



BSC 497 – Intro Medical Microbiology Syllabus (Spring 2014)

Instructor: Andrei Kochegarov, PhD	Mon, Wed, Fri.	Noon-12:50pm
Office: 255 McFarland Science Bldg (STC)		Classroom: STC 122
Phone: 903-886-5602		
Email: Andrei.Kochegarov@tamuc.edu		
Office Hours: 2 – 6pm, Mon, Wed, Fri. or by appointment		

Class Schedule

Jan 13-17, 1_The Nature of Infection – Overview 1

Jan 20-24, 2_The Nature of Infection – Overview 2

Jan 27-31, 3_Immune system

Exam 1 Feb 3

Feb 3-7, 4_Gram(+) Cocci

Feb 10-14, 5_G (+) Bacilli

Feb 17-21, 6_Mycobacterium

Feb 24-28, 7_Actinomyces and Nocardia

Exam 2 March 3

March 3-7, 8_Anaerobic bacteria

March 10-14, **Spring Break**

March 17-21, 9_Enterobacteriaceae_Intro

March 24-28, 10_Enterobacteriaceae

March 31-April 4, 11_Neisseria.pptx

Exam 3 April 7

April 7-11, 12_Chlamydia12

April 14-18, 13_Spirochetes

April 21-25, 14_Rickettsia

April 28-May 2, 15_Vibrio Campylobacter, Helicobacter

Final exam

All dates and assignments are tentative and subject to change.

Textbooks:

1. Medical Microbiology, 4th edition, Edited by Samuel Baron. University of Texas Medical Branch at Galveston, Galveston, Texas Galveston (TX): University of Texas Medical Branch at Galveston; 1996. Available online and free: <http://www.ncbi.nlm.nih.gov/books/NBK7627/>
2. Kenneth J. Ryan and others. 2010. Sherris Medical Microbiology. 5th edition. McGraw-Hill. ISBN: 978-0-07-163854-7

Course Description

BSC 497, Intro Medical Microbiology, is a course for junior or senior biology undergraduate students designed to provide basic principles of pathogenic microorganisms and infection. Specific topics covered during this class include

pathogenic and non-pathogenic microorganisms, diagnostic laboratory procedures, infection controls, and emerging diseases. This course includes many etiological agents responsible for global infectious diseases. This introductory level medical microbiology course will focus on the principles of pathogenic mechanisms, rather than individual cases of diseases, in order to foster a student's ability to develop critical thinking and problem solving techniques for their future clinical career.

Prerequisite: BSC 306, Applied Microbiology or Equivalent.

Student Learning Outcomes

Upon completion of this course, you should be able to;

1. Explain the nature of infection.
2. Distinguish pathogenic and non-pathogenic microorganisms.
3. Identify different morphologies of pathogenic microorganisms and determine corresponding, efficient treatments.
4. Explain basic principles of disease control.
5. Explain how disease control is tightly linked to the growth control of microorganisms.
6. Explain the importance of the growing incidence of antimicrobial resistance and seek possible solutions to control antimicrobial resistance.

Classroom Policy

- For successful course completion, your presence and participation is essential. Your attendance grade will be determined by your presence, your participation in class discussion, and your attention to the class discussion, whether by the instructor or a fellow student.
- Students should arrive ON TIME. Late arrivals are NOT acceptable.
- Students are expected to read the assigned textbook material prior to the class.
- To create a pleasant learning environment, students MUST turn their cell phones and other potentially disruptive electronic devices. Only laptop computers are allowed to take class notes. Those laptop computers should be operated with MUTE function on (i.e. sound off). Remember, laptop is only for taking notes. You give up the privilege of using your laptop computers in class if you caught using your computer for other activities such as reading emails, chatting, watching videos, etc.

Grading Policy

Grade portion consists as below;

Topic Presentation	= 100 points
3 Mid-term and final exams (100 pts. each)	= 400 points
Total	= 500 points

Grading Scale

The final course grade will be assigned based on the following break-down;

90 – 100%	= A
80 – 89%	= B
70 – 79%	= C
60 – 69%	= D
59% and below	= F

Teaching Methodology

Web-Enhanced Course Classroom lecture will be supplemented with lecture slides and answer keys for quizzes and exams via eCollege. Students are strongly encouraged to print lecture slides (4-6 slides per page) prior to the class and bring to the class. Periodically check course homepage as well as your email for course announcements.

Topic Presentations Each student will give a presentation summarizing his/her chosen topic and lead class discussion. The summary should include i)the nature of infection, ii)Causative agents and their mechanisms of pathogenesis, iii)Diagnosis, iv)Treatment and prevention v)One exemplary clinical case study. The presentations should be well-prepared, concise, and include sufficient visual aids. The presentation will be evaluated by your classmates (40%) and the instructor (60%). Topics are;

- Skin and Wound infections
- Bone and Joint infections
- Respiratory infections
- Enteric infections
- Urinary tract infections
- Genital infections
- Central nervous system infections

Your topic selection comprises 10% of your topic presentation grade (i.e. 10 pts out of 50). To earn your topic selection points, you have to submit a PDF file of your case study source. Your case study source should be a scientific journal article.

Mid-term Exams There will be 3 mid-term exams. The exams will consist of multiple choices and short answer questions. Large portion of EXAM questions will be drawn from the same test pool as quiz pool. Thus, make sure to study materials covered by quiz-pool first. Mid-term exams will be taken in class hours.

Comprehensive Final The final exam will consist of multiple choices and short answer questions. The exam will cover all class materials covered through the semester with emphasis on materials not covered by mid-term exams (70% from materials covered by mid-term exams and 30% from materials NOT covered by mid-term exams). Large portion of Final Exam questions will be drawn from the same test pool as Mid-term pool. Thus, make sure to study materials covered by those pools.

Makeup The student is responsible for requesting a makeup when they are unable to take the regularly scheduled exams. The request should be made within 3 days of the absence. Makeup exams will be scheduled only in the event of EXCUSED absence (as defined in the Student's Guidebook). If the test is not made-up, the student will receive Zero for that exam. No make-ups for quizzes. Excused absences include;

- Verified illness (with Doctor's note)
- Death in a student's immediate family
- Obligation of student at a legal proceedings in fulfilling responsibility as a citizen
- Elective TAMUC activities (with the activity director's note)

University Statements

Academic integrity: As members of Texas A&M University-Commerce academic community, we all are responsible to underpin the principles of academic integrity expressed by this community. We are expected to watch these principles to be kept and appreciated by others.

- The first instance of cheating will result in an automatic Zero on the exam. A second instance will result in Zero course grade (automatic F).
- Plagiarism is a serious academic criminal activity. You must cite all sources of information with properly accredited. Copying material, whether parts or whole, will result in Zero for your term paper and can incur in further University disciplinary consequences.

Accommodations: The American with Disability Act (ADA) is a federal anti-

discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other aspects, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have disability requiring accommodation, please contact:

Office of Student Disability Resources or Services

Texas A&M University-Commerce

Gee Library, Room 132

Tel) 903-886-5150, 903-886-5835

Fax) 903-468-8148

Email) StudentDisabilityService@tamu-commerce.edu

Access to student work: Copies of your work in this course including copies of any submitted papers and your portfolios may be kept on file storage for institutional research, assessment, and accreditation purposes. All work used for these purposes will remain anonymous.

Spring2014 payment information:

Late payment Jan. 11, 2014

Late registration Jan. 15, 2014

Drop for non-payment Jan. 30, 2014

Texas A&M University-Commerce

2600 S. Neal St, Commerce, TX 75429-3011

Biological and Environmental Sciences

Tel) 903-886-5378 Fax) 903-886-5997