Students graduating with any undergraduate degree in Mathematics should be able to:

1. Solve mathematical problems using techniques and concepts from calculus, linear algebra and differential equations.

2. Use mathematical tools to solve problems arising from other scientific disciplines and/or practical situations.

3. Demonstrate proficiency in mathematical communication, including the comprehension and writing of mathematical proofs; including writing well-organized, grammatically correct, and logically sound mathematical arguments.

4. Evaluate and interpret numerical, graphical and symbolic representations of data and effectively communicate mathematical ideas using these means.

In addition, students graduating with a B.A. in Mathematics should be able to:

1. Demonstrate the ability to apply specific advanced mathematical tools and processes using logical reasoning, generalization and abstraction.

In addition, Mathematics B.A. graduates with a concentration in High school teaching should be able to:

1. Demonstrate an understanding of the mathematical concepts from topics such as algebra, geometry, probability and statistics that will enable them to successfully teach in California secondary mathematics classrooms.

In addition, students graduating with a B.S. in Applied Mathematics should be able to:

1. Model real world situations using mathematics and solve these systems employing a variety of analytical and numerical techniques.

2. Implement numerical approaches using computational software.

In addition, students graduating with a B.S. in Mathematics should be able to:

1. Demonstrate mastery of the concepts in algebra, analysis, and one other core area of mathematics as indicated on the major sheet using logical reasoning, generalization and abstraction.