1. Define and explain basic principles in biological sciences and major concepts in wildlife ecology including, population ecology, organismal biology, plant ecology/taxonomy, and genetics/evolution.

2. Explain and discuss principles of wildlife management including natural resource legislation, policy, and applications.

3. Explain and apply the scientific methods including designing and conducting experiments and testing hypotheses.

4. Explain and demonstrate techniques for collection of data in laboratory and field settings, keep accurate records, and analyze data to address hypotheses.

5. Demonstrate a style appropriate for communicating scientific results in written and oral form. Provide opportunity to develop these communication skills.