Tentative Syllabus (as of 08/20)

Instructor Dr. Joachim G. Schantl  
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Office Hours Monday, Wednesday, 8th period (3:00 – 3:50 p.m.),  
Friday, 3rd period (9:35 – 10:25 a.m.), Sisler Hall 329.  

Or by appointment: Please inquire by e-mail, include “CHM 5235” or “CHM 4230” in the subject line and suggest 2 or 3 times/dates in your message.

E-Learning site https://lss.at.ufl.edu/ Updated regularly with Announcements, Gradebooks (scores), Resources (syllabus, lecture notes, problem sets, exams, handouts, etc.).

Text  
(1) “Organic Structure Analysis”, 2nd Ed. (Crews, Rodriguez, Jaspars)

(2) “Structure Determination of Organic Compounds”, 4th Ed. (Pretsch, Bühlmann, Radertscher)

Books on Reserve Sign in to https://ares.uflib.ufl.edu/ to see the books available for two-hour check-out at the Marston Science Library.

Prerequisites One year of Organic Chemistry (e.g., CHM 2210 / 2211) is necessary.

Lecture M, W, F 6th period (12:50–1:40 p.m.) in Leigh 207.

Course topics  
I. Strategies for Compound Identification  
II. Nuclear Magnetic Resonance (1H, 13C, other nuclei, 1D and 2D experiments)  
III. Infrared Spectroscopy  
IV. Mass Spectrometry  
V. Ultraviolet / Visible Spectroscopy  
VI. Electron Paramagnetic Resonance

Class notes Class notes will be posted on e-Learning at least the day before the first class that needs them. Revised notes (as necessary) will be posted there as well.

Problem Sessions F 6th period (12:50–1:40 p.m.) in Leigh 207.  

Problem sessions attendance and participation is required for CHM 5235 students; participation will be graded.

CHM 4230 students are strongly encouraged to attend the problem session.

Problem sets Problem sets will be posted on e-Learning roughly a week before the associated problem session.  
CHM 5235 problem sets are not collected.  
CHM 4230 problem sets are due at the beginning of the associated problem session (students may keep a copy) and can be turned in either in class or in my office prior to class.

Exams Exams are take home. They will be web posted after class on  
Monday, Sept. 26; Monday, Nov. 14; Monday, Dec. 5.

Exams are due at the beginning of the next class period (the following Wednesday).
Grading:  
CHM 5235  
Exam 1 20%  
Exam 2 25%  
Exam 3 35%  
Problem session * 20%  

CHM 4230  
Exam 1 20%  
Exam 2 25%  
Exam 3 35%  
Problem sets** 20%  

*CHM 5235 students: Participation in the problem sessions is graded; problem sets are not collected.  

**CHM 4230 students: Problem sets are collected (grading on problem sets is pass/fail). Participation in the problem session is not required. However, attendance at the problem sessions is strongly encouraged.  

Grading Scale:  
Letter Grade A A– B+ B B– C+ C C– D+ D D– E  
Score Required 92% 90% 87% 83% 77% 73% 70% 65% 60% 55% <55%  

Classroom etiquette Please come to class on time and adjust your cell phone so that it does not ring.  

Student honor code See the UF Student Guide [http://www.dso.ufl.edu/studentguide/](http://www.dso.ufl.edu/studentguide/) for details.  

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.  

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”  

**Tentative course schedule (as of 08/20)**  

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<thead>
<tr>
<th>Monday</th>
<th>Wednesday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>08/22</td>
<td>Spectroscopy intro</td>
<td>08/24</td>
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<tr>
<td>08/29</td>
<td>¹H chemical shift</td>
<td>08/31</td>
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<td>09/05</td>
<td>Labor Day – No classes</td>
<td>09/07</td>
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<tr>
<td>09/12</td>
<td>¹³C chemical shift, ¹H coupling</td>
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<td>09/19</td>
<td>¹H coupling</td>
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<td>dynamic NMR – Exam #1 posted</td>
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<td>10/03</td>
<td>2D NMR</td>
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<td>10/10</td>
<td>2D NMR</td>
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<td>10/17</td>
<td>2D homonuclear correlation</td>
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<td>10/24</td>
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<td>IR – Exam #2 posted</td>
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<td>UV</td>
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<td>12/05</td>
<td>Integrated problems – Exam #3 posted</td>
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