

Faculty Senate Curriculum Committee

Life Sci

Approval Form

(25) b

Proposal Title: Pharmacology

Sponsor(s): _____ Dept.: _____

Check one: Course Specialization Concentration Achievement Certificate
 Certification Program Major Program Minor Change
(please name: deletion or credit/title/catalog change)

Undergraduate Graduate 3 Credit Hours

<p>Step 1 (Department)</p> <p><input type="checkbox"/> Approved _____ Date</p> <p><input type="checkbox"/> Not Approved</p> <p>_____ Dept. CC Chairperson</p> <p><input type="checkbox"/> Reviewed _____ Date</p> <p><i>Temporary</i></p> <p>_____ Chairperson, Dept.</p>	<p>Step 2 (Receipt)</p> <p>SCC# <u>86-27-44</u></p> <p>Proposal Received <u>2/2/87</u> Date</p> <p><u>Brenda A. Boley</u> Chairperson, SCC</p>	<p>Step 3 (School CC)</p> <p>Reviewed <u>9/3/87</u> Date</p> <p><input checked="" type="checkbox"/> Approved</p> <p><input type="checkbox"/> Not Approved</p> <p>Comments: <i>The original version of the original document.</i></p> <p><u>Alfred C. Shaw</u> Chairperson, School Curr. Comm.</p>
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Step 4 (Academic Dean) Comments:

Reviewed 3-12-87
Date

John Parkin
Signature, Dean of School

Step 5 (SCC)

Open Hearing 4/9/87 Approved by Senate Curriculum Committee 4/9/87
Date Date

Returned to sponsor(s) for the following reasons:
Need a minimum of a laboratory course in Biology as a prerequisite -

Step 6 (Faculty Senate)

Presented to Faculty Senate : 4/13/87 Approved Not Approved
Date

Notification to Vice-President Academic Affairs 4/15/87 Brenda A. Boley
Date Signature, SCC Chairperson

Step 7 (Vice-President for Academic Affairs)

Received 4/23/87
Date

Approved Yes No

If no, reasons are as follows:

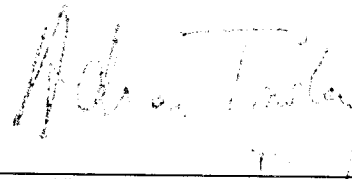
Student credit hours 3

Faculty load hours 3

Equalized credit hours 3

Official copy and approval sheet filed 4/23/87
Date

Signature



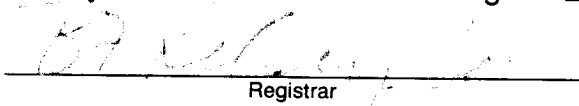
Vice-President for Academic Affairs

Registrar

Approved course description received _____
Date

Hegis Taxonomy and Course Number assigned _____

Signature



Registrar

Date

Notification forwarded: Senate Curriculum Committee Chairperson, Department Chairperson(s), Academic Dean(s), Registrar, Sponsor(s).

A COURSE PROPOSAL

PHARMACOGNOSY

-Dr. Harry Gershenowitz
Department of Life Sciences
Glassboro State College

1a. Course Title: Pharmacognosy

1b. Dr. Harry Gershenowitz is a Full Professor in the Department of Life Sciences. He is initiating the course Pharmacognosy which is sponsored by the Department of Life Sciences. Furthermore, he is a registered pharmacist (1950) and the only Diplomate in Pharmacy (1969) for the eight southern counties of New Jersey. Also, he is the only qualified pharmacognosist among Glassboro State College faculty. Dr. Gershenowitz was the only lecturer in Pharmacology at the Drug Information Education Workshop held at Glassboro State College during the early 1970s. He has delivered over 30 public lectures as well as published several articles on the topic entitled "Generic Medicine for the Senior Citizen". In addition, he recently completed an advanced course in pharmacology during August 1986. He received a Certificate of Achievement on November 1986 for completing the requirements of the program entitled "Basic Pharmacology of Psychotropic Drugs".

1c. Course Level: Undergraduate (Sophomore, Junior, Senior) - 3 S.H.

1d. Curriculum Effect: Free Elective

1e. Prerequisites: (1) Biology I or the equivalent of a laboratory course in Biology and

(2) Biology II or the permission of the instructor.

1f. Suggested Time and Scale of Implementation: A single section scheduled for Spring 1988.

1g. Adequacy: The Department of Life Sciences has provided funding for the purchase of demonstration materials for the course. A lecture room in Bosshart Hall is adequate for this lecture-demonstration course. Savitz Library's reference source materials are adequate and additional pharmacopoeias have been purchased.

2. Rationale:

The study of pharmacognosy will enhance the curricular offerings in Botany and in addition will enhance the background of our students who apply to professional schools. This course will build on the knowledge of students who have studied Introduction to Botany, Biology I, Biology II, Human Biology and Human Physiology. The course is structured for pre-professionals, nursing, and interested students majoring in the biological or physical sciences.

A pharmacognosist has expert knowledge of the chemical constituents of plants, how to go about identifying new chemicals and even molecules which occur in plants, and how various cultures use plants to their benefit, with particular interest in their medical applications. A pharmacognosist may, for instance, travel through a rural area such as Appalachia, or a remote jungle area, learning how the residents use plants for healing, and observe their actual use. He/she would then collect these herbs, take them back to a laboratory and subject them to various sophisticated analyses.

Most typically, a pharmacognosist is interested in isolating and describing the active ingredients or "bioactive molecules" of plants. And, his or her investigations might lead to attempts to synthesize these bioactive molecules, or to experiment with changing them slightly to achieve certain effects, such as increased activity, less toxicity, and greater stability of curative drugs.

Pharmacognosists could promote their field by serving as consultants on films, and on specialized publications. Because of the broad nature of problems in pharmacognosy, an undergraduate course would stand on its own and offer many employment opportunities to our students. The development, dissemination, and wise application of pharmacognostic information is essential for survival in a chemical age. This study is beneficial for a stronger life science curriculum in the School of Liberal Arts and Sciences.

3a. Objectives:

1. To provide an understanding of the role of pharmacognosy in American society.
2. To promote thought, raise questions, and confront issues relating to the use of drugs in our society.
3. To provide guided training in the development of scientific attitudes and in the use of the scientific method.
4. To appreciate the contributions of scientists.
5. To enhance one's development of a botanical vocabulary.
6. To give practice in the use of botanical and pharmacognostic skills.
7. To develop interest in the fields of botany and pharmacognosy for a vocation.

3b. Topical Outline

1. Glossary of Terms
2. Classification of the Plant Kingdom
3. History
 - (a) Europe
 - (b) America
 - (c) American Indian medicine
 - (d) Early colonial and pioneer America
 - (e) America today
4. Preparing Plants for Medicinal Use
 - (a) Collecting plants
 - (b) Preserving plants
 - (c) A simple solar herb dryer
 - (d) Compound medicines
5. Familiar Medicinal Plants
6. Poisonous Plants
7. Remedial Plants
 - (a) Nervous system
 - (b) Heart and circulation
 - (c) Metabolism
 - (d) Special sensory organs: Eye and Ear
 - (e) Oral hygiene
 - (f) Gastrointestinal tract
 - (g) Urogenital system
 - (h) Skin
 - (i) Deterrents: Antibiotics
 - (j) Antiseptics
 - (k) Pesticides
8. Psychoactive Plants
 - (a) Stimulants
 - (b) Hallucinogens
 - (c) Depressants
9. Marijuana
10. Heroin and Methodone
11. Cocaine

3c. Evaluation and Grading Procedures of Students:

The student will be required to prepare a medicinal herbarium collected in the southern Pine Barrens of New Jersey. The submitted herbarium will be 20 percent of the final grade. Also, there will be two written examinations.

3d. Course Evaluation

A questionnaire will be issued to the students during the final week of class. A six-month follow-up survey will be conducted. The contents of the survey will help to revise the curriculum by adding materials from those students in professional schools and/or professional positions.

Evaluation of Course (Pharmacognosy) Characteristics:

1. Are objectives clear?
2. Is the amount of work required appropriate for credits received?
3. Was assigned reading difficult?
4. Are tests fair?
5. Rate textbook contribution to course.
6. General course rating.
7. How knowledgeable was the instructor about the subject matter?
8. How well was the information presented?
9. Did you feel that the instructor effectively answered the questions raised?
10. What would you say are the strengths of the course?
Please be specific.
11. What would you say were the weaknesses of the course?
12. Do you have any additional comments or recommendations about the course?

4a. Consultation:

1. Dr. John W. Alden, Director, Substance Abuse Services
Cooper Hospital, University Medical Center
Associate in Psychiatry

2. Dr. Richard J. Meagher, Chairperson
Department of Life Sciences
Glassboro State College
3. Dr. Morton Tener, Professor
Department of Secondary Education
Glassboro State College
4. Dr. Elliott Schreiber, Associate Professor
Department of Psychology
Glassboro State College

4b. (Please see enclosed letters)

5a. Methodology:

Methodology will include lectures, discussions, local walks, and visiting lecturers.

5b. Textbook:

Walter H. Lewis and Henry P. F. Elvin-Lewis, Medical Botany
(New York: John Wiley and Sons, 1977)

The following works will help to provide the students with the background information necessary to understand the course.

1. Noel L. Allport, The Chemistry and Pharmacy of Vegetable Drugs, Chemical Publishing Company, Inc. 1944.
2. L. H. Baily. How Plants Get Their Names, Dover Publications, 1963.
3. Herbert G. Baker, Plants and Civilization, Wadsworth Publishing Company, 1965.
4. Steward Brooks, Civil War Medicine, Charles C. Thomas Publishers, 1966.
5. Nelson Coon, Using Plants for Healing, Rodale Press, 1979.
6. David Conway, The Magic of Herbs, E. P. Dutton & Company, Inc. 1973.
7. Lyle E. Craker (ed.), Herbs, Spices and Medicinal Plants (Vol. I), Oryx Press, 1986.
- Adele Dawson, Health, Happiness and the Pursuit of Herbs, The Stephen Greene Press, 1980.
8. Francis Denmore, How Indians Use Wild Plants, Dover Publication, 1974.
10. Alan Eshleman, Poison Plants, Houghton Mifflin Company, 1979.
11. Norman Farnsworth, "Hypoglycemic Plants", Title and Till, Vol. 57, September, 1971, pp. 53-56.
12. Jose Soares Fernandes, "Jungle Medicine", Modern Pharmacy, March, 1948, pp. 4-6.
13. Sigmund Freud, Cocaine Papers, New American Library, 1974.
14. Peter T. Furst, Hallucinogens and Culture, Chandler & Sharp Publishers, Inc. 1976.
15. Edmund N. Gathercoal and Elmer H. Wirth, Pharmacognosy, Lea & Febiger, 1936.
16. Harry Gershenowitz, "The Algonkian Drug Formulary," The Bulletin of the Gloucester County Historical Society, September 1985, pp. 70-71.
- /. _____, "Romani Medicine", South Jersey Magazine, Summer, 1986, p. 29.

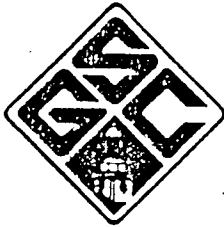
18. John Grabowski, Cocaine: Pharmacology Effects, and Treatment of Abuse, National Institute of Drug Abuse, Washington, D.C., 1984, Savitz Library Doc. #HE 20.3216.
19. Asa Gray, Manual of Botany, Eighth Edition, Van Nostrand Company, 1970.
20. Lester Grinspoon, Marijuana Reconsidered, Harvard University Press 1971.
21. Lester Grinspoon & James B. Bakalar, Cocaine, A Drug and its Social Evolution, Basic Books, Inc., Publishers, 1975.
22. Michael J. Hamer (Ed.) Hallucinogens and Shamanism, Oxford University Press, 1973.
23. Ellison Hawks, Pioneers of Plant Study, Books for Libraries Press, 1969.
24. Homeopathic Pharmacopoeia of the United States (latest edition).
25. Robert M. Julien, A Primer of Drug Action, William Freeman and Company, 1973.
26. John Kaplan, The Hardest Drug: Heroin, University of Chicago, 1983.
27. Martin Kaufman, Homeopathy in America, The Johns Hopkins Press, 1971.
28. Walter H. Lewis and Memory P. F. Elvin-Lewis, Medical Botany, John Wiley & Sons Publishers, 1977.
29. Leo Lionni, Parallel Botany, Knopf Publishers, 1977.
30. Geoffrey Marks and William K. Beatty, The Medicinal Gardens, Charles Scribner's Sons, 1971.
31. V. Nitton, Nitton's Practical Modern Herbal, W. Foulsham & Company, Ltd., 1976.
32. Julia F. Morton, Major Medicinal Plants: Botany Culture and Uses, Charles C. Thomas Publishers, 1973.
33. Gabriel Nahas, Marijuana--Deceptive Weed, Raven Press, Publishers, 1973.
34. David B. Sabine, "Medicine in the Revolution", American History Illustrated, June, 1973, pp. 37-44.
35. Virginia Scully, A Treasury of American Indian Herbs, Crown Publishers, 1970.

36. Bryon Stinson, "The Army Disease", American History Illustrated, December, 1971, pp. 10-17.
37. Norman Taylor, Plant Drugs That Changed the World, Dodd, Mean & Company, 1965.
38. Maria Treben, Health Through God's Pharmacy, Wilhelm Ennsthaler, Austria, 1984.
39. Tyler, Brady and Robbers, Pharmacognosy, Lea & Febiger, 1984.
40. Epidemiology of Heroin 1964-1984, U. S. Department of Health and Human Services, Division of Epidemiology, 1985.
41. The Dispensatory of The United States of America (latest edition).
42. The Pharmacopoeia of The United States of America (latest edition).
43. The National Formulary-by authority of the American Pharmaceutical Association (latest edition).

Catalog Description:

Pharmacognosy (3 s.h.). Prerequisites: (1) Biology I or the equivalent of a laboratory course in Biology and
(2) Biology II or the permission of the instructor

A lecture-demonstration course designed to study the science which embraces the history, source, cultivation, collection, preparation, distribution, commerce, identification, composition, purity and preservation of drugs of vegetable and animal origin.



GLASSBORO STATE COLLEGE

Psychology Department

Glassboro, New Jersey 08028-1763
(609) 863-6016/6017

October 3, 1986

To Whom It May Concern:

I am an Associate Professor of Psychology at Glassboro State College.

Dr. Harry Gershenowitz has asked me to review his proposal for a new course entitled "Pharmacognosy", which would be offered in the Spring or Fall semester of 1987, at Glassboro State College. This course would be in the Life Sciences Department.

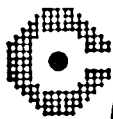
The course proposal is well developed and is organized on an adequate level for our students. It has fine content and detailed objectives for college students. The course also has elaborate references.

I am happy to recommend this course proposal for adoption in the Life Sciences Department at Glassboro State College.

Sincerely,

Elliott H. Schreiber
Elliott Schreiber, Ed.D.
Associate Professor, 1981
DIPLOMATE, ABPP.

ES:klh



Department of Psychiatry

September 15, 1986

RE: Dr. Harry Gershenowitz

To Whom It May Concern:

This is to verify that Dr. Harry Gershenowitz attended a six hour seminar on the Pharmacology of Alcohol, presented by myself on August 27 & 28, 1986.

Dr. Gershenowitz is very astute in the science of pharmacology of abuse substances. I totally support his proposal to present a course in pharmacology at Glassboro State College.

Respectfully submitted,

John W Alden

John W. Alden
Director, Substance Abuse Services
Cooper Hospital/University Medical Center
Associate in Psychiatry
Robert Wood Johnson Medical School at Camden
(formerly Rutgers Medical School)

JWA/pas
JWA49

2/20/50

Harry:

This is to inform you that I support your intention of developing a 3 credit non laboratory course in pharmacognosy. I also will support your request for \$402.00 for the purchase of crude natural drugs which will be used for demonstration purposes in lecture.

Richard Meagher



GLASSBORO STATE COLLEGE

Curriculum and Instruction: Secondary Education Department
Glassboro, New Jersey 08028-1752 (609) 863-6071

October 2, 1986

To Whom It May Concern

Dr. Morton Tener

From: Dr. Morton Tener, Secondary Education Dept.

RE: TO SUPPORT THE COURSE, PHARMACOGNOSY

I would like to offer my assessment and support for the course, Pharmacognosy, developed by Dr. Harry Gershenowitz. Such a course has related content for many of the life science courses and life science careers for future life science majors.

The course offers in addition to classroom participation "hands on" activities through action research (field work experiences, herbarium collection and laboratory analyses).

As Dr. Gershenowitz cites, the course has current value regarding the abuse of drugs, the cruciality of identifying food substances the public is consuming and the need to identify particular medicinal drugs for all age groups.

This also would be valuable for the teaching profession. Young people should be armed with valid information in order to help build a better society. Also, this course can stimulate a greater respect for what life science disciplines could offer.

This course has all of the ingredients of a solid syllabus; valuable objectives, variety of activities, sound evaluation techniques and follow-up.

Because of the above reactions, I forward my unreserved support for Dr. Harry Gershenowitz's efforts.