

COURSE SYLLABUS: Economic Botany (BSC 405, 505)

TEXT: S - Simpson, B. and M. Conner-Ogorzaly. 2001. Economic Botany: Plants in Our World. 3rd Ed. McGraw-Hill, New York.

OTHER REFERENCES ON LIBRARY RESERVE

See Reading List

Sh - The Forest Belts of North America. IN: Sherry, 1972. Plants for Man. Prentice-Hall, Inc., New York.

TENTATIVE LECTURE TOPICS AND ACTIVITIES:

1. Introduction and objectives of the course
Reference material available
Responsibilities and course content
Abstracts (undergraduate students)
Research paper (graduate students)
Market surveys of botanical products
Discussion papers - To be assigned later in class
Group Project: Poster Preparation - To be assigned later
Grading procedure
2. Diversity in the plant kingdom (Handouts; S- 1-38)
Nature of angiosperms (flowering plants) and other seed plants
The cell, cell products and cell wall
3. Medicinal plants (S- 262-285)
History of plants in medicine
"Ethnobotanical Approach to Drug Discovery", by A. Cox and M. Balick. Discussion paper to be assigned in class.
CIBA Symposium. Discussion paper to be assigned in class.
4. Poisons and psychoactive drugs from plants (S- 286-312)
Insecticides from plants

EXAMINATION

DATE:

5. Origins of agriculture (S- 67-83; W- 39-58)
Origin of selected crop plants
Discussion papers to be assigned in class.

Page 2. Economic Botany

6. Grains and forage grasses (S- 107-135)
The grass plant
Major grain crops
Forage crops
7. Wood, wood products (S- 378-398) and forests (Sh- 54-82)

8. Fibers, dyes, inks and tannins (S- 355-377)
Classification, origin and use of plant fibers

EXAMINATION

DATE:

9. Stimulating Beverages (S- 313-331)
Coffee, tea, chocolate, mate, kola, guarana
Discussion paper to be assigned in class.

10. Alcoholic beverage (S- 332-354)
Beer and wine making - Guest Speaker

11. Spices, herbs and perfumes (S- 192-217)
History of spice trade
Distribution of spices in the world
Essential oils

IF TIME ALLOWS

12. Hydrogels, latexes, gums, resins (S- 243-261)
Natural rubber and balata

13. Uses of plants in the future (S- 458-478)
Plants as alternative sources of energy
Discussion paper to be assigned in class.

Abstracts, surveys and research papers due: Thursday, two week
before the last class day.

FINAL EXAMINATION (Not Comprehensive) - See final exam schedule