NATS 1212

SCIENCE OF CONTEMPORARY ISSUES

Winter 2008

INSTRUCTOR:  Dr. Ronald Nohr
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   E-mail: rnohr@du.edu


LABORATORY MANUAL:  Catalyst, NATS 1212, R. Nohr, 2008,
   Prentice Hall

OFFICE:  Physics Bldg. 307

OFFICE HOURS:  Monday:  11:00 – 12:00
   Tuesday:  12:00 – 1:00
   Wednesday 11:00 – 12:00
   or by appointment

EXAMINATIONS:  There will be two one hour and thirty minute
   exams this quarter plus a two hour comprehensive
   final exam. Examination questions will be multiple
   choice and short essay. They will be similar to the
   practice handouts. THERE WILL BE NO MAKE-UP
   EXAMS. The only exception to the no make-up
   policy will be members of a University team or group;
   e.g., athletic team or music group. You must inform
   Dr. Nohr prior to the exam and make arrangements
   at that time for a make-up test. If you miss an exam,
   for whatever reason, you can substitute your final
exam. score for that test. Also, if your final exam
grade is higher than one of your two midterm grades
than you can substitute it for the lowest grade.

QUIZZES:

There will be 18 quizzes during the quarter. These
are given to help you to “keep up” and to emphasize
key points for the exams. Only 15 of the quizzes will
be counted toward your final grade. There will be no
make-ups.

FINAL GRADE:

Examinations: 2 x 250 points = 500 points
Final Examination (comprehensive) = 250 points
Quizzes (15 Total) = 150 points
Laboratory (Mandatory Attendance) = 100 points
Total Points = 1,000 points

The assignment of a letter grade for a total percentage
score will be based on a fixed performance scale. Grades
therefore will not be fitted to a statistical bell-shaped
normal distribution curve.

LECTURE TOPICS:

NATS 1212 is designed around the science of three
contemporary topics:

Food and Chemicals in Our Bodies

Diamonds to Plastics

Water: Its Chemistry, Pollution and Purification
**LECTURE SCHEDULE**

<table>
<thead>
<tr>
<th>WEEK OF</th>
<th>TOPIC</th>
<th>STUDY MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 2</td>
<td>Chemical Bonding/ Functional Groups</td>
<td>Ch. 6 / Handout</td>
</tr>
<tr>
<td>Jan. 7</td>
<td>Covalent Bonds / Functional Groups / Food</td>
<td>Ch. 6 / Handout</td>
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<tr>
<td>Jan. 14</td>
<td>Fat and Cholesterol</td>
<td>pp. 252-53, 440-41, 470-71, Handout</td>
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<tr>
<td>Jan. 21</td>
<td>Carbohydrates and Proteins</td>
<td>pp. 433-40, 444-51, Handout</td>
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<td>(Jan. 21 Martin Luther King Jr. Holiday)</td>
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<tr>
<td>Jan. 28</td>
<td>Exam.I, Plastics</td>
<td>pp. 612-19 Handout</td>
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<tr>
<td>Feb. 4</td>
<td>Plastics</td>
<td>pp. 612-19 Handout</td>
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<tr>
<td>Feb. 11</td>
<td>Plastics</td>
<td>pp. 612-19 Handout</td>
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<tr>
<td>Feb. 18</td>
<td>Exam. II, Water</td>
<td>pp. 254-89 Handout</td>
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<tr>
<td>Feb. 25</td>
<td>Water</td>
<td>pp. 254-89 Handout</td>
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<tr>
<td>March 3</td>
<td>Water, Review for Final</td>
<td>Handout</td>
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<tr>
<td>March 10</td>
<td>Review for Final</td>
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<tr>
<td>March 11-14</td>
<td>Final Examination</td>
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