

# Special Topics in Fine Chemicals & Polymers 002

Department of Chemical and Biological Engineering, 2007/2

The lecture will be delivered in English

<b>Class Hours</b>	Tuesdays and Thursdays 2:30 – 3:45 pm (458.703 (002))
<b>Classroom</b>	302-719
<b>Instructor</b>	Dr. Young Gyu Kim; Room 302-728, 880-8347, <a href="mailto:ygkim@snu.ac.kr">ygkim@snu.ac.kr</a>
<b>Office Hours</b>	1:00 – 2:00 pm, Monday through Friday
<b>Website</b>	<a href="http://eng.snu.ac.kr/lecture">http://eng.snu.ac.kr/lecture</a> (458.703 002 정밀화학및고분자특강)
<b>Textbook</b>	<i>Advanced Organic Chemistry, Part A 5<sup>th</sup> ed.</i> Springer, <b>2007</b> : Francis A. Carey and Richard J. Sundberg.
<b>References</b>	1. <i>March's Advanced Organic Chemistry: Reactions, Mechanisms, and Structure</i> , 5 <sup>th</sup> ed.; Wiley, <b>2001</b> : Michael B. Smith and Jerry March. 2. <i>Stereochemistry of Organic Compounds</i> , Wiley, <b>1994</b> : Eliel, E. L.; Wilen, S. H. 3. <i>Advanced Organic Chemistry, Part B, 4<sup>th</sup> ed.</i> Kluwer Academic/Plenum, <b>2001</b> : Francis A. Carey and Richard J. Sundberg.
<b>Grading</b>	Total 780 points (No credits for missing more than a quarter of the total class hours or 2 reports or 1 exam)
<b>Homework</b>	8 Reports on selected Homework problems; 8 Reports x 30 points = 240 points, due on every following Tuesday after each chapter is finished
<b>Hour Exam</b>	3 x 100 points = 300 points
<b>Final Exam</b>	Comprehensive 240 points

## Schedule

<u>Week</u>	<u>Topics</u>	<u>Chapter/page</u>	<u>Remarks</u>
1/Sep 3	Introduction / Bonding & Structure	Ch 1/page 1	
2/Sep 10	(No classes)		
3/Sep 17	Ch 1 & Stereochem/Selectivity	Ch 2/page 119	
4/Sep 24	Ch 2	(continued)	HW#1 Due
5/Oct 1	Structural Effects	Ch 3/page 253	HW#2 Due
6/Oct 8	Ch 3	(continued)	
7/Oct 15	Nucleophilic substitution	Ch 4/page 389	HW#3 Due
7/Oct 16, 7 pm	<i>1st Hour Exam (2 hrs)</i>	Chapters 1-3	
8/Oct 22	Ch 4	(continued)	
9/Oct 29	Polar Addition & Elimination	Ch 5/page 473	HW#4 Due
10/Nov 5	Carbanions & Other nucleophiles	Ch 6/page 579	HW#5 Due
10/Nov 6, 7 pm	<i>2nd Hour Exam (2 hrs)</i>	Chapters 1-5	
11/Nov 12	Reactions of Carbonyls	Ch 7/page 629	HW#6 Due
12/Nov 19	Ch 7	(continued)	
13/Nov 26	Concerted Pericyclic Reactions	Ch 10/page 833	HW#7 Due
13/Nov 28, 7 pm	<i>3rd Hour Exam (2 hrs)</i>	Chapters 1-7	
14/Dec 3	(continued)	(Ch 10)	HW#10 Due
15/Dec 11	<i>Final Exam (3 hrs, 2:30 pm)</i>	Chapters 1-10	