Chem 500  
Special Topics (NMR Spectroscopy)  
Syllabus

Course Information

*Title and Course Number:* Special Topics; Chem 500  
*Prerequisites:* Organic Chemistry-Sophomore level  
*Credit Hours:* 3  
*Classroom:* Currens 202  
*Meeting Times:* MW 5.00-6.15 PM

Instructor Information

*Name:* Dr. T. K. Vinod  
*Office:* Currens 438  
*Office Hours:* MWF 10.00-11.00 AM and by appointments  
*Office Phone:* 309 341-7829  
*E. Mail:* mftkv@wiu.edu

Textbook

Some of the best available textbooks in the market that cover the essential topics are given below. You are not required to buy any of these, however having one or more of these books as readily available reference(s) will be useful

3. *NMR Spectroscopy* by Roger S. Macomber

On-Line Resources

An extensive day-to-day lecture schedule for the course is posted on-line at  
http://www.wiu.edu/users/mftkv/CHEM500

Please print this syllabus and review the course webpage at  
www.wiu.edu/users/mftkv/Chem500  
before you come to class on Monday
Also available on-line is a nicely illustrated NMR textbook by Dr. Joseph Hornak of Rochester Institute of Technology. This book can be found at: http://www.cis.rit.edu/htbooks/nmr/inside.htm

Course Objective

This course is designed to introduce the techniques of both 1H and 13C nmr spectroscopy as powerful tools for structure elucidation in organic chemistry. A brief introduction to the principles of NMR spectroscopy will be followed by extensive analysis and discussion of NMR parameters such as chemical shift, coupling constants, splitting patterns, etc. The second half of the course is dedicated to the use of multi-pulse experiments (spin decoupling, NOE, APT, INEPT, DEPT etc.) and 2-dimensional techniques (COSY, NOESY, ROESY, etc.) in structure elucidation of complex natural products.

Course Calendar

An extensive day-to-day lecture schedule for the course can be viewed at http://www.wiu.edu/users/mftkv/CHEM500

Attendance

Attendance in lectures is mandatory

Exams and Grading Scheme

Student performance in this course will be evaluated through 2 homework assignments, 3 in-class open notebook exams that permit the usage of class notes and web notes posted for CHEM500. Students will not be permitted to bring reference textbooks as resources for the exams. A detailed grading scheme can be found at http://www.wiu.edu/users/mftkv/CHEM500 and is also copied below

<table>
<thead>
<tr>
<th>% Total Points Scored</th>
<th>Letter Grades</th>
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<tbody>
<tr>
<td>100-85%</td>
<td>A…-A-</td>
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<tr>
<td>84.9-70%</td>
<td>B+…B-</td>
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<tr>
<td>69.9-55%</td>
<td>C+…C-</td>
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<tr>
<td>54.5-40%</td>
<td>D+…D-</td>
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</tbody>
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Academic Dishonesty

Students are encouraged to review WIU policies regarding cheating and plagiarism. Copying answers from your friends on the homework assignments
will be considered as an act of plagiarism and will be dealt with as per the university policies.

Useful Resources:
http://sdo.wiu.edu/facultyStaff/absencepolicy.asp (absence policy)

http://www.wiu.edu/policies/acintegrity.php (academic integrity policy)

http://sjp.wiu.edu/CodeOfConduct/index.asp (Disorderly conduct)

In accordance with University policy and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor’s attention, as he/she is not legally permitted to inquire about such particular needs of students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should contact the instructor as to the most appropriate procedures to follow in such an emergency. Contact Disability Support Services at 298-2512 for additional services.

Emergency Preparedness:
WIU Office of Risk Management and Emergency Preparedness provide resources on how to respond to emergency situations. Please view the video resources at www.wiu.edu/rmep/ (Click “Resources” on the right side of the page)