

## Syllabus SIO 192 – Fall 2016

### Antibiotics in the Modern Age

Instructor:  
Chambers Hughes (chughes@ucsd.edu)  
Monday 11:00 – 11:50 AM  
Hubbs Hall 4500  
(1 Unit)

Required book:  
C. Walsh, *Antibiotics: Actions, Origins, Resistance*  
(<http://www.asmscience.org/content/book/10.1128/9781555817886>)

Date	Lecture	Topic
Sept 26	1	Introduction to antibiotics ( <i>Antibiotics</i> , chapter 2)
Oct 3	2	Antibiotics that act on cell wall biosynthesis ( <i>Antibiotics</i> , chapter 3) <b>penicillin, ampicillin, cephalosporins, monobactams, carbapenems</b>
Oct 10	3	Antibiotics that act on cell wall biosynthesis ( <i>Antibiotics</i> , chapter 3) <b>vancomycin, daptomycin</b>
Oct 17	4	Antibiotics that block bacterial protein biosynthesis ( <i>Antibiotics</i> , chapter 4) <b>tetracyclines, macrolides, aminoglycosides</b>
Oct 24	5	Antibiotics that block bacterial protein biosynthesis ( <i>Antibiotics</i> , chapter 4) <b>clindamycin, chloramphenicol, linezolid</b>
Oct 31	6	Antibiotics that block DNA replication and repair ( <i>Antibiotics</i> , chapter 5) <b>fluoroquinolones</b>
Nov 7	7	Antibiotics that inhibit DNA/RNA precursor synthesis ( <i>Antibiotics</i> , chapter 6) <b>trimethoprim/sulfamethoxazole</b>
Nov 14	8	Antibiotic resistance ( <i>Antibiotics</i> , chapters 7-10)
Nov 21	9	Antibiotic resistance ( <i>Antibiotics</i> , chapters 7-10)
Nov 28	10	Conclusion

Course requirements: attend, complete all homework assignments