1. Students should be introduced to a rich and diverse set of mathematical ideas.

2. Students should be able to think analytically and critically.

3. Students should achieve an understanding of the mathematical concept of proof.

4. Students should have experience applying knowledge from one branch of mathematics to another and from mathematics to other disciplines.

5. Students should experience mathematics as an engaging field with contemporary open questions, as opposed to a body of knowledge that is complete and static.

6. Students should be introduced to a variety of mathematical and statistical software packages.

7. Students should be able to communicate mathematics both orally and in writing.

8. Students should have experience working on an intensive project that requires them to analyze and create mathematical arguments and then to produce a substantial written and oral report.

9. Student’s achievements in scholarship should be recognized through a variety of means.

10. Students should be mentored and advised at anytime by Faculty.