

CALENDAR DESCRIPTION

BIO 126-3

FOREST BIOLOGY

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

PHILOSOPHY/GOALS:

A study of the science of life essential to a career in resource management; the classification of living organisms, particularly those of algae, higher plants, freshwater and terrestrial animals found in Ontario forests and freshwater ecosystems and animal life cycles, and introductory animal anatomy.

COURSE OUTLINE

METHOD OF ASSESSMENT:

Course Title: FOREST BIOLOGY

Code No.: BIO 126-3

Program: FOREST TECHNICIAN

Semester: II

Date: JANUARY, 1989

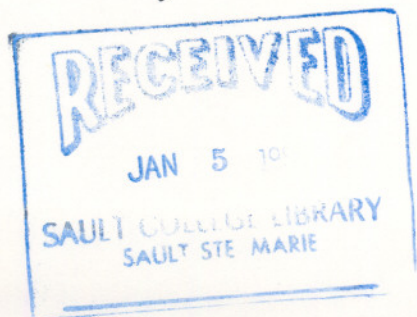
Author: M. HARVEY/D. HALL

REVISED

Students receiving a final grade of 60% will pass the course. Students receiving a grade of 50-59% may be given an opportunity to write a re-write of the exam content. Students successfully completing a re-write exam will be given a "C" grade.

New: _____ Revision: X

APPROVED: [Signature] Chairperson Date: Jan 4/89



CALENDAR DESCRIPTION

FOREST BIOLOGY

BIO 126-3

COURSE NAME

COURSE NUMBER

PHILOSOPHY/GOALS:

A study of the science of life essential to a career in resource management; the classification of living organisms, particularly those of algae, higher plants, freshwater, and terrestrial animals found in Ontario forests and freshwater ecosystems; plant and animal life cycles, and introductory animal anatomy.

METHOD OF ASSESSMENT:

Evaluation

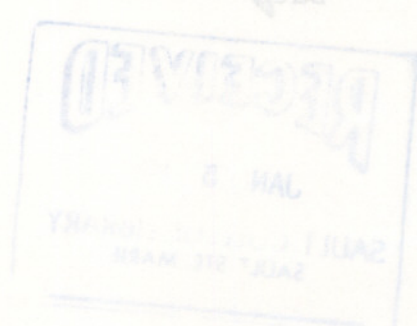
3 Term Tests	60%
Quizzes	20%
Labs, Lab Tests	20%
	<u>100%</u>

Grading

- A+= 90%
- A = 80%
- B = 70%
- C = 60%

Rewrites

Students receiving a final grade of 60% will pass the course. Students receiving a grade of 50-59% may be given an opportunity to write a rewrite examination on the entire course content. Students successfully completing a rewrite exam will be given a "C" grade.



APPROVED:

Chairperson

GUIDE FOR LAB DRAWINGS

SUPPLIES

Dissecting Kit

H pencil

Eraser

Plain bond paper

Metric ruler

General

ATTENDANCE at all classes is an essential component of this course.

LAB DRAWINGS - use only plain bond paper, one side only. All drawings will be done with an H pencil. All lettering will be freehand. Staple pages together (see guide for lab drawings).

- All lab drawings shall follow the format of the attached sample drawing.
- Title (see illustration)
1. Scientific name - must be underlined.
 2. Common name.
 3. Condition of specimen
(is it living, preserved, wet mount, prepared slides?)
 4. Portion of specimen
(is it a whole mount or a section; x-section, longitudinal section or a radial section?)
 5. View
(What view are you looking at - dorsal, ventral or lateral?)
 6. Sex
(male or female?)
 7. Scale
 8. What is the purpose of the drawing/lab?

GUIDE FOR LAB DRAWINGS

General

Our purpose is not to produce artists. What is desired is a clear-cut delineation of material seen and studied in the lab. Showing its proper form and proportion. As you study the material and make the drawings, checking the specimens for various parts, you will realize that drawings are excellent aids to learning. Your powers of observation should develop quite quickly.

Draw the material as you see it! The drawings must show what you see, and what you know. Do not copy from the textbook or other students work! All work should be done in the lab.

Format

All lab drawings shall follow the format of the attached sample drawing.

Title (see illustration)

1. Scientific name - must be underlined.
2. Common name.
3. Condition of specimen
(is it living, preserved, wet mount, prepared slide?)
4. Portion of specimen
(is it a whole mount or a section; x-section, longitudinal section or a radial section?)
5. View
(What view are you looking at - dorsal, ventral or lateral?)
6. Sex
(male or female?)
7. Scale
8. What is the purpose of the drawing/lab?

Shading (Stippling Style Only)

Keep drawings as simple as possible. Only stipple when necessary to show a difference in texture, colour or depth. Stipple deliberately holding pencil vertically. Placing the dots close together or further apart will give a variety of shading.

N.B. - FOLLOW THESE INSTRUCTIONS CAREFULLY UNTIL YOU ARE ABLE TO PUT THEM INTO EFFECT AUTOMATICALLY.

1. All lab drawings must be completed before the end of the lab.
2. Any labs requested to be handed in will be marked out of 10. Labs not received when requested will receive a 0.
3. Lab drawings are part of the course material and could be on a test.
4. Not all labs will be requested for marking. Labs not requested, will be discussed in class to allow students to correct and complete drawings.
5. Some labs will be marked using other procedures; eg., a quiz or lab may be inspected and checked as completed.
6. All labs must be completed before a grade can be given.
7. Individual labs and your lab book will be graded for accuracy, neatness, completeness and format.

SUBMISSION OF BIOLOGY LABS

1. All lab drawings must be completed before the end of the lab period.
2. Drawings may be requested at any time:
 - at the end of a lab
 - next week or at any later lab
 - keep all completed labs in your lab book, and bring to each class. Lab books may be requested for grading at anytime and must be complete.
3. Any labs requested to be handed in will be marked out of 10. Labs not received when requested will receive a 0.
4. Lab drawings are part of the course material and could be on a test.
5. Not all labs will be requested for marking. Labs not requested, will be discussed in class to allow students to correct and complete drawings.
6. Some labs will be marked using other procedures; eg., a quiz or labs may be inspected and checked as completed.
7. All labs must be completed before a grade can be given.
8. Individual labs and your lab book will be graded for accuracy, neatness, completeness and format.

COURSE OUTLINE

WEEK	TOPIC
1	Review the Kingdoms The Nucleus, Cell Division Mitosis and Meiosis Sexual and Asexual Reproduction
2	Compare Prokaryotic and Eukaryotic Cells The Viruses The Kingdom Monera - bacteria - blue green algae Introduction to the Kingdom Protista
3	Complete the plantlike Protista Introduce the Kingdom Plantae The Algae - lower nonvascular plants Comparison of Lower Life Forms from Selected Water Samples TEST
4	Kingdom Plantae Primitive Land Plants - liverworts - mosses - horsetails - ferns Comparison of Anatomy and Reproduction Strategies
5	Kingdom Plantae The Gymnosperms and Angiosperms Evolution, Anatomy and Reproductive Strategies
6	Complete Gymnosperms and Angiosperms Kingdom Fungi Examine Evolution and Classification and Reproductive Structures in 5 Major Phyla The Role of Decomposers in the Environment The Lichens TEST

COURSE OUTLINE

WEEK	TOPIC
7	Primitive Animals Kingdom Protista - Protozoans Kingdom Animalia - Sponges - Jelly fish - Coral - Roundworms The Evolution and Development of Reproductive Systems, Skeletal Structures Body Symmetry and Internal Organs
8	Kingdom Animalia - Earthworms - Molluscs Dissection of An Earthworm
9	Kingdom Animalia Phylum Anthropoda Evolution and Development of Respiratory Structures, Segmentation and Appendages - Insects - Arachnids Dissection of a Crayfish
10	Kingdom Animalia - Chordates - Fish Observe and Compare 3 Classes of Fish Dissection of a Fish
11	Kingdom Animalia - Amphibians - Reptiles Dissection of a Toad
12	Kingdom Animalia - Birds Introduction to Mammals Examine Tissues and Organ Systems in Mammals

WEEK

TOPIC

13

Kingdom Animalia
Dissection of a Rat
Identify and Study the Function of Major Tissues
and Organ Systems

14

Kingdom Animalia
Review Mammalian Anatomy
Complete Dissection of a Rat
Review, Compare and Contrast the Evolution and
Development of the 5 Kingdoms

FINAL TEST

WEEK	TOPIC
13	Kingdom Animalia Dissection of a Rat Identify and Study the Function of Major Tissues and Organ Systems
14	Kingdom Animalia Review Mammalian Anatomy Complete Dissection of a Rat Review, Compare and Contrast the Evolution and Development of the 2 Kingdoms
	FINAL TEST