CH 621 ADVANCED ORGANIC CHEMISTRY/ORGANIC SYNTHESIS

SPRING 2009 Th 4:30 pm to 7:45 pm location: Sci-1-089

Instructor: Dr. Bela Torok
Room S-1-32, Science Building
Tel: 287-6159 e-mail: bela.torok@umb.edu

Office Hours: Wednesday: 10am-12am
Friday: 11 am to 12 am

Exams:
Mid-term 1: 05 March 2007
Mid-term 2: 16 April 2007
Final exam: 18-22 May 2007, TBA
Quizzes (5): see Course Outline

There will be no make up quizzes or exams. In case of any serious problems contact me in advance.

Grading: Grades will be determined on the basis of your performance in the following areas:

Quizzes(5): 50 Paper referrals (2): 50
Mid-term 1: 75
Mid-term 2: 75
Final Exam: 150

The grades will be computed by the percentage of the total 400 points. The percentile-grade equivalences are as follows:

Grading:
400-375 A
374-350 A-
349-325 B+
324-305 B
304-290 B-
289-275 C+
274-260 C
259-245 C-
244-230 D+
229-215 D-
214-200 D-
below 200 F

Both quizzes and exams will be designed to test your ability to apply what you have learned. They will be only short-answer type questions and short essays.
Classroom rules: As usual. Please, be in time. In case of any problem, let me know it in advance.

Books:

Reference books:
March: Advanced Organic Chemistry, Wiley

Summary Statement
The purpose of this course is to take you to the level of the contemporary Organic Chemistry. Several different topics will be discussed. See outline.

Tentative Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Graded works</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Introduction</td>
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<tr>
<td>2</td>
<td>02/05</td>
<td>Microwave Chemistry</td>
<td>presentations</td>
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<tr>
<td>3</td>
<td>02/12</td>
<td>Sonochemistry</td>
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<tr>
<td>4</td>
<td>02/19</td>
<td>Organofluorine Chemistry</td>
<td>Quiz1, presentations</td>
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<td>5</td>
<td>02/26</td>
<td>Oxidation</td>
<td>Quiz2, presentations</td>
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<td>6</td>
<td>03/05</td>
<td>Reduction</td>
<td>EXAM 1</td>
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<tr>
<td>7</td>
<td>03/12</td>
<td>Hydroboration</td>
<td>presentations</td>
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<tr>
<td>8</td>
<td>03/19</td>
<td>Spring Brake</td>
<td>No Class</td>
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<td>9</td>
<td>03/26</td>
<td>Protecting Groups</td>
<td>Quiz 3, presentations</td>
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<tr>
<td>10</td>
<td>04/02</td>
<td>Reactions of organometallic compounds</td>
<td>presentations</td>
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<td>11</td>
<td>04/09</td>
<td>C-C bond forming reactions through carbanions</td>
<td>Quiz4, presentations</td>
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<td>12</td>
<td>04/16</td>
<td>Cyclization (Ring-Closure) and Ring Opening</td>
<td>EXAM 2</td>
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<tr>
<td>13</td>
<td>04/23</td>
<td>Asymmetric Synthesis</td>
<td>presentations</td>
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<tr>
<td>14</td>
<td>04/30</td>
<td>Asymmetric Synthesis</td>
<td>Quiz5, presentations</td>
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<tr>
<td>15</td>
<td>05/7</td>
<td>Catch-up, Review, Discussion</td>
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<tr>
<td>16</td>
<td>TBA</td>
<td>Final Exam</td>
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Academic Integrity
Students are required to adhere to the University Policy on Academic Standards and Cheating, to the University Statement on Plagiarism and the Documentation of Written Work, and to the Code of Student Conduct as delineated in the catalog of Undergraduate Programs, pp. 44-45, and 48-52. The Code is available online at: [http://www.umb.edu/student_services/student_rights/code_conduct.html](http://www.umb.edu/student_services/student_rights/code_conduct.html).