<table>
<thead>
<tr>
<th>Lecture</th>
<th>Topic</th>
<th>Reading</th>
</tr>
</thead>
</table>
| Week 1 (Jan. 25) | Introduction/Overview.  
Introduction to the chemical literature.  
Proposal assignment presented to class.  
Assignment of challenges/problem set(s). |                                                                       |
| Week 2 (Feb. 1)  | Critical reading of scientific papers.  
Papers presented to class by instructor, followed by discussion lead by instructor.  
Assignment of papers to be presented in Week 5 and 6. | Assigned Papers |
| Week 3 (Feb. 8)  | Lecture on grants and grant writing and guidelines for assigned proposal.  
Students submit preliminary proposal (1 page) describing research project for approval  
Student submit solutions to challenge/problem set #1 | Reading to assist in grant writing:  
1. Friedland & Folt  
2. New & Quick |
| Week 4 (Feb. 15)  | Selected students present solutions to challenge/problem #1.  
Discuss solutions  
Challenge/problem set #2 is assigned |                                                                       |
| Week 5 (Feb. 22)  | Students present overviews and analysis of assigned papers, students in class then discuss the paper and critique the presentation.  
Students turn in proposal outline – based on R21 proposal structure | Assigned papers |
| Week 6 (Mar. 1)   | Students present overviews and analysis of assigned papers, students in class then discuss the paper and critique the presentation. | Assigned papers |
| Week 7 (Mar. 8)   | Spring Break – No Classes |                                                                       |
| Week 8 (Mar. 15)  | Students present overviews and analysis of assigned papers, students in class then discuss the paper and critique the presentation.  
Student submit solutions to challenge/problem set #2 | Assigned Papers |
| Week 9 (Mar. 19)  | Selected students present solutions to challenge/problem set #2.  
Discuss solutions |                                                                       |
| Week 10 (Mar. 22) | Discussion and analysis of assigned papers.  
Grant proposals are to be submitted at the beginning of class. | Assigned Papers |
| Week 11 (Apr. 5)  | Class breaks into “study sections” to evaluate and discuss student proposals.  
(score the proposals). |                                                                       |
| Week 10 (Mar. 29) | Selected students present solutions to challenge/problem set #2.  
Discuss solutions |                                                                       |
| Week 12 (Apr. 12) | Students present overviews and analysis of assigned papers, students in class then discuss the paper and critique the presentation. | Assigned Papers |
| Week 13 (Apr. 19) | Students present overviews and analysis of assigned papers, students in class then discuss the paper and critique the presentation.  
Revised Grant proposals are to be submitted at the beginning of class. | Assigned Papers |
| Week 14 (Apr. 26) | Class breaks into “study sections” to evaluate and discuss student proposals.  
(score the proposals). |                                                                       |
| Week 15 (May. 3)  | Study sections present review and scoring of assigned proposals.  
Discuss reviewed proposals, indicating strengths and weaknesses. |                                                                       |