

Debre Tabor University
Faculty of Natural and computational Sciences
Department of Biology
Course syllabus for MSc Biology (Botany) Second Semester 2018/19 (2011 EC) Entry
Ethnobotany (Biol. 616) 2 Cr. Hrs. (5 ECTS)

Course Description

This course will deal with the origin, botany, utilization, cultivation and uses of plants; important firewood and timber-yielding plants and non-wood forest products (NWFPs); traditional herbal medicine; endangered and rare useful plants of Ethiopia; strategies for conservation of medicinal, spice and other useful plants; research methods in ethnobotany; roles of ethnobotany in biodiversity conservation and socio-economic development.

Course Objectives

After completing this course, students will be able to:

- ✓ Identify socially, economically and culturally useful plants;
- ✓ Distinguish traditional and modern healthcare;
- ✓ Describe ethnobotanical research methods;
- ✓ Apply ethnobotanical knowledge in biodiversity conservation and socio-economic development.

Course Content Breakdown

Unit 1. Origin, botany, utilization, cultivation and uses of plants: food, forage and fodder crops; fiber crops; vegetable oil-yielding crops; timber-yielding plants; non-wood forest products (NWFPs) such as bamboos, rattans, raw materials for paper making, gums, tannins, dyes, resins and fruits

Unit 2. Traditional Herbal Medicine: Indigenous systems of medicine; international plant drugs, their export and import; important controversial medicinal plants and their substitutes; endangered and rare plants of Ethiopia; role of plant drugs in pharmaceutical industry.

Unit 3. Strategies for Conservation of Medicinal, Spice and Other Useful Plants

Unit 4. Ethnobotanical Research Methods: Qualitative and quantitative research methods

Unit 5. Roles of Ethnobotany in Sustainable Development

Mode of Delivery

- ✓ Lectures
- ✓ Group discussion
- ✓ Field trip and report
- ✓ Group project

Assessment Criteria

Continuous assessment will be implemented in assessing student's performance. The details of assessment breakdown are given below.

Assignments	10%
Field trip report and presentation.....	15%
Term paper preparation and presentation.....	15%
Final exam	60%
Total.....	100%

Recommended Readings

- Cotton, C.M. (1996). *Ethnobotany: Principles and Applications*. John Willey & Sons, England.
- Cunningham, A.B. (2001). *Applied Ethnobotany: People, Wild Plant Uses and Conservation*. Earthscan Publication Ltd., London.
- Eldredge, N. (1992). *Systematics, Ecology, and the Biodiversity Crisis*. Columbia University Press., New York.
- Harding, L.E. and McCullum, E. (1994). *Biodiversity in British Columbia: Our Changing Environment*. Environment Canada, Canadian Wildlife Service, Canada.
- Martin, J.G. (2000). *Ethnobotany: A Methods Manual*. Chapman and Hall, USA.
- McMahon, M., Anton, M.K., and Vincent, R.E. (2001). *Hartmann's Plant Science: Growth, Development, and Utilization of Cultivated Plants*, 3rd ed. Prentice Hall Publication.
- Nautiyal, S. and Kaul A.K. (2003). *Non-Timber Forest Products of India*. Jyoti Pub, Dehra Dun, India.