1. Apply technical knowledge and practical skills to conduct quality science in the field and laboratory.
2. Utilize analytical and quantitative skills to understand and create meaning for graphical and quantitative representations of data.
3. Understand the theories, major concepts and mechanisms which underlie and explain observed biological phenomena.
4. Locate meaningful scientific information, evaluate and use needed information effectively.
5. Understand different forms of communication within Biology, and know how to communicate scientific information in appropriate ways (verbal, written, etc.).
6. Understand what constitutes a testable hypothesis and components of effective experimental design.
7. Understand the difference between science, scientific practice and other ways of knowing and learning.