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## CHEM 605-001: Advanced Organic Chemistry Structure and Mechanism

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## SYLLABUS CHEM 605 – Advanced Organic Chemistry Structure and Mechanism Dr. Gund – Fall 2018 Office 388T- tel xt 3669, email Gund@njit.edu

Text : Carey and Sundberg « Advanced Organic Chemistry, » 4th ed., Part A: Structure and Mechanisms, Kluwer Academic/Plenum Publishers, NY, 2000

Supplementary Texts:

(1) Smith and March, "March's Advanced Organic Chemistry", 6<sup>th</sup> ed., Reactions, Mechanisms, and Structure, John Wiley Publishers, NY

- (2) Bruckner "Advanced Organic Chemistry", Hartcourt/Academic Press, NY 2002
- (3) Isaacs "Physical Organic Chemistry", 2<sup>nd</sup> ed Addison Wesley Longman, England 1996

From Carey and Sundberg:

Chapter 2 – Principles of Stereochemistry

- Chapter 3 Conformational, Steric and Stereoelectronic Effects
- Chapter 4 Study and Description of Organic Reaction Mechanisms
- Chapter 5 Nucleophilic Substitution
- Chapter 6 Polar Addition and Elimination Reactions
- Chapter 9 Aromaticity (If time permitting)
- Chapter 11 Concerted Pericyclic Reactions

There will be three exams. Two will be given during the semester and the third during final week. Each exam is worth 100 points. Grades will be made up out of 300 points. Problems at the end of the chapter are assigned. Office hours will be M 4 to 5 PM