

SYLLABUS --FALL 2011-- MIBO/IDIS 4220-6220**Bacterial Pathogenesis: 10:10-11:00 am****Rm 404B Biological Sciences Bldg., UGA Athens Campus****116 SLC, UGA Griffin Campus**

DATE	TOPIC	INSTRUCTOR
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Biology of the Vertebrate Host

M 8/15	Introduction	Karls
W 8/17	Host physiology & anatomy	Lee
F 8/19	1 st line of defense	Karls
M 8/22	Innate immune response	Karls
W 8/24	Complement & inflammation	Karls
F 8/26	Acquired immunity	Karls
M 8/29	Acquired immunity	Karls
W 8/31	Cellular biology	Karls
F 9/2	Research methods	Karls
M 9/5	Labor Day	

Virulence strategies

W 9/7	Exam I	Karls
F 9/9	Virulence factors I	Karls
M 9/12	Virulence factors II	Karls
W 9/14	Discussion of assigned paper 1	Karls
F 9/16	Regulation of Virulence	Karls
M 9/19	Antimicrobials & their targets	Karls
W 9/21	Ecology & mechanisms of antimicrobial resistance	Lee

Intracellular Pathogens

F 9/23	<i>Salmonella</i>	Lee
M 9/26	<i>Salmonella</i>	Lee
W 9/28	<i>Mycobacteria</i>	Karls
F 9/30	<i>Mycobacteria</i>	Karls
M 10/3	Exam II	Lee/Karls

W 10/5	<i>E. coli</i> –EIEC/Shigella	Lee
F 10/7	<i>Campylobacter</i>	Lee
M 10/10	Discussion of assigned paper 2	Lee
W 10/12	Food Safety Epidemiology	Lee
F 10/14	<i>Chlamydia</i>	Lee

Extracellular Pathogen

M 10/17	<i>Treponema</i>	Lee
W 10/19	<i>E. coli</i> -EPEC	Lee
F 10/21	<i>Helicobacter</i>	Maier
M 10/24	<i>Helicobacter</i>	Maier
W 10/26	Discussion of paper (<i>Borrelia</i>)	Maier

F 10/28 Fall Break**Toxins and Disease**

M 11/31	<i>Pseudomonas aeruginosa</i>	Maier
W 11/2	Exam III	Lee/Maier
F 11/4	<i>Vibrio cholera</i>	Karls
M 11/7	<i>Neisseria</i>	Karls
W 11/9	<i>Clostridium</i>	Karls
F 11/11	<i>Bacillus anthracis</i>	Karls
M 11/14	<i>Staphylococcus</i>	Higgins
W 11/16	<i>Streptococcus</i>	Higgins
F 11/18	Discussion of assigned paper	Higgins

MWF 11/21-25 Thanksgiving Break

M 11/28	Microbial-host ecology	Lee
W 11/30	Tools for Virulence gene discovery	Karls
F 12/2	Exam IV	Lee/Higgins/Karls
M 12/5	Vaccines	Lee
*T 12/6	Honors & Grad Student Presentations	Karls
F 12/14	FINAL EXAM 8 am- 11 am	All

*The official University Schedule assigns a Friday Class Schedule to Tues Dec 6

Other Important Information for MIBO/MMIB4220-6220:

Students taking **MIBO6220** or **MIBO4220 Honors** *must contact Dr. Karls by August 26* to arrange for their graduate or Honors project. There is a separate syllabus for Grad/Honors that describes how grades will be calculated based on exams, quizzes, and the project.

Reading assignments, including journal articles and chapters/pages in the text book, will be posted on the eLC page for each lecturer. The required Text book is “Bacterial Pathogenesis: A Molecular Approach” 3rd Edition, by B. A. Wilson, et al. I have put on reserve in the library: “Basic Immunology” by Abbas et al., which supports the lectures on Immunology, and “Cellular Microbiology” by Cossart et al., which supports the lectures on various pathogens and the journal articles. ***It is highly recommended that you read the assigned material BEFORE class; it will help you to follow the lectures and take more complete notes in class. Reading the assigned journal articles before class discussion is required.***

Group Project: You will be assigned to a small group that will present part of the data from one article and answer class questions. *Your group will be graded for the clarity of your presentation and your knowledge of the subject (4 pts total).* **Worksheets:** There will be a worksheet for each of the four assigned research articles, which will be presented and discussed by student groups. EVERYONE is responsible for answering the questions in the worksheet. *The worksheets for all 4 articles are worth 16 pts total.* Worksheet answers will be submitted on the e-Learning Commons site for the class BEFORE the start of class on the due date; *no worksheet will be accepted after the start of class on the discussion day for the article.* **Exams:** There will be 4 in-class exams and a cumulative final exam. The exams, including the final exam, are **80 pts** of your grade; the lowest exam grade will be dropped; therefore, if you are happy with your grade after the 4 in-class exams, you do not need to take the final exam. If you miss an exam (unexcused), that is scored as a zero. Make-up exams for excused absences must be arranged with Dr. Karls well in advance for University-approved absences or the day of return from an illness (Doctor’s excuse must cover the day of the exam). Exams may have a mix of short answer, discussion, multiple choice, and fill-in tables. You must use a pen to take the exams or you cannot request a re-grade. *Re-grading must be requested in writing with an explanation of the reason that re-grading is needed. You have 7 days after the exam is returned to the class to request a re-grade (turn in your request to the TA).* Grade Scale: A 100-93, A- 92-90, B+ 89-87, B 86-83, B- 82-80, C+ 79-77, C 76-73, C- 72-70, D+ 69-67, D 66-63, D- 62-60, F <60. Note: grades ending in >.5 round up to the next whole number, e.g. 92.6 rounds to 93, but 92.5 counts as 92.

There are no designated office hours for the Instructors; you may set up appointments with the Faculty or TA by e-mail (Please do not just drop by our offices!):

Dr. Karls (Course Director) akarls@uga.edu

Dr. Lee mdlee@uga.edu

Dr. Maier rmaier@uga.edu

Dr. Higgins higginsb@uga.edu

TA:

eLC Course name: MIBO/IDIS 4220/6220

Slides for each lecture will be posted to the e-LC. There are links to other resources on e-commons, as well. These sources in some instances are only outlines of covered material, i.e. much of the material for the course is NOT available on the e-commons. In addition, there is significant material covered in lectures that is NOT in the textbook. Therefore it is essential that you attend lectures and take notes to fully understand the material for this course.

All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work.

<http://www.uga.edu/honesty>

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.