## 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:**

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

**Course requirements:** attend, complete all homework assignments