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Instructor Expertise

Time

- Preparation Time
- Student Time In and Out of the Laboratory
- Time for Class and Laboratory – the Schedule of Classes
- Time of Academic Year

The Physical Arrangement of the Teaching Laboratory

Class Size

- Number of Laboratory Sections

Resources for Discovery-Based Laboratories

Organisms

Equipment

Safety Considerations for Independent Projects

Transportation for Field-Based Studies

Preparatory Staff

Student Interns/TAs

Summary

Further Reading

5 A Model Introductory Biology Course

Instructor Group Meetings

Shared Course Materials

Flexible Design Allows for the Introduction of New Modules

Overall Conceptual Organization

Laboratory Modules for the First Edition of “Introduction to Biological Investigation”

- Module 1: Caenorhabditis elegans: From Genes to Behavior
- Module 2: Cyanogenic Clover: Genetic Variation and Natural Selection
- Module 3: Biodiversity and Soil Microbial Ecology

Additional Laboratory Modules

- Module 4: Personal Genomics: Understanding Individual Genetic Variation
- Module 5: Behavioral Variations Within a Species
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