Organic Chemistry II

Chemistry 282

Section: D100

Term: 2006 Spring

Instructor: Dr. Uwe Kreis

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Discussion Topics: General Course Description:

Polyfunctional organic compounds and complex organic reactions. Introduction to natural products.

2 lecture hours/week; 1 tutorial hour/week; 0 laboratory hours/week.

Topics covered (Week designations are approximate!)

Week 1. Benzene, Electrophilic aromatic substitution.

Week 2. Side chain reactions and radical stabilities.

Week 3. Conjugated Dienes, Diels-ALder Reaction.

Week 4. Review of Spectroscopy.

Week 5. Aldehydes and Ketones.

Week 6. Wittig & Grignard reaction, keto-enol tautomerization,

Week 7. Carboxylic Acids and Derivatives.

Week 8 & 9. Enolate Chemistry, Aldol reaction, Enamines.

Week 10. Carbohydrates, Structure, nomenclature, reactions.

Week 11 & 12. Amines, Properties, Preparation and Reactions.

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Week 13. Amino acids & nucleic acids.

Grading: 35% Midterm/Quizzes; 10% Group presentation; 5% Paticipation & attendance; 50% Final Examination

Required Texts: Maitland Jones, "Organic Chemistry" 3rd Ed. W.W.Norton & Co.

OR

John McMurry, "Organic Chemistry", 6th Ed. 2004. Brooks/Cole

Recommended Texts: Any introductory organic chemistry text

Materials/Supplies: A molecular model set is useful

Prerequisite/Corequisite: Prerequisite: CHEM 281.

CHEM 286 should be taken concurrently.

Notes: Group presentations will be scheduled for certain tutorials at which attendance is mandatory.

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.