BIO 329, 51395, MEDICAL MYCOLOGY SYLLABUS SPRING 2007

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: T from 11 AM-12 PM or by appointment; Location MBB 2.424B). (Discussion and Test Review Sessions: Tuesday, 5-6 PM, Wednesday, 4:30-5:30 PM (Locations TBA). These sessions are optional, although quizzes may be given and up to 5 bonus points/exam period can 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 (her syllabus for the Discussion Sessions can be found below and at http://webspace.utexas.edu/sbc/www/). She will then try to accommodate you. However, if she can’t and you think you will 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 one 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 of 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, and generally will be assigned as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>85-100%</td>
<td>A</td>
</tr>
<tr>
<td>70-84%</td>
<td>B</td>
</tr>
<tr>
<td>55-69%</td>
<td>C</td>
</tr>
</tbody>
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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, significant 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. In general, these notes represent only duplicated and reformatted versions of the computer-generated overheads prepared specifically for Bio 329 from last year’s Notes, but not of any figures, tables, diagrams or other items to be presented similarly, as handouts or possibly at the web-site. These notes may also be available at the class web site, although they may be from previous years and even less up-to-date. 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.

TENTATIVE SPRING, 2007, LECTURE SCHEDULE - BIO 329

JAN  16  Course Introduction (and start)
       18  General Introduction to Medical Mycology
       23  Definitions and Fungal Terminology
       25  Fungal Classification, Historical Overview and Chytridiomycota,
       30  Zygomycota Ascomycota, Basidiomycota
FEB  1   Fungi Imperfecti, Conidia and Other Spores
       6   General Aspects of Fungal Immunology and Pathology
       8   Antifungal Therapeutic Agents
       13  Antifungal Therapeutic Agents
       15  The Superficial Mycoses
FEB  20  EXAM I - Over information through antifungals
       22  Dermatophytosis and the dermatophytes
       27  Dermatophytosis and the dermatophytes
MAR  1   Introduction to Subcutaneous Mycoses, with emphasis on those caused by
dematiaceous (black) fungi
       6   Chromoblastomycosis
       8   Phaeohyphomycosis, Mycetoma, Other Diseases Caused by Black Fungi
12-16  SPRING BREAK
       20  Sporotrichosis
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.


**RESERVE BOOK LIST - Spring 2007 - 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  
Atlas of Clinical Mycology, deHoog et al., QR 245, K86, 2000  
Molecular Principles of Fungal Pathogenesis, Heitman et al., ed., QR 245, M65, 2006  
Fungal Pathogenesis; Principles and Clinical Applications, Calderone & Cihlar, ed., RC117, f864, 2000

**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

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

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