

MBMB/MICR 403
Medical Microbiology
T, R 11:10 AM – 12:25 PM LSIII, Room 1059
Spring 2018 - Dr. Derek Fisher

COURSE DESCRIPTION:

A survey of the more common bacterial, viral, mycotic, and parasitic infections of humans with particular emphasis on the distinctive properties, pathogenic mechanisms, epidemiology, immunology, diagnosis and control of disease-causing microorganisms. Three hours lecture. Spring semester.

OBJECTIVES:

Students should develop a global view of infection including: 1) how organisms cause disease, 2) transmission of agents and agent reservoirs, 3) the immune response and host barriers to infection, 4) disease prevention, treatment, and monitoring and the role of the public health system in these processes, and 5) how disease has shaped human evolution and history. Students will also be introduced to the primary research that serves as the foundation for our knowledge of infectious diseases.

PREREQUISITE:

MICR 301 or consent of instructor.

RECOMMENDED TEXT:

Medical Microbiology, 8th edition. Murray, Rosenthal, and Pfaller. ISBN: 9780323299565.

Lecture slides/notes, reading material, and old exams/practice questions will be made available on D2L.

FISHER RESEARCH BACKGROUND:

<http://www.ncbi.nlm.nih.gov/myncbi/browse/collection/48341232/?sort=date&direction=ascending>

<http://micro.siu.edu/faculty-staff/faculty/fisher.php>

CONTACT INFORMATION:

LSIII 1007 (office), LSIII 1026 and 1032 (labs)
618-453-5201 (office phone)
dfisher@siu.edu or fisher@micro.siu.edu

OFFICE HOURS:

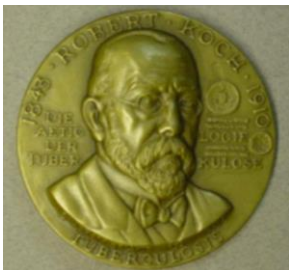
1 PM - 2 PM on Tuesday and Thursday or by appointment.

GRADING OVERVIEW:

SCALE:	A ≥90%	≥558
	B 89-80%	557 – 496
	C 79-70%	495 – 434
	D 69-60%	433 – 372
	F <60%	≤371

1) Four exams, 100 points each:	
a) Lectures 1-7	100
b) Lectures 8-14	100
c) Lectures 15-20	100
d) Lectures 21-27 (during Final testing period)	100
	Exam points: 400
2) Twelve, 10-point quizzes:	120
3) Literature Assignments – packet grading	0/65/75/85/100

Total 620



PATH COINS: You will receive six virtual PATH COINS at the start of the semester. PATH COINS may be redeemed for: 10 points (one coin), a redo on the literature assignment (three coins), and/or a one-week extension on the literature assignment (three coins). Bonus coins may be earned throughout the semester.

LITERATURE ASSIGNMENTS: Literature will be posted to D2L two weeks in advance of the scheduled due date. You must read the assigned literature and answer the three questions listed at the end of the: “How to read a scientific paper” PDF provided on D2L. Each assignment is due by the start of class on the scheduled discussion date. Assignments must be submitted as Word documents via the D2L assignment submission folder. A detailed rubric with formatting guidelines will be provided on D2L – follow the rubric and formatting guidelines! Each assignment will be graded as pass/fail using the provided rubric. **Passing one assignment = 65/100, two = 75/100, three = 85/100, four = 100/100.**

GENERAL COURSE TIMELINE:

Spring Semester 2018 Holidays (<http://registrar.siu.edu/calendars/academic1718.php>)

Semester Begins	Tuesday, January 16
Spring Break	March 10-18

Drop Information (<http://registrar.siu.edu/calendars/registration18sp.php>)

Last day to drop, eligible for a refund	Sunday, January 28 (file on 26 th)
Last day to drop, NOT eligible for a refund	Sunday, April 1 (file on 30 th)

LECTURE/EXAM SCHEDULE*

Day / Date			Topic	Quiz and Literature	Book Chapter(s)	Lecture Number
T	Jan	16	Introduction to Medical Microbiology		1-3	1
R		18	General Immunology	Q1	7-8	2
T		23	Immunoglobulins and Histocompatibility		9-10	3
R		25	Humoral and Cell Mediated Immunity	Q2	9-10	4
T		30	Complement, Hypersensitivity, Immunological Defects	Literature 1	8-10	5
R	Feb	1	Vaccines	Q3	11	6
T		6	Antimicrobial Chemotherapy		17	7
R		8	EXAM 1			
T		13	Microbiome and Normal Flora		2	8
R		15	Gram positive cocci	Q4	18-19	9
T		20	Gram positive Spore-formers and Anaerobic Infections		20, 30, 31	10
R		22	Gram positive bacilli	Q5	21-22	11
T		27	Gram negative bacilli	Literature 2	25	12
R	Mar	1	Gram negative bacilli	Q6	27, 29	13
T		6	Gram negative bacilli		26, 28	14
R		8	EXAM 2			
T		13	Spring break			
R		15	Spring break			
T		20	Gram negative bacilli	Q7	25, 29	15
R		22	Fastidious Gram negative bacteria	Literature 3	23-24, 33	16
T		27	Spirochetes	Q8	32	17
R		29	Obligate Intracellular bacteria		34 and 35	18
T	Apr	3	Mycotic Infections	Q9	Section 6	19
R		5	Parasites		Section 7	20
T		10	EXAM 3			

R		12	General Virology		36-38, 40	21
T		17	DNA Viruses	Q10	41, 43, 44	22
R		19	RNA Viruses	Literature 4	46, 55	23
T		24	RNA Viruses	Q11	50, 52	24
R		26	RNA Viruses		48-49	25
T	May	1	RNA Viruses, retro	Q12	54	26
R		3	Public Health System		D2L	27
R		?	EXAM 4 Final testing period – Time/date posted 3rd week of semester			

***Lecture dates and material are tentative; exam, quiz, and literature dates are not. Students will only be responsible for material covered in class prior to the exam date.**

ADDITIONAL INFORMATION

HINTS for SUCCESS:

- 1) Attend class.
- 2) Study often, not just the night before an exam.
- 3) Review lecture material the evening after a lecture. This will help you learn the material and will make studying for exams much easier.
- 4) Read the chapters cited next to each lecture prior to class. It will help you better comprehend the lecture material.
- 5) Ask questions!
- 6) Seek out academic help before it is too late – it is very difficult to recover from two failed exams.
- 7) LEARNING ASSISTANCE and DISABILITY SERVICES: <http://tutoring.siu.edu/index.html> and <http://disabilityservices.siu.edu/>

ATTENDANCE:

Attendance is not mandatory, but absences will negatively affect your grade **as material covered exclusively in the classroom will appear on exams.**

ACADEMIC COURTESY (modified from B. Stiles, Wilson College):

Please arrive to class on time and be prepared to discuss the material. Cell phones must be turned to silent or off during class. Ringing and buzzing cell phones bother others in the class (and the instructor) and detract from a fruitful educational environment. Sleeping, reading newspapers, talking to friends, texting, or other activities distracting the students and instructor are strictly forbidden.

EXAMS, ASSIGNMENTS, and QUIZZES:

Exams may only be rescheduled for extreme circumstances (death of an immediate family member, illness requiring hospitalization, etc.) or an absence due to a pre-approved academic/athletic conflict. Proof may be required (for example, a doctor's note) and permission to reschedule will be granted on a case by case basis at the discretion of the instructor. Failure to take an exam on the scheduled date

without an approved absence will result in a 0 (F) for the exam. Make up quizzes will not be offered – you may use your PATH COINS (one coin = one quiz). Literature assignments will not be accepted after the due date unless you buy time with your PATH COINS.

ACADEMIC DISHONESTY POLICY (adapted from the College of Science policy

[http://www.science.siu.edu/ common/pdfs/oppaper](http://www.science.siu.edu/common/pdfs/oppaper)):

Students may be subject to disciplinary proceedings resulting in an academic penalty or disciplinary penalty for academic dishonesty. Academic dishonesty includes, but is not limited to, cheating on a test, plagiarism, or collusion. Sanctions for academic dishonesty available to an instructor include: assigning a failing grade, or zero, for a paper or exam; assigning a failing grade for a course (the instructor shall assign an “incomplete” in lieu of a letter grade pending adjudication and final resolution of the complaint.); recommending that a student be dropped from a program; and recommending that a student be suspended from the University.

EMERGENCY PROCEDURES:

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus, available on BERT's website at <http://emergency.siu.edu/>, Department of Safety's website <http://www.dps.siu.edu/> (disaster drop down), and in the Emergency Response Guideline pamphlet. Know how to respond to each type of emergency.

Instructors will provide guidance to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency. The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.

You will earn a PATH COIN for completing and turning in this form to the instructor (cut below the line). The signed form must be received no later than the end of class on January 30th, 2018 for credit.

I have read the syllabus:

Name – Sign and Print

Date