California Sate University Channel Islands

NEW COURSE PROPOSAL

Courses must be submitted by November 9, 2007, to make the next catalog production

DATE (*Change if modified*) OCTOBER 2, 2007 REV 12.5.07
PROGRAM AREA(S) BIOLOGY

1. Catalog Description of the Course. *[Follow accepted catalog format.]*

Prefix(es) (Add additional prefixes if cross-listed) **BIOL Course No. 318**
Title: MEDICAL MYCOLOGY Units: 4
☒ Prerequisites BIOL 200
☐ Corequisites
☐ Consent of Instructor Required for Enrollment
Description (Do not use any symbols): **Surveys the structure, nutritional requirements, ecology, and economic importance of fungi. Topics will include the impact of fungi both on natural ecosystems and human civilization with emphasis on the biology of fungi causing major diseases in humans.**

Grading Scheme:
☒ A-F Grades
☐ Credit/No Credit
☐ Optional (Student Choice)

Repeatability:
☐ Repeatable for a maximum of units
Total Completions Allowed
☐ Multiple Enrollment in Same Semester

Lab Fee Required: ☒

Mode of Instruction/Components (*Hours per Unit are defaulted*).

	Units	Hours per Unit	Benchmark Enrollment	Graded Component	CS & HEGIS # (Filled in by the Dean)
Lecture	3	1	24	☒	
Seminar				☐	
Laboratory	1	3	24	☒	
Activity				☐	
Field Studies				☐	
Indep Study				☐	
Other Blank				☐	

The following two lines will be filled out internally based on the Mode of Instruction data directly above.
Three hours lecture per week (*Use 2nd line only if necessary*)
Three hours laboratory per week

Course Attributes:

☐ **General Education Categories**: All courses with GE categories notations (including deletions) must be processed at the GE website: http://summit.csuci.edu/geapproval. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing.

A (English Language, Communication, Critical Thinking)
A-1 Oral Communication ☐
A-2 English Writing ☐
A-3 Critical Thinking ☐
B (Mathematics, Sciences & Technology)
B-1 Physical Sciences ☐
B-2 Life Sciences – Biology ☐
B-3 Mathematics – Mathematics and Applications ☐
B-4 Computers and Information Technology ☐
C (Fine Arts, Literature, Languages & Cultures)
C-1 Art ☐
C-2 Literature Courses ☐
C-3a Language ☐
C-3b Multicultural ☐
D (Social Perspectives) ☐

E (Human Psychological and Physiological Perspectives) ☐

UDIGE/INTD Interdisciplinary ☐
Meets University Writing Requirement ☐
Meets University Language Requirement ☐

☐ American Institutions, Title V Section 40404: ☐Government ☐US Constitution ☐US History
Refer to website, Exec Order 405, for more information: http://senate.csuci.edu/comm/curriculum/resources.htm
☐ Service Learning Course

3. Justification and Requirements for the Course. (Make a brief statement to justify the need for the course)

A. Justification: This is a required course for Biology majors with an Emphasis in Clinical Lab Science and allied health students. It would be a valuable elective for Biology majors. Students need this course on their record to gain access to degree programs in Clincal Lab Science or Public Health Microbiology.

B. Degree Requirement: ☒ Requirement for the Major/Minor ☒ Elective for the Major/Minor

Note: Submit Program Modification if this course changes your program.

4. Learning Objectives. (B*ullets, will occur upon carriage return*)

Upon completion of the course, the student will be able to:

- Describe how and why fungi impact our lives.
- Determine how molds differ from other microbes/ bacteria
- Classify molds
- Identify characteristics of the major fungal groups
- Identify major types of pathogenic species
- Identify disease(s) produced
- State the major features of fungal pathology

5. Course Content in Outline Form. *[Be as brief as possible, but use as much space as necessary]*

I. Introduction to Mycology; Major Groups of Fungi
II. Introduction to Higher (True) Fungi
III. Deuteromycetes: Hyphomycetes
IV. Deuteromycetes: Coelomycetes
V. Ascomycetes: Hemiascomycetes
VI. Ascomycetes: Plectomycetes
VII. Ascomycetes: Erysiphales, Meliolales, and Laboulbeniales
VIII. Ascomycetes: Pyrenomycetes
IX. Ascomycetes: Loculoascomycetes
X. Ascomycetes: Discomycetes
XI. Lichens
XII. Basidiomycetes: Introduction to Hymenomycetes
XIII. Basidiomycetes: Mushrooms (Agaricales, Boletales)
XIV. Gasteromycetes
XV. Mycorrhizal Relations
XVI. Basidiomycetes: Heterobasidiomycetes
XVII. Basidiomycetes: Smuts
XVIII. Basidiomycetes: Rusts
XIX. Zygomycetes: Mucorales
XX. Zygomycetes (Endogonales and Entomophthorales) & Trichomycetes
XXI. Chytridiomycota
XXII. Hyphochytriomycota, Plasmodiophorids & Labyrinthulids
XXIII. Oomycetes
XXIV. Cellular Slime Molds
XXV. Plasmodial Slime Molds
XXVI. Fungal Immunology and Pathology
XVII. Antifungal Therapeutic Agents
XVIII. Mycoses
XXIX. Dermatophytosis and the dermatophytes
XXX. Black Fungi diseases
XXXI. Sporotrichosis
XXII. Candidiasis
XXIII. Cryptococcosis
XXIV. Histoplasmosis
XXV. Blastomycosis
XXVI. Coccidiodomycosis
XVII. Aspergillosis
XVIII. Fungal allergies
XXIX. Mushroom Poisonings and Mycotoxins

Does this course overlap a course offered in your academic program? YES ☐ NO ☒
If YES, what course(s) and provide a justification of the overlap?

Does this course overlap a course offered in another academic area? YES ☐ NO ☒
If YES, what course(s) and provide a justification of the overlap?
Signature of Academic Chair(s) of the other academic area(s) is required on the signature sheet below.

6. Cross-listed Courses (*Please fill out separate description in item 1 above, for each PREFIX)*

A. List Cross-listed Courses (Signature of Academic Chair(s) of the other academic area(s) is required).
Prefix for cross-listed discipline(s):

B. Department responsible for staffing: Biology

7. References. *[Provide 3 - 5 references on which this course is based and/or support it.]*

- Esser, K. and P. A. Lemke, eds. 1994-2002. The Mycota. A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research. Springer-Verlag, New York. Volumes I-XI
- Mueller, G. M., G. F. Bills and M. S. Foster, eds. 2004. Biodiversity of Fungi. Inventory and Monitoring Methods. Elsevier Academic Press, New York.
- Medical Mycology The Pathogenic Fungi & The Pathogenic Actinomycetes
- Fungal Infection Diagnosis and Management
- Clinical Mycology - The Human Opportunisitic Mycoses. David H. Ellis Pfizer Inc. New York
- Practical Laboratory Mycology. Elmer W. Koneman & Glenn D. Roberts Williams & Wilkins Baltimore
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8. List Faculty Qualified to Teach This Course.

- Biology faculty

9. Effective Date

A. First semester offered: F09

10. New Resources Required. YES ☐ NO ☒

If YES, list the resources needed and obtain signatures from the appropriate programs/units on the sheet below.

A. Computer (data processing), audio visual, broadcasting needs, other equipment)

B. Library needs

C. Facility/space needs

11. Will this new course alter any degree, credential, certificate, or minor in your program? YES ☐ NO ☒

If, YES attach a program modification form for all programs affected.

Catalog deadline for New Minors and Programs (including modifications): October 15, 2007, preceding year.

Catalog deadline for Course Proposals and Modifications: November 9, 2007, of preceding year.

Last day to submit any work to be considered for the academic year: April 15th.

Tom Schmidhauser, Ching-Hua Wang — Proposer of Course

10/2/2007 — Date

Approval Sheet

Program/Course:

_____

Program Chair(s) Date

_____

Program Chair(s) Date

_____

General Education Chair(s) Date

_____

Curriculum Committee Chair(s) Date

_____

Dean of Faculty Date