



BROWARD COLLEGE COURSE OUTLINE

LAST REVIEW: 2008-2009

NEXT REVIEW: 2013-14

STATUS: A

(i.e. 2006-2007)

(i.e. 2011-2012)

(A, I, D)

COURSE TITLE: Plants and People

COMMON COURSE NUMBER: BOT 2800

CREDIT HOURS: 3

CONTACT HOUR BREAKDOWN

(Per 16 week term)

CLOCK HOURS:

(Voc. Course ONLY)

Lecture: 48

Lab:

Clinic:

Other:

PREREQUISITE(S): None

COREQUISITE(S): None

PRE/COREQUISITE(S): None

COURSE DESCRIPTION *(750 characters, maximum)*: This course will emphasize the role of plants in the development of civilizations, and the influence of plants on world history, politics, economics and culture. Will survey important plants and plant products from different cultures around the world.

General Education Requirements – Associate of Arts Degree (AA), meets Area(s): 4A Area

General Education Requirements – Associate in Science Degree (AS), meets Area(s): 4A Area

General Education Requirements – Associate in Applied Science Degree (AAS), meets Area(s): Area

UNIT TITLES

1. History of ethnobotany
2. Plant classification
3. Cultural uses of plants
4. Economic plants
5. Food and beverage plants
6. Material plants
7. Medicinal plants
8. Psychoactive plants

*** Complete the following only if course is seeking general education status ***

GENERAL EDUCATION Competencies and Skills *:

In the box to the right of the Competency/Skill, enter all specific student learning outcome unit numbers, as indicated in the course outline (i.e. 1.1, 2.7, 4.2, 4.0 and 5.12) that apply.

Course must include <u>all</u> of the following:	
1. Read with critical comprehension**	1.2, 1.4, 1.5 2.2, 2.4, 2.6, 2.7 3.1, 3.2, 3.3 4.3, 4.4, 4.5, 4.6 5.3, 5.7, 5.11 6.3, 6.4, 6.7, 6.8 7.3, 7.5, 7.6 8.4, 8.5
2. Write clearly and coherently**	1.4, 1.5 2.6 4.6 6.3 8.3, 8.4
3. Demonstrate literacy as appropriate within a given discipline** A – Information literacy B – Technology literacy D – Cultural literacy F – Scientific literacy	A - 1.5, 1.6; 2.2, 2.7; 4.5; 5.1, 5.4, 5.8, 5.9, 5.12; 6.1, 6.4, 6.5, 6.8; 7.5; 8.4, 8.5 B - 1.5, 1.6, 1.7 D – 1.5, 1.6; 3; 5.3, 5.4, 5.7, 5.8, 5.11, 5.12; 6.3, 6.4, 6.7, 6.8; 7.4, 7.7; 8.1 F - 2.2, 2.5, 2.7; 4.5; 5.1, 5.4, 5.8, 5.9, 5.12; 6.1, 6.4, 6.5, 6.8; 7.5, 7.7; 8.4, 8.5
4. Apply problem solving skills or methods to make informed decisions in a variety of contexts**	1.7 7.5, 7.7 8.5
Course must include at least <u>one</u> of the following:	
5. Differentiate between ethical and unethical behavior	3.4; 8.5
6. Demonstrate an understanding of the physical, biological, and social environments and how individual behaviors impact this complex system.	1.3, 1.4, 1.5, 1.6 3.1, 3.2, 3.3, 3.4 4.2, 4.4 5.2, 5.3, 5.4, 5.6, 5.7, 5.8, 5.10, 5.11, 5.12 6.2, 6.3, 6.4, 6.6, 6.7, 6.8 7.4, 7.6 8.3
7. Demonstrate an understanding of and appreciation for human diversities and commonalities.	1.3 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 4.4, 4.6 5.3, 5.4, 5.7, 5.8, 5.11, 5.12 6.3, 6.4, 6.7, 6.8 7.4, 7.6 8.2, 8.5
8. Speak and listen effectively.	

**General Education Competencies and Skills endorsed by 2010-2011 General Education Task Force*

****Required Competencies**

1) Read with critical comprehension.

The student will be introduced to the basic texts, concepts, vocabulary, and methods necessary for developing an understanding of the discipline and meeting the required benchmarks as stated in the course outline.

2) Write clearly and coherently.

The student will demonstrate an understanding and mastery of subject matter in a variety of ways, including writing. Writing activities may include both graded and ungraded essays, short answer quizzes, summaries, reactions, journals, and various other reports.

3) Demonstrate and apply literacy across all the disciplines (indicate which ones apply).

- a) **Information literacy** means understanding how to locate needed information, using the appropriate technology for the task, managing and evaluating the extracted information and using it effectively and ethically.
- b) **Technology literacy** is the ability to responsibly and effectively use appropriate technology to access, manage, integrate, or create information, and/or use technology to accomplish a given task.
- c) **Workplace literacy** is having the appropriate knowledge and skills to communicate and work with others effectively and perform job duties, whether it is through the use of computers and/or other technology.
- d) **Cultural literacy** is recognizing, understanding, and appreciating the similarities and differences between one's own culture and the cultures of others through a study of the arts, customs, beliefs, values, and history that define a culture.
- e) **Quantitative literacy** is having the ability to formulate, solve and interpret mathematical/statistical operations and graphical/tabular representations to make informed decisions.
- f) **Scientific literacy** means understanding the methodology and application of the scientific process, the physical and biological worlds, and recognizing that scientific knowledge is continuously updated or revised as new information is discovered.

g) Environmental literacy is creating a context within which environmental issues can be viewed, imparting knowledge to enhance one's ability to analyze the issues, make the connections between humans' decisions and actions and the challenges facing the environment, and instilling the desire to sustain the environment through ethical practices in both one's professional and personal lives.

4. Apply problem-solving skills or methods to make informed decisions in a variety of contexts.

The student will use acquired skills or methods to recognize, analyze, adapt, and apply critical thinking to solve problems and make informed decisions.

EVALUATION:

In the box to the right of the Methods of Assessment, enter all specific learning outcome numbers (i.e. 1.1, 2.7, 4.0, 4.2 and 5.12) that apply.

1. Portfolio	
2. Short essays	1.4; 4.6; 6.3; 7.5
3. Research Papers	1.5
4. Group projects	
5. Discussions (In class and online)	3.4; 4.5; 5.7; 6.4; 7.6; 8.2
6. Multiple Choice tests	2.2-.5; 5.1-.9; 6.1-.5; 8.1
7. Presentations	1.6-.7
8. Service Learning Projects	
9. Quizzes (pop, announced, etc.)	
10. Take-home tests	
11. Summaries, critiques, and analyses	1.4-.5-.6; 4.4-.6; 5.2-.4; 6.8; 7.2-.3
12. Reaction papers	
13. Surveys	
14. Performance	
15. Short answer tests	2.6; 8.4
16. Classroom debates and colloquia	
17. Blogs, wikis, web pages	
18. Other (Please explain)	

UNITS

Unit 1 History of ethnobotany

General Outcome:

- 1.0 The student shall: be able to demonstrate reading with critical comprehension by expressing an understanding of the ways in which plants and uses of plants have shaped past cultural and historical developments in a variety of ways, such as short essays or research papers.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student through an analysis of textbook readings and scholarly journal articles shall be able to:

- 1.1 explain what ethnobotany is.**
- 1.2 identify and compare the significant historical events of ethnobotany as a science.**
- 1.3 illustrate the way plants have been used to influence different cultures.**
- 1.4 analyze the ways in which plants have impacted world history.**
- 1.5 evaluate the cultural and historical roles of a selected plant utilizing appropriate University/College Library and scientific electronic databases.**
- 1.6 plan and create a presentation that evaluates the cultural and historical role of a selected plant.**
- 1.7 determine and employ methods of communication appropriate to the audience and purpose of the presentation.**
- 1.8 construct a set of criteria by which to judge the effectiveness of a presentation.**
- 1.9 evaluate a presentation using the set of criteria that had been constructed.**

Common Course Number: **BOT 2800**

Unit 2 Plant classification

General Outcome:

- 2.0 The student shall: be able to demonstrate reading with critical comprehension by expressing an understanding of how plants can be categorized in a variety of ways, such as multiple choice tests, or short answer quizzes.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student through an analysis of textbook readings shall be able to:

- 2.1 explain the science of taxonomy.**
- 2.2 categorize plants into the appropriate plant kingdom.**
- 2.3 describe selected species.**
- 2.4 compare selected plants.**
- 2.5 use scientific nomenclature.**
- 2.6 list, describe and contrast the major phyla of plants.**
- 2.7 name, explain and analyze the basic morphological, anatomical structures of plants.**

Common Course Number: **BOT 2800**

Unit 3 Cultural uses of plants

General Outcome:

- 3.0 The student shall: be able to demonstrate reading with critical comprehension by expressing knowledge of the ways in which uses of plants have shaped cultural developments in a variety of ways, such as in class discussions.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student through an analysis of assigned readings shall be able to:

- 3.1 identify and assess the historical roles that plants have played in cultures throughout the globe.**
- 3.2 explain and compare the current role that plants play in several cultures.**
- 3.3 illustrate and evaluate the impact of plants on cultural developments around the world.**
- 3.4 examine the personal, ethical, and ethnic values that shaped the use of plants in selected cultures.**
- 3.5 evaluate their own values in relation to their cultural uses of different plants.**
- 3.6 compare their own values to other individuals and cultures that impact their use of plants.**

Common Course Number: **BOT 2800**

Unit 4 Economic plants

General Outcome:

- 4.0 The student shall: be able to demonstrate reading with critical comprehension by expressing knowledge of economically important plants around the world in a variety of ways, such as in class discussions, or short essays.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student through an analysis of textbook and assigned readings shall be able to:

- 4.1 discuss the hunter and gathering origins of plant uses.**
- 4.2 explain the development of agricultural uses of plants.**
- 4.3 compare the efficacy of the hunter and gatherer versus the agricultural uses of plants.**
- 4.4 analyze the use of plants as a basis for material cultures.**
- 4.5 categorize economically important plants throughout the globe.**
- 4.6 analyze the patterns of use of these plants in selected cultures.**

Common Course Number: **BOT 2800**

Unit 5 Food and beverage plants

General Outcome:

- 5.0 The student shall: be able to demonstrate reading with critical comprehension by expressing knowledge of the uses of food and beverage plants in a variety of ways, such as multiple choice tests, or in class discussions.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student through an analysis of textbook and assigned readings shall be able to:

- 5.1 identify important grass, legume and starch plants .**
- 5.2 contrast the uses of these grass, legume and starch plants.**
- 5.3 evaluate the roles these grass, legume and starch plants had in different cultures.**
- 5.4 analyze the economic impact these grass, legume and starch plants have in selected cultures.**
- 5.5 describe important spice and herb plants.**
- 5.6 discuss and illustrate the uses of these spice and herb plants.**
- 5.7 contrast the roles these spice and herb plants had in different cultures.**
- 5.8 determine the economic impact these spice and herb plants have in selected cultures.**
- 5.9 identify important beverage plants.**
- 5.10 explain the uses of these beverage plants.**
- 5.11 compare the roles these beverage plants had in different cultures.**
- 5.12 examine the economic impact these beverage plants have in selected cultures**

Common Course Number: **BOT 2800**

Unit 6 Material plants

General Outcome:

- 6.0 The student shall: be able to demonstrate reading with critical comprehension by expressing knowledge of the uses of material plants in a variety of ways, such as multiple choice tests, short essays, or in class discussions.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student through an analysis of textbook and assigned readings shall be able to:

- 6.1 identify important cloth plants.**
- 6.2 discuss the uses of these cloth plants.**
- 6.3 compare the roles these cloth plants had in different cultures.**
- 6.4 assess the economic impact these cloth plants have in selected cultures.**
- 6.5 identify important wood plants.**
- 6.6 examine the uses of these wood plants.**
- 6.7 contrast the roles these wood plants had in different cultures.**
- 6.8 analyze the economic impact these wood plants have in selected cultures.**

Common Course Number: **BOT 2800**

Unit 7 Medicinal plants

General Outcome:

- 7.0 The student shall: be able to demonstrate reading with critical comprehension by expressing knowledge of medicinal plants in a variety of ways, such as constructing diagrams, short essays, or in class discussions.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student through an analysis of textbook and scholarly journal articles shall be able to:

- 7.1 compile a list of important medicinal plants.**
- 7.2 assess the ways in which medicinal plants are used.**
- 7.3 compare the purposes for which these medicinal plants are used.**
- 7.4 illustrate the cultural beliefs that substantiate the use of these medicinal plants.**
- 7.5 evaluate scientific research regarding the effectiveness of selected medicinal plants.**
- 7.6 contrast the cultural belief about the efficacy of selected medicinal plants to the scientific evidence of their pharmacological effectiveness.**
- 7.7 evaluate their own conclusions about selected medicinal plants based on scientific research.**

Common Course Number: **BOT 2800**

Unit 8 Psychoactive plants

General Outcome:

- 8.0 The student shall: be able to demonstrate reading with critical comprehension by expressing knowledge of psychoactive plant use by indigenous peoples in a variety of ways, such as multiple choice tests, in class discussions, constructing diagrams, or short answer quizzes.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student through an analysis of scholarly journal articles and assigned readings shall be able:

- 8.1 select the important psychoactive plants used by different indigenous peoples.**
- 8.2 interpret the cultural significance of these psychoactive plants.**
- 8.3 illustrate the ways in which psychoactive plants are currently used.**
- 8.4 categorize and explain the pharmacology of selected psychoactive plants.**
- 8.5 compare the personal, ethical, aesthetic, cultural and scientific reasons for using a psychoactive plant.**