BIO 329, 50505, MEDICAL MYCOLOGY SYLLABUS SPRING 2006

Course: Bio 329, Medical Mycology, BUR 112, TTH 9:30-10:45 AM

Prerequisites: Biology 325, 325H and 226R with a grade of at least a C in each. Concurrent or subsequent enrollment in Bio 129L (Medical Mycology Laboratory) is recommended for Clinical Laboratory Science majors.

Instructor: Dr. Paul J. Szaniszlo, ESB 109A, E-mail pjszaniszlo@mail.utexas.edu (Office Hours: Mondays from 11:30 AM-12:30 PM, or by appointment)

T.A./Grader: Samantha Croft, MBB 2.424B, E-mail sbcroft@hotmail.com (Office Hours: TTh 11 AM-12 PM; Location MBB 2.424A). (Discussion and Test Review Sessions: W, Th 4-5 PM, Locations TBA). These sessions are optional, although quizzes may be given and up to 5 bonus points/exam period may be earned during these sessions. If you cannot attend either of these sessions, please let Samantha know your reasons and why you cannot rearrange your schedule, in writing, before the 12th class day (a syllabus for the Discussion Sessions can be found at http://www.sbs.utexas.edu/mycology/bio329/). She will then try to accommodate you. However, if she can’t and you think you need those potential points to pass, then you should seriously consider dropping this course.


Readings: In addition, or as an alternative to the text assignments, a number of articles will be assigned during the course. These readings are required and are available in the Life Sciences Library as a set of uncatalogued articles. They can also be purchased at Speedway Copy and Printing, in Dobie Mall, should you want personal copies. The titles, authors, and sources of the readings are listed on pages 3 and 4 in the general order they will be assigned.

Course Description: This course consists of a basic introduction to medical mycology and a comprehensive study of the fungi (yeasts and molds) and mycoses (fungal diseases) likely to be encountered in clinical settings by a physician, medical mycologist, or medical technologist. Attention will be distributed as equally as possible between emphasis on the biology of the fungal zoopathogen and on its disease. A general course outline in the form of a Tentative Lecture Schedule (page 2-3) is attached, as well as a short Reserve Book List (page 4-5).

Grading and Test Policy: There will be three semester examinations and an optional comprehensive final. The exams will focus on the material covered since the last examination but the second and third exams will all require good knowledge of prior coverage, and particularly the material covered for the first examination. Each examination will count equally (33.3%), if you opt not to take the comprehensive final. Should you decide to take the final, then it too will count 33.3% and your lowest semester exam grade will be dropped from the calculation for your final average (Note: if you opt to take the final, then it will be one of the three scores used to calculate your final grade). Final averages will not be curved, but generally will be assigned as follows:

85-100% = A
70-84% = B
55-69% = C
50-54% = D
and less than 50% = F
Professor’s Grading Philosophy: “Students earn grades, he does not give grades.”

Examination Schedule: The three semester exams will be scheduled during the regular class period, but probably will be in a different room. There will be no make-up exams unless there is a substantial legitimate and well documented medical excuse or a documented personal tragedy associated with your absence from an examination. Failure to take an examination may result in a zero grade for that exam. The date each exam will be given and the approximate materials to be covered by each exam are included in the Tentative Lecture Schedule (page 2-3). Should this schedule not be acceptable, then you should consider dropping the course immediately.

Class Web Site: To help you keep up with things in Bio 329, there is a web-site associated with Medical Mycology. Unless you are informed otherwise, the URL for this site will be http://www.sbs.utexas.edu/mycology/bio329/.

Class Notes Packet: A class notes packet will be available for your purchase at Speedway Copy and Printing, Dobie Mall. These notes may also be available at the class web site, and in general represent only duplicated and reformatted versions of the computer-generated overheads prepared specifically for Bio 329, but not of any figures, tables, diagrams or other items to be presented similarly, as handouts or possibly at the web-site. The purchase of these items is totally at your discretion and they are provided only for your note-taking convenience, so you don’t have to download from the web site, and can more easily take notes, make drawings, or make records of other materials (information in tables or graphs, for example) related to lecture information that is not included in these notes.

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TENTATIVE SPRING, 2006, LECTURE SCHEDULE - BIO 329

JAN 17  Course Introduction (and start)
19  General Introduction to Medical Mycology
24  Definitions and Fungal Terminology
26  Fungal Classification, Historical Overview and Chytridiomycota,
31  Zygomyctota Ascomycota, Basidiomycota
FEB  2  Fungi Imperfecti, Conidia and Other Spores
  7  General Aspects of Fungal Immunology and Pathology
  9  Antifungal Therapeutic Agents
14  Antifungal Therapeutic Agents
16  The Superficial Mycoses
FEB  21  EXAM I - Over information through antifungals
  23  Dermatophytosis and the dermatophytes
  28  Dermatophytosis and the dermatophytes
MAR  2  Introduction to Subcutaneous Mycoses, with emphasis on those caused by dematiaceous (black) fungi
  7  Chromoblastomycosis
  9  Phaeohyphomycosis, Mycetoma, Other Diseases Caused by Black Fungi
13-17  SPRING BREAK
21  Sporotrichosis
23  Introduction to the Pathogenic Yeasts
28  Candidiasis
30  Cryptococcosis
APR  4  EXAM II - Through candidiasis
Histoplasmosis
Blastomycosis
Coccidioidomycosis
Coccidioidomycosis
Aspergillosis

APR 25 EXAM III – Through aspergillosis
Fungal Allergies
MAY 2 Mushrooms and Mushroom Poisonings
Class Evaluations, Mycotoxins and finishing up
MAY 10 Optional Comprehensive Final Examination (see grading and test policies on page 1 for details)

BIO 329 - RESERVE READING LIST - SPRING 2006
(In Life Science Library as a set of uncatalogued articles)

These articles are also available through Speedway Copy and Printing, Dobie Mall, and are required readings. Although you may not be tested directly on the details of these articles, they will help you to better appreciate the subject and to write better essay discussions, if requested. In general, after the first few, these articles provide considerably more information about fungi and the fungal agents of mycosis that will be taken up in this course than is presented in our text.

Sz 17. Brandt, M. E. et al. 2000. Candida dubliniensis fungemia: the first four cases in North


RESERVE BOOK LIST - Spring 2006 - Paul J. Szaniszlo

These books are on reserve in the Life Science Library and should be of help should you need supplemental reading on certain topics introduced in Bio 329.

Medical Mycology

Clinical Mycology, Dismukes, Pappas and Sobel
QR 245, C566, 2003

Medical Mycology, Kwon-Chung and Bennett
QR 245, K86, 1992

General Mycology

Ainsworth & Bisby's Dictionary of the Fungi, 8th ed., Hawksworth, Krik, Sutton & Pegler
QK 603, A5, 1995

Dictionary of the Fungi, 9th ed., Hawksworth et al., QK 600.35, A5

The Fifth Kingdom, 3rd ed., Kendrick
QK 603, K46, 1992

Introductory Mycology, 4th ed., Alexopoulos, Blackwell and Mims
QK 603, A55, 1996

QK 603, M62, 1996

The Fungi, 2nd ed., Watkinson, Carlile and Gooday
QK 603, C257, 2001

Additional references, which are available at the UT Science Library, but are not on reserve.

Microbiology and Microbial Infections, Topley and Wilson’s, 9th ed., Vol. 4. Medical Mycology, QR 46, T6, 1998

A Practical Guide to Medically Important Fungi and The Diseases They Cause, Sugar and Lyman
RC 117, S84, 1997

Dimorphic Fungi in Biology and Medicine, Vanden Bossche, Odds and Kerridge (eds)
QR 245, D55, 1993

Medical Mycology: A Practical Approach, Evans and Richardson
QR 248, M43, 1989

Medical Mycology and Human Mycoses, Beneke and Rogers
QR 245, B46, 1996

Medical Mycology, 3rd ed., Rippon
RC 117, R5, 1988

Fungal Dimorphism: With Emphasis on Fungi Pathogenic for Humans, Szaniszlo
QR 245, 1985

Laboratory Handbook of Medical Mycology, McGinnis
RC 117, E56, 1980

Identifying Filamentous Fungi: a Clinical Laboratory Handbook, St. Germain and Summerbell
QR 248, F55, 1996

Fungal Pathogenesis,: Principles and Clinical Applications, Calderone & Cihlar, ed.