reflect on how cognitive theories/research findings influence your STEM teaching practices.
2. Identify central concepts and developmentally appropriate practices associated with STEM content.
 - a. Study national and state STEM standards.
 - b. Review applicable standards written by the National Association for the Education of Young Children.
 - c. Ascertain critical thinking skills and inquiry tools associated with STEM content.
3. Describe how hands-on learning supports STEM content comprehension.
 - a. Design science learning experiences.
 - b. Design technology learning experiences.
 - c. Design engineering learning experiences.
 - d. Design mathematics learning experiences.
4. Articulate how STEM content supports young learners' growth and development in all developmental domains.
 - a. Explain how language and literacy development are enhanced by STEM content.
 - b. Explain how social development can be enhanced by STEM content.
 - c. Explain how emotional development can be enhanced by STEM content.
 - d. Explain how physical development is enhanced by STEM content.
 - e. Explain how cognitive development is enhanced by STEM content.

RE 2. Baker Faculty are required to demonstrate through evidence that all SLO's and related standards are met using System developed or individually developed deliverables.

Required Elements

Baker College Early Childhood Education Mission Statement

Our mission is to prepare knowledgeable and highly skilled professionals in the field of early childhood education who support human development through partnerships, advocacy, service, and the education of all young children and their families.

The Mission Statement as the Cornerstone of the Conceptual Framework

The Baker College ECE Program mission statement reflects shared core values of multiple programs across our institution, and takes its roots from the mission of NAEYC. A strong alignment to the accrediting body and a commitment to unity through shared vision, standards, and curriculum make the Baker ECE Program unique. This focus is maintained throughout the program's conceptual framework as central themes form the foundation for the program. These themes include:

- Producing graduates with a strong knowledge of **Child Development**
- Focus on creating **Partnerships**
- Emphasis on becoming a lifelong **Professional**

These SLOs are approved for experiential credit.

Effective: Spring 2018