

STT-Chemistry in Your Home, Work, and Environment

Chemistry 192

Section: D100

Term: 2006 Summer

Instructor: Dr. D. Leznoff

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Discussion Topics: This is an introductory course intended for both science and non-science majors, exploring the impact of chemistry on modern living. Students will gain a broad perspective on chemical processes with historical, environmental and economic importance in shaping society, examining both beneficial and harmful aspects of the chemicals that shape our lives. Topics may include: Perfumes, explosives, drugs, dyes, plastics, pesticides and greenhouse gases.

3 lecture hours/week; 1 tutorial hour/week; 0 lab hours

Week

Tentative Lecture Topics

1-2 Introduction: Atoms, molecules, elements and the Periodic Table

3 Air pollution, greenhouse gases, the ozone layer

4 Acid Rain and Green Chemistry

5 Fertilizer, explosives and fireworks

6-7 Fuels old and New: from gasoline to hydrogen

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8 Metals, minerals and mines

9 Soap

10 Polymers and Plastics

11 Drugs

12

Food and Drink (e.g. the chemistry of chocolate, coffee, wine, beer)

13

Looking beyond "artificial" and "organic"

Grading: 5% News Assignments; 20% Midterm Exam; 25% Written Report/Presentation; 50% Final Exam.

Required Texts: Snyder, C.H., "The Extraordinary Chemistry of Ordinary Things", Publisher: Wiley. 4th Edition., 2003.

Recommended Texts: Several books on reserve in Library

Materials/Supplies: None

Prerequisite/Corequisite: None

Notes: None

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