Fall 9-1-2000

PHAR 324.01: Medicinal Plants

Rustem S. Medora
University of Montana - Missoula, rustem.medora@umontana.edu

Let us know how access to this document benefits you.
Follow this and additional works at: https://scholarworks.umt.edu/syllabi

Recommended Citation
https://scholarworks.umt.edu/syllabi/5294

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
# TENTATIVE SCHEDULE - FALL 2000
## MEDICINAL PLANTS
### PHARMACY 324

**Instructor:** Rustem S. Medora, Ph.D.

**OFFICE HOURS:** Tuesday & Thursday, 2:00-5:00 PM

**Appointments Preferred**

**Text:**
"Tyler's Herbs of Choice: The Therapeutic Use of Phytomedicinals" (1999)

**Optional Texts:**

**Books on Reserve:**
2. Foster & Tyler "Tyler's Honest Herbal" (1999)
5. Ray & Ksir "Drugs, Society & Human Behavior" (1999) -----Check PHAR 110

<table>
<thead>
<tr>
<th>DATE</th>
<th>LECTURE/SUBJECT</th>
<th>DATE</th>
<th>LECTURE/SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>J 9/6</td>
<td>History of Pharmacy/Terminology</td>
<td>Mon 10/23</td>
<td>Plant Drugs/Respiratory System</td>
</tr>
<tr>
<td>Fri 9/8</td>
<td>&quot;</td>
<td>Wed 10/25</td>
<td>&quot;</td>
</tr>
<tr>
<td>Mon 9/11</td>
<td>Harvesting &amp; Preparation</td>
<td>Fri 10/27</td>
<td>Plant Drugs/Cardiovascular System</td>
</tr>
<tr>
<td>Wed 9/13</td>
<td>Dr. Cathy Bartels, Literature Research</td>
<td>Mon 10/30</td>
<td>&quot;</td>
</tr>
<tr>
<td>Fri 9/15</td>
<td>Harvesting &amp; Preparation</td>
<td>Wed 11/1</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>Depart for Trout Lake, WA</td>
<td>Fri 11/3</td>
<td>Dr. Ethan Russo</td>
</tr>
<tr>
<td>9/16-9/17/00</td>
<td>TROUT LAKE</td>
<td></td>
<td>&quot;Plants Used in Neurology&quot;</td>
</tr>
<tr>
<td>Mon 9/18</td>
<td>Economic Importance</td>
<td>Mon 11/6</td>
<td>Plants Used in Neurology</td>
</tr>
<tr>
<td>Wed 9/20</td>
<td>Importance of Ethnobotany</td>
<td>Wed 11/8</td>
<td>EXAM II</td>
</tr>
<tr>
<td>Fri 9/22</td>
<td>Basic Anatomy/Physiology</td>
<td>Fri 11/10</td>
<td>HOLIDAY-VETERAN'S DAY</td>
</tr>
<tr>
<td>Mon 9/25</td>
<td>&quot;</td>
<td>Mon 11/13</td>
<td>Plant Drugs/Urogenital System</td>
</tr>
<tr>
<td>Tues 9/26</td>
<td>Visit to Herbal Farm in Hamilton</td>
<td>Wed 11/15</td>
<td>&quot;</td>
</tr>
<tr>
<td>Wed 9/27</td>
<td>CNS Plant Depressants</td>
<td>Fri 11/17</td>
<td>Flavors &amp; Spices</td>
</tr>
<tr>
<td>Fri 9/29</td>
<td>&quot;</td>
<td>Mon 11/20</td>
<td>Adaptogens</td>
</tr>
<tr>
<td>Mon 10/2</td>
<td>CNS Stimulants</td>
<td>Wed 11/22</td>
<td>STUDENT TRAVEL DAY</td>
</tr>
<tr>
<td>Wed 10/4</td>
<td>&quot;</td>
<td>Fri 11/24</td>
<td>HOLIDAY-THEANKSGIVING</td>
</tr>
<tr>
<td>Fri 10/6</td>
<td>Plants That Affect the Peripheral NS</td>
<td>Mon 11/27</td>
<td>Plant Drugs/Diabetes</td>
</tr>
<tr>
<td>Sat 10/8</td>
<td>Visit to MSU Labs</td>
<td>Wed 11/29</td>
<td>Plant Drugs/Cancer</td>
</tr>
<tr>
<td>Mon 10/9</td>
<td>Systems of Traditional Medicine</td>
<td>Fri 12/1</td>
<td>Psychoactive Plants</td>
</tr>
<tr>
<td>Wed 10/11</td>
<td>&quot;</td>
<td>Mon 12/4</td>
<td>&quot;</td>
</tr>
<tr>
<td>Fri 10/13</td>
<td>Dr. Georgia Milan: Integrated Medicine</td>
<td>Wed 12/6</td>
<td>Oral Reports</td>
</tr>
<tr>
<td>n 10/16</td>
<td>EXAM I</td>
<td>Fri 12/8</td>
<td>&quot;</td>
</tr>
<tr>
<td>wed 10/18</td>
<td>Plant Drugs/Digestive System</td>
<td>Mon 12/11</td>
<td>&quot;</td>
</tr>
<tr>
<td>Fri 10/20</td>
<td>&quot;</td>
<td>Wed 12/13</td>
<td>Poisonous Plants</td>
</tr>
<tr>
<td></td>
<td>&quot;</td>
<td>Fri 12/15</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;</td>
<td>Wed 12/20</td>
<td>FINAL EXAM 8:10-10:10</td>
</tr>
</tbody>
</table>
MONTHLY REPORTS
PHARMACY 324 -- MEDICINAL PLANTS

Students must type one-page (or two double-spaced pages) monthly report on four (4) of the topics listed below. Reference citations must be included.

1. **Complementary Methods of Therapy**
   References:
   a. Steiner’s "Folk Medicine" (on reserve)
   b. Micozzi’s "Physicians Guide to Alternative Medicine" (on reserve)
   c. Kastner & Burroughs’ "Alternative Healing" (reference section)
   d. Arvigo’s audio cassette on "Alternative Medicine" New Dimension (on reserve)
   e. Andrews’ "A Bibliography on Herbs, Herbal Medicine, Natural Foods & Unconventional Medical Treatment" (reference section)
   f. Folder on Complementary Methods (on reserve)
   g. Lectures by speakers at the Mansfield Conference (1998)
   h. Takemi et. al. "Herbal Medicine: Kampo, Past & Present"
   i. Micozzi’s "Fundamentals of Complementary & Alternative medicine" (on reserve)

2. **The Herbal Regulatory Dilemma**
   References:
   a. Tyler, V.E. "Herbs of Choice" Chapter 2
   b. HerbalGram #32, pages 18-24 & 58 and HerbalGram #39, pages 28-31
   c. Dietary Supplement Health & Education Bill of 1994 (on reserve)
   d. Tylers’ "Honest Herbal" (on reserve)
   e. Medora, R. “DSHEA of 1994”
   f. HerbalGram #47 & 48

3. **The Need for Conservation of Medicinal Plants**
   References:
   a. Videos #9, 10, 11, 12, 14, 15, 17, 18, 19; Audio cassettes 1 & 3
   b. Plotkin’s "Tales of a Shaman’s Apprentice" & "Medicine Quest" (on reserve)
   c. Folder on Conservation (on reserve)
   d. Grifo & Rosenthal’s "Biodiversity & Human Health"
   e. Balick, M.J. et al., "Medicinal Resources of the Tropical Forest" (on reserve)
   f. Balick & Cox’s, "Plants, People & Culture" (on reserve)
   g. Cox’s "Nafanua" (on reserve)

4. **Functional Foods**
   References:
   a. Audio cassette "Healthy Foods" (SS 126)
   b. Folder on Nutraceuticals (on reserve)
   c. RDA (on reserve)
   d. NRC’s "Carcinogens & Anticarcinogens in the Human Diet"
   e. Nutrition & The Amazon Food Pharmacy (video on reserve)
5. Flavors and Spices
   References:
   a. “Essential Oils of Central and North America” (video on reserve)
   b. Folder on Flavors and Spices (on reserve)
   c. Gunther’s “The Essential Oils” Volume 1-6 (Mansfield Library)
   d. Books in the Mansfield Library under the title “Aromatherapy . . .”
   e. “Illustrated Encyclopedia of Essential Oils” (on reserve)

6. Hallucinogens
   References:
   a. LSD/Ergot (video on reserve)
   b. “Murder, Magic and Medicine” (on reserve)
   c. Folder on Hallucinogens (on reserve)
   d. Check books by Richard E. Schultes
   e. Check books in the Mansfield Library under the title “Hallucinogens . . .”

7. Special Forest Products (Medicinal Species)
   References:
   a. Steven Foster’s “Forest Pharmacy” (on reserve)
   b. “Special Forest Products: Biodiversity Meets the Marketplace” (on reserve)
   c. Folder on Special Forest Products (on reserve)
   d. Check books in the Mansfield Library on this topic

8. Intellectual Property Rights
   References:
   a. “Biodiversity Prospecting: Using Genetic Resources . . .” (on reserve)
   b. “Timber, Tourists & Temples” (on reserve)
   c. Folder on Special Forest Products (on reserve)
   d. Check books in the Mansfield Library and the Law Library on this topic

9. Special Topics
    Check with the instructor

NOTE:

<table>
<thead>
<tr>
<th>REPORTS</th>
<th>DUE DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Mon., Sept. 25, 2000</td>
</tr>
<tr>
<td>#2</td>
<td>Fri., Oct. 20, 2000</td>
</tr>
<tr>
<td>#3</td>
<td>Fri., Nov. 17, 2000</td>
</tr>
<tr>
<td>Term Paper</td>
<td>Fri., Dec. 8, 2000</td>
</tr>
</tbody>
</table>
VIDEOS ON RESERVE

1. The Opium Poppy VT07751
2. Aspirin/Willow VT07752
3. LSD/Ergot VT07753
4. Quinine VT07754
5. Digitalis VT07755
6. Belladonna/Mandragora VT07756
7. Coca VT07757
8. The Yew VT07758
9. Powerful Medicine VT02246
10. Jungle Pharmacy VT02733
11. Secrets of the Rain Forest VT04617
12. 20th Century Medicine Man
13. Essential oils of North & Central America VT03131
14. Plant Drugs, Healing Herbs & Phytomedicinals VT06615
15. Pharmacology & Therapeutic Application of Plant Drugs VT06614
16. Nutrition & The Amazon Food Pharmacy VT06616
17. Tropical Medicine in the Rain Forest VT06617
   A Walk Through Aceer (Useful Plant Trail) VT06618
19. Ethnomedical Field Research in the Amazon VT06619
20. Presidential Lecture (Varro Tyler) VT07333
21. Edible Wild Plants VT02117

AUDIO CASSETTES ON RESERVE

1. The Diversity of Life AT 04304/1996-05-10
2. The Medicine Garden
3. The Recovery of the Commons

MOVIE ON RESERVE (NOVEMBER 8 - DECEMBER 10, 1999)

1. Poisonous Plants
Exams and Grading:* Grades will be based on two mid-term exams and a final, three monthly reports, a term paper (INSTRUCTOR MUST APPROVE THE TOPIC FOR THE TERM PAPER) and participation in class. At least one of the reports must be presented to the class orally. Participation in class discussions and attendance in all class-related activities is mandatory.

Students are required to take all exams on scheduled days and times. The first two exams are scheduled at regular class times.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXAM 1</td>
<td>20%</td>
</tr>
<tr>
<td>EXAM 2</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Monthly Reports</td>
<td>18%</td>
</tr>
<tr>
<td>Term Paper</td>
<td>12%</td>
</tr>
<tr>
<td>Attendance/Participation</td>
<td>10%</td>
</tr>
</tbody>
</table>

P/NP: A “C” grade is a passing grade in the P/NP option.

Field Trips: Three field trips are being planned on the weekends in September and October. Students must participate in at least one field trip. Tentative dates for field trips are September 15-17, September 26, and October 7, 2000.

*Graduate Students: Graduate students will be graded separately and must maintain scores in the upper 20% of the class. They must write a COMPREHENSIVE TERM PAPER including an extensive bibliography.

Time/Commitment: You will need to devote extra time to view the displays, watch the movies, and participate in weekend field trips.


LAST DAY TO DROP THE CLASS IS MONDAY, OCTOBER 16, 2000