Bachelor of Science in Applied Mathematics

The following Program Learning Outcomes have been established by Evangel faculty to define the areas of knowledge and skills that students graduating from this major degree program should have developed:

1. The applied mathematics comprehensive major consists of a concentration in mathematics and a second concentration in one of the following: physics, biology, chemistry, or environmental science

2. Demonstrate critical thinking and problem-based learning skills to understand, interpret, and evaluate scientific hypotheses.

3. Gain experience with working independently as well as part of a team.

4. Demonstrate proficiency using theories and practice (field and laboratory) in physics, biology, chemistry, or environmental biology.

5. Communicate mathematical and scientific findings in standard written and oral formats.

6. Develop a realistic understanding of the various challenges and benefits of applied mathematics vocations through work studies, internships, or summer research opportunities.

7. Identify, formulate, abstract, and solve mathematical problems that use tools from a variety of mathematical areas, including algebra, analysis, probability, numerical analysis and differential equations.

8. Maintain a core of mathematical and technical knowledge, including software and algorithmic processes necessary in quantitative analysis, and mathematical modeling.

9. Demonstrate analytical skills and extensive experience with the tactics of problem solving and logical thinking; ask pertinent questions and perform suitable quantitative analysis.

10. Demonstrate a solid understanding of rigorous mathematical proof; write clear well-organized and logical mathematical arguments.