



Course Approval Form

For approval of new courses and deletions or modifications to an existing course.

registrar.gmu.edu/facultystaff/curriculum

Action Requested:

Create new course Delete existing course

Modify existing course (check all that apply)

Title Credits Repeat Status Grade Type

Prereq/coreq Schedule Type Restrictions

Other: _____

Course Level:

Undergraduate

Graduate

College/School: Department:

Submitted by: Ext: Email:

Subject Code: Number: Effective Term: Fall Spring Summer

(Do not list multiple codes or numbers. Each course proposal must have a separate form.) Year

Title: Current

Banner (30 characters max including spaces)

New

Credits: (check one) Fixed Variable

Repeat Status: (check one) Not Repeatable (NR) Repeatable within degree (RD) Repeatable within term (RT)

Maximum credits allowed:

Grade Mode: (check one) Regular (A, B, C, etc.) Satisfactory/No Credit Special (A, B, C, etc. +IP)

Schedule Type Code(s): (check all that apply) Lecture (LEC) Lab (LAB) Recitation (RCT) Internship (INT)

Independent Study (IND) Seminar (SEM) Studio (STU)

Prerequisite(s):

Corequisite(s):

Instructional Mode: 100% face-to-face Hybrid: ≤ 50% electronically delivered 100% electronically delivered

Special Instructions: (list restrictions for major, college, or degree; hard-coding; etc.)

Are there equivalent course(s)? Yes No

If yes, please list _____

Catalog Copy for NEW Courses Only (Consult University Catalog for models)

Description (No more than 60 words, use verb phrases and present tense)	Notes (List additional information for the course)
Provides a modern, comprehensive knowledge of fungal biology including classification, phylogeny, structure, physiology/metabolism, growth and development, genetics, industrial applications including biotechnology, ecological roles including pathogenic interactions with plants, animals, and man.	
Indicate number of contact hours: Hours of Lecture or Seminar per week: <input type="text" value="3"/> Hours of Lab or Studio: <input type="text"/>	
When Offered: (check all that apply) <input type="checkbox"/> Fall <input type="checkbox"/> Summer <input checked="" type="checkbox"/> Spring	

Approval Signatures

Department Approval _____ Date _____ College/School Approval _____ Date _____

If this course includes subject matter currently dealt with by any other units, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.

Unit Name	Unit Approval Name	Unit Approver's Signature	Date

For Graduate Courses Only

Graduate Council Member _____ Provost Office _____ Graduate Council Approval Date _____

Course Proposal Submitted to the Curriculum Committee of the College of Science

1. COURSE NUMBER AND TITLE:

BIOL 408

Mushrooms, Molds, and Mankind

Course Prerequisites:

BIOL 213 with a C or better.

Catalog Description:

Provides a modern, comprehensive knowledge of fungal biology including classification, phylogeny, structure, physiology/metabolism, growth and development, genetics, industrial applications including biotechnology, ecological roles including pathogenic interactions with plants, animals, and man.

2. COURSE JUSTIFICATION:

Course Objectives:

The course objectives are:

- 1) to provide a basic knowledge of fungal biology so that students will:
 - a) recognize and appreciate the diversity of the different types of fungi
 - b) understand how fungi grow and reproduce
 - c) recognize the structural, physiological, and metabolic features that characterize the different fungal lifestyles (saprotrophism, parasitism, and mutualism).
- 2) show how the knowledge from #1 helps to understand the roles that fungi play in:
 - a) ecology
 - b) industry
 - c) agriculture
 - d) medicine

Course Necessity:

There is no general mycology course at GMU.

Course Relationship to Existing Programs:

Will be of interest to students in biology, environmental science, and medicine.

Course Relationship to Existing Courses:

Will provide a foundation for more selective courses such as Fungi & Ecosystems .

3. APPROVAL HISTORY: None

4. SCHEDULING AND PROPOSED INSTRUCTORS:

Semester of Initial Offering:

Spring 2013 (was taught as a special topic course in Spring 2012)

Proposed Instructors:

Dr. Albert P. Torzilli

5. TENTATIVE SYLLABUS: See attached.

Mushrooms, Molds & Mankind

SYLLABUS:

Instructor: Dr. Torzilli

Email: atorzill@gmu.edu Office: 3043 DKH Office Hrs. Thurs. 2-4pm or by appointment

<u>Date</u>	<u>Subject</u>	<u>Text</u>
1/26	Natural Classification of the Fungi	Chap 3
2/2	“ “ “ “ “	“
2/9	Hyphal Growth	Chap 4
2/16	Mechanisms of Hyphal Growth and Fungal Cell Walls	125-133; 136-142; Ch. 6
2/23	Spores	
3/1	EXAM 1	
3/8	Fungal Genetics	Chaps 7,8
3/15	Spring Break	
3/22	Fungi As Saprotrophs (Decomposers)	238-247; 326-336
3/29	Fungi As Mutualists: mycorrhizae, lichens, endophytes	pp336-361
4/5	EXAM 2	
4/12	Fungi As Plant Pathogens	Chap 14
4/19	Fungi As Symbionts & Predators of Animals	Chap 15
4/26	Fungi As Pathogens of Animals Including Man	Chap 16
5/3	Fungi As Food; Fungal Biotechnology	Chap 11, p473-487; 497-506; 257-264

Text: *21st Century Guidebook to Fungi* by David Moore, et al. Cambridge, 2011.

Grading: Lecture Exams 100 pts. X 2 = 200 pts.
Final Exam (new material) 100 pts.
Total 300 pts
Optional Comprehensive Final 100 pts.

One may choose to use the score on the comprehensive final to substitute for a low grade on one of the lecture exams.

Course Goals:

This course is intended to provide the student with an introduction to fungal biology including, phylogeny, classification, growth, and importance to man and the environment.

Important Dates: 2/24, last day to drop; 5/10, FINAL EXAM (4:30-7:15 pm)