University of Minnesota College of Pharmacy

Phar 6768: Infectious Diseases
3 Credits
Course Syllabus FALL 2018
Course Website: https://ay17.moodle.umn.edu/course/view.php?id=13937

Class Meeting Times & Locations

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>TC room</th>
<th>Duluth room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>1:25pm-2:15pm</td>
<td>WDH 7-135</td>
<td>Lib 410</td>
</tr>
<tr>
<td>Thursday</td>
<td>10:10am-12:05pm</td>
<td>Moos 1-450</td>
<td>LSci 165</td>
</tr>
<tr>
<td>Friday</td>
<td>1:25pm-2:15pm</td>
<td>Moos 1-450</td>
<td>LSci 165</td>
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| Technology Help | Phone: 612-301-4357 | Email: help@umn.edu | Phone: 218-726-8847 | Email: itsshelp@d.umn.edu |

This course adheres to the items listed in the College of Pharmacy Central Syllabus: http://z.umn.edu/copcentralsyllabus

Fall Semester 2018
August 28, 2018-December 14, 2018

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Phar 6768: Infectious Diseases (3 Credits)
FALL SEMESTER 2018

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Course Website: Available for all registered students by logging into: www.moodle.umn.edu

<table>
<thead>
<tr>
<th>Course Instructors</th>
<th>Course Instructors</th>
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</thead>
</table>
| Courtney Aldrich, PhD
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<table>
<thead>
<tr>
<th>Course Teaching Assistants-Graduate Student TAs</th>
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</table>
| Dan Dauner, PharmD, MSPH, BCPS-AQ ID (D)  
Social and Administrative Pharmacy graduate program  
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| Sarah Kim, PharmD (TC)  
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<table>
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<tr>
<th>Course Teaching Assistants-Pharmacy Residents (PGY2)</th>
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| Eleanor Broadbent, PharmD (TC)  
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PGY2 Infectious Diseases Resident  
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| Hailey Soukup, PharmD (TC)  
PGY2 Infectious Diseases Resident  
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**DETAILED COURSE SCHEDULE**

For a detailed course outline and schedule, see the course Moodle site (see link on cover page). While all attempts will be made to minimize changes, this schedule is subject to change throughout the semester as needed. Any schedule changes will be announced during class or via email.

**COURSE COMMUNICATIONS**

There will be frequent communication through email, announcements in class, and via the course site about course administrative issues. Please check both the website and your email daily. If you are not in class, please get communications from a classmate.

On the course website you will see the following forums: “Course Announcements,” and the “Clinical Forum/Discussion Board.” Please check the Announcements forum for information from instructors regarding the course. Please use the Clinical/Discussion Board to post any content related questions and/or answers you may have. You should subscribe to this forum to receive emails each time a new post is made in the forum. This board is to be utilized:

1. As a way for students to share ideas and help each other learn. It will be monitored intermittently by course faculty for potential input into discussions as well.
2. As a way for students to ask questions regarding administrative questions and/or requests related to the course. It will be monitored by one of our TAs once a day at the end of the day.

**COMPUTER / TECHNOLOGY REQUIREMENTS**

The University of Minnesota computer requirements are listed here:

- Moodle: This course will use Moodle to distribute resources and host course information. See Moodle setup requirements at [http://www1.umn.edu/moodle/start/technical.html](http://www1.umn.edu/moodle/start/technical.html).
• Internet-enabled device capable of accessing Moodle and Participoll (computer, tablet, etc.)

OVERVIEW OF THE COURSE
Course content:
The Infectious Diseases course will focus on the pharmacology, medicinal chemistry, pharmacokinetics and pharmacodynamics of antibiotics, and the pharmacotherapy of infectious diseases. The purpose of this course is to prepare students to approach patients with potential or confirmed infectious diseases, interpret diagnostics used to rule-in or rule-out infection, and understand/utilize antibiotic stewardship principles. Students will be expected to implement and monitor pharmacotherapeutic plans associated with the treatment of acute and chronic infections. Knowledge gained in this course will prepare students for future patient care of patients with suspected or confirmed infection.

Course format:
The format of this course will combine lecture-based teaching with team-based learning (TBL) sessions and case-based application of concepts. Frequent assessments will be administered to help reinforce course concepts.

PREREQUISITES:
Students must have satisfactorily completed all work appropriate for a PD3 student.

COURSE REQUIREMENTS
Pedagogical goals and tools:
One of the hallmarks of being a professional is a dedication to life-long learning. To promote life-long learning, we expect you to actively participate in your own education while in the College of Pharmacy. In order to be successful in this course you need to:

● Come prepared to class:
  o Watch pre-recorded presentations assigned and be prepared to answer questions
  o Complete assigned readings prior to class
  o Be prepared for quizzes and exams
  o Be prepared for active team based learning activities

● Bring your internet-enabled device to class each day to facilitate Moodle quizzes and ParticiPoll

● Participate in class
  o Contribute to solving patient cases which will be presented during lectures
  o Prepare for and participate in Team Based Learning (TBL) exercises

● Seek help when you need it

COURSE MATERIALS
Recommended texts/readings:
Students are urged to review any assigned readings prior to class to aid in the understanding of lecture material. Questions from the required readings may be included in course examinations (in addition to lecture and handout material). Recommended reading and/or reference material will be specified by individual lecturers and could include chapters from:

● Foye’s Principles of Medicinal Chemistry (7th edition); available as e-text

● The Sanford Guide to Antimicrobial Therapy. Available in print

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E-course handouts and materials:
Course notes and materials will be provided in electronic formats wherever possible through the Moodle course site. Whenever possible, the materials will be posted one week prior to a lecture, or earlier if available. Please review materials posted in advance of the class period to ensure preparedness for the upcoming week and class activity and scheduled in class quizzes. Physical copies of course materials will not be available for purchase in the bookstore.

COURSE GOALS & LEARNING OBJECTIVES
At the conclusion of the course, students will be able to:

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<tr>
<th>Number</th>
<th>Description</th>
<th>Applicable Domain(s)</th>
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| 1.     | Describe the role of a pharmacist in the prevention and treatment of infectious diseases and communicate appropriate information to healthcare professionals and patients. | Domain 3: Health Systems Management  
Domain 4: Leadership and Engagement  
Domain 5: Professional and Interprofessional Development |
| 2.     | Identify, describe and classify drugs used to treat human infectious diseases (antibacterial, antiviral, antifungals, antiparasitic), including the mechanism of action, pharmacokinetics, drug interactions and appropriate dosing. | Domain 1: Patient-Centered Care  
Domain 6: Knowledge, Scientific Inquiry, and Scholarly Thinking |
| 3.     | Select an appropriate agent (and alternative agents) based on pharmacokinetics; optimally formulate and dose; evaluate drug resistance and pharmacodynamic interaction with the microorganism. | Domain 1: Patient-Centered Care  
Domain 3: Health Systems Management  
Domain 6: Knowledge, Scientific Inquiry, and Scholarly Thinking |
| 4.     | Monitor treatment of patient, including consideration of side-effect profile, drug-drug interactions, drug-food interactions and choosing alternate drug agent if necessary. | Domain 1: Patient-Centered Care  
Domain 3: Health Systems Management  
Domain 6: Knowledge, Scientific Inquiry, and Scholarly Thinking |

ASSESSMENTS AND GRADING
PHAR 6768 overall course grade:
The overall course grade will be determined by the results of 6 online Moodle exams, 2 team-based learning (TBL) activities, 1 Bugs and Drugs chart assignment, and 3 In-class multiple choice exams (2 midterms and 1 final exam).

Assignment due dates and exam dates:
All assignment due dates and exam dates will not be changed from those printed in the course schedule. Should the University be closed due to an unforeseen event, the assignment due date or exam will be rescheduled.

Note: Late work will not be accepted if a student has technical difficulties and all avenues of technical support to correct the problem were not attempted. Make-up exams for students who overlooked the due date and/or time will not be granted.
Online Moodle exams:
Six online Moodle exams will be given via Moodle. Each online exam will assess material covered from the class periods indicated next to the Moodle Exam as designated in the course schedule. Students will have access to the Exam for 75 minutes over a 48 hour period during the dates noted on the course schedule. The exam can be taken any time within that 48 hour period; however, once the online exam is opened there will be 75 minutes to complete it. The standard make-up policy will apply to all exams. Although the online exams are open-resource, they are not group projects. **Thorough study of the material for each Online Moodle Exam is strongly encouraged as it will prepare you for the in-class, closed-resource midterms and final exam.** Each student is expected to take the online exams independently and submit their own work. Each student is responsible for ensuring that they are appropriately logged into the course website when taking assigned exams. The Moodle exam (n = 6) scores will be averaged and the overall average score will comprise 25% of the total course grade (see assessment point value breakdown for more details).

Technical support for online exams:
If you require assistance please take the following steps: **Step 1:** Visit the technical support website http://umn.edu/moodle to troubleshoot your problem through self-help pages. **Step 2:** If your problem cannot be solved with self-help, call the One Help desk at 218-726-8847 in Duluth or 612-301-4357 in TC. Following these steps will ensure that you get the assistance that you need in a timely manner. Please do not hesitate to contact Tech Support. They are there to help! If you have technical difficulties during an online quiz, or if you are uncertain your quiz submitted properly, email the course director immediately, including your chosen answers for the quiz questions.

Team Based Learning (TBL):
Each of the TBL sessions will be structured as an iRAT quiz where students respond individually as a Moodle quiz, followed by a tRAT quiz that the table team answers collectively using scratch-offs. The iRAT and tRAT portion of the activity will be followed by a team-based learning applied activity. The iRAT will count for 50% of the grade, while the tRAT will count for the remaining 50%. TBL sessions are intended to be an active learning experience, thus students must be present and in class to earn a TBL grade. Working remotely does not demonstrate professionalism and will not be awarded credit. Further, tRAT credit is not available to students who do not complete an iRAT. Students are responsible for bringing all items needed to complete the readiness assessments (this may include clickers, computers, tablets, phones, batteries, etc.). Students without a working device will not be awarded credit - paper and/or verbal answers will not be accepted.

- **TBL Absentee policy:** The iRATs will start on time - questions missed due to tardiness will be forfeited. If a student receives a 0 for the iRAT a 0 will also be awarded for the tRAT. In the event of an excused absence, students will receive the class average for the iRAT and tRAT.
- **tRAT Appeals process:** If, after team discussion, your team does not agree with an answer to an iRAT/tRAT question, your team may make an appeal to challenge this answer. The appeal must be submitted to the course directors within 48 hours of the TBL session. The course directors will forward the appeal to the content expert for review and judgment on the appeal. Individual appeals will not be accepted.

**Bugs and Drugs chart assignment:**
Students will be given a blank Bugs and Drugs chart at the beginning of the course. To facilitate synthesis and review of agents learned during the course, this chart should be filled out longitudinally during the course. An electronic copy of the chart (either typed or written by hand) should be turned in by the due date. Students are permitted to work in groups to fill out the chart. This assignment will be graded as ‘all or nothing’ i.e., full points (5% final grade) will be awarded if the assignment is turned in. If a student fails to turn in the assignment by the due date, no points will be awarded.

1. Submit as a PDF document only.
2. Keep a copy of this chart to use for your own reference/studying as it will be useful during APPE rotations.

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**Mid-term exams**:  
Two in-class, mid-term exams will each contribute **20%** toward the overall course grade. These exams will **not** be graded on a curve. The use of electronic devices such as Palm, other PDA, pocket computers, programmable calculators, and other devices with electronic databases is **not permitted** during the exam unless specified by the course faculty administering the exam. Analysis of composite class response for all questions will be conducted prior to releasing the grades.

**Final Exam**:  
An in-class final exam will contribute **20%** toward the overall course grade. This exam will **not** be graded on a curve. The use of electronic devices such as Palm, other PDA, pocket computers, programmable calculators, and other devices with electronic data bases **is not permitted** during the exam unless specified by the course faculty administering the exam. Analysis of composite class response for all questions will be conducted prior to releasing the grades.

**Exam policy**  
Exams will not be returned to students. Faculty will, however, facilitate the student's ability to view their exams at some point either during or outside of class time. This will be your **only** chance to comprehensively review your exam. If you have extenuating circumstances, you may schedule an appointment with the instructing faculty or teaching assistants to review any of your exams. Grades will **NOT** be given out over the telephone or by email.

**Missing Grades and/or Grade Discrepancies:**  
Students are responsible for checking the Moodle gradebook for missing grades and/or grade discrepancies. If a potential inaccuracy is identified students have **one week** from the day/time the grade is posted to notify the course director. After one week requests to change grades will not be honored.

**Make-up policy for examinations, quizzes, etc.:**  
Please note MAKE-UP EXAMINATIONS WILL NOT BE OFFERED EXCEPT UNDER THE FOLLOWING CIRCUMSTANCES: illness, verified by a licensed professional; a family emergency, verified by the professional in attendance; or a University-sponsored event, verified by the sponsoring organization. Additional circumstances will be considered at the discretion of the instructor, but are not likely to be granted. If a student is unable to attend the scheduled exam, the relevant instructor must be notified (by email AND phone) **at least 24 hours in advance** of the exam time (where possible). If you do not receive a reply to your request prior to the exam time, please do **NOT** assume that your request has been granted; contact us again to confirm that your request was received and processed. If an acceptable circumstance or adequate documentation is not provided, a grade of zero on the exam will be assigned. Unless there are extenuating circumstances, students must contact the relevant instructor within 24 hours of the missed exam in order to be considered for a make-up. Depending on the circumstances, the make-up exam date will not be more than one week after the original exam date and will if possible occur before the original exam date.

**Final grade:**  
The final grade for the course will be determined according to the formula defined in the table below. Common rounding rules will be applied when determining the final grade **ONLY** (as per Microsoft Excel® where 0.5 and higher values are rounded up).
Regrade Policy: Only written regrade requests will be considered. If you would like to submit a question/s for regrade, you need to email your request directly to the course directors and to the instructor who wrote the question/assessment, with information that details the question number and reasons why you feel your answer is correct within 48 hours from the day/time of any answers being posted.

Course letter grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D</th>
<th>F</th>
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<tbody>
<tr>
<td>%</td>
<td>100-93</td>
<td>92-90</td>
<td>89-87</td>
<td>86-83</td>
<td>82-80</td>
<td>79-77</td>
<td>76-73</td>
<td>72-70</td>
<td>69-60</td>
<td>59-0</td>
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Minimum Passing Level
As per the Academic Standing Committee Policy, students who receive a grade below D in this course must successfully repeat the course before advancing to 4th year courses.

DISABILITY ACCOMMODATIONS:
Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange accommodations must contact the course director within the first week of the course. Students who do not present documentation from Disability Services a minimum of one week before an assessment will adhere to original/traditional expectations for that assessment. Please contact Disability Services to quantify and arrange the necessary accommodations:

Twin Cities: http://ds.umn.edu/  612-626-1333
Duluth: http://www.d.umn.edu/access/  218-726-8217

All discussions concerning this issue will remain confidential. English as a second language is not considered a disability by the College of Pharmacy and this course will not accommodate requests for additional exam time based on this criterion.

HONOR CODE AND CLASSROOM ETIQUETTE:
Each student is bound by the honor code which defines academic misconduct as any unauthorized act which may give a student an unfair advantage over other students, including but not limited to: falsification, plagiarism, misuse of test materials, receiving unauthorized assistance and giving unauthorized assistance. Specifically, each student will be required to do their own work on all quizzes (online or written), tests, extra credit assignments, oral and written exams unless otherwise advised by the course instructors. For exams or other assessments that are not returned to students by the instructors, it will be considered a "misuse of test materials" and therefore a violation of the honor code to copy, scan, photograph or otherwise re-construct such assessment content.
You signed the following statement upon accepting placement in the University of Minnesota College of Pharmacy: “I hereby affirm that I have read and understood the provisions and stipulations of the University of Minnesota Pharmacy Student Code of Ethical Responsibility and Professional Behavior.”

The Code was established in the belief that central to any intellectual and professional endeavor is an atmosphere of mutual trust and respect, based on individual maintenance of community standards. Your professional community starts here at the College of Pharmacy with your peers, faculty, preceptors, staff and administrators. It is our expectation that you will exhibit professional behavior towards other students and to faculty in the classroom at all times. In turn, we will treat you with the professional respect you deserve.

COURSE/FACULTY EVALUATION:
Students will have an opportunity to complete online course evaluations for course instructors as well as the overall course. We value your opinion. It’s our intention to provide a good backdrop for educational and professional development. To accomplish this it is vital that our students provide us with constructive assessment of our progress so far.

RECORDING POLICY:
For information relevant to the recording policy for this course, please refer to the following link: https://www.pharmacy.umn.edu/sites/pharmacy.umn.edu/files/classroom-lecture-recording-policy.pdf