



**College of Sciences
Academic Learning Compacts**

Mathematics, B.S.

Discipline Specific Knowledge, Skills, Behavior and Values

1. Graduates will be able to identify and use the logical principles of mathematical proof.
2. Graduates will be able to identify and use the principles necessary for mathematical applications
3. Graduates will be able to recognize mathematically correct arguments and derivations.
4. Graduates will be able to select the appropriate proof technique for questions in pure mathematics.
5. Graduates will be able to select the appropriate solution method for questions in applied mathematics.
6. Graduates will be able to employ mathematical terminology and notation accurately.

Critical Thinking

7. Graduates will be able to identify and use specific concepts, theorems and results from real analysis.
8. Graduates will be able to identify and use specific concepts, theorems and results from partial differential equations.

Communication

9. Graduates will be able to employ mathematical terminology and notation accurately.
10. Graduates will be able to communicate mathematical information in oral and written form using appropriate mathematical language.
11. Graduates will be able to read and understand mathematical information presented in appropriate mathematical language.

Assessment of Mathematics, B.S. Outcomes

These outcomes will be assessed using a variety of assessment methods, including:

- tests
- projects
- problem finding and solving
- papers