CHM 4230: 5682
CHM 5235: 5683

Organic Spectroscopy

Fall 2012

Tentative Syllabus (as of 08/22)

Instructor

Dr. Joachim G. Schantl
Office: Sisler 329A. Phone: (352) 392-9131. E-mail: jschantl@chem.ufl.edu.

Office Hours

Sisler Hall 329
Monday, Wednesday, 4th period (10:40 – 11:30 a.m.),
Friday, 2rd period (8:30 – 9:20 a.m.),.

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 (^{1}H, ^{13}C, 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. 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 and 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
Wednesday, Sept. 19; Monday, Nov. 05; Monday, Dec. 3.

Exams are **due at the beginning of the next class period** (the following Wednesday).

Grading: **CHM 5235** and **CHM 4230**

Exam 1	100 pts
Exam 2	125 pts
Exam 3	175 pts
Problem session*	100 pts (20 pts for the problem set for each Problem Session, only the best 5 problem sets will count).

*CHM 5235 students: Problem sets are collected.
In addition, participation in the problem sessions is graded.

**CHM 4230 students: Problem sets are collected.
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%	80%	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/ 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 08/22)

Monday		Wednesday		Friday	
	Spectroscopy intro	08/22	Spectroscopy intro	08/24	NMR intro, basic theory
08/27	^{1}H NMR	08/29	^{1}H NMR	08/31	^{19}F NMR (Prof. W. Dolbier)
09/03	*Labor Day – No classes*	09/05	^{13}C NMR	09/07	PS #1
09/10	^{1}H, ^{13}C NMR	09/12	^{1}H, ^{13}C NMR	09/14	PS #2
09/17	^{1}H, ^{13}C NMR	09/19	^{1}H, ^{13}C NMR – Exam #1 posted	09/21	**Exam #1 due** – NMR
09/24	NMR	09/26	NMR	09/28	PS #3
10/01	NMR	10/03	NMR	10/05	PS #4 or **GL (TBA)**
10/08	NMR	10/10	NMR	10/12	PS #4 or **GL (TBA)**
10/15	MS	10/17	MS	10/19	PS #5 or **GL (TBA)**
10/22	MS	10/24	MS	10/26	PS #5 or **GL (TBA)**
10/29	**MS**	10/31	MS	11/02	PS #6
11/05	**MS** – Exam #2 posted	11/07	**Exam #2 due** – IR	11/09	*Homecoming – No classes*
11/12	*Veterans Day (obs.) – No classes*	11/14	IR	11/16	IR
11/19	IR – **TBA**	11/21	*Pre-Thanksgiving – No classes*	11/23	*Thanksgiving – No classes*
11/26	UV, ORD, CD	11/28	UV, ORD, CD	11/30	PS #7
12/03	Integrated problems – Exam #3 posted	12/05	**Exam #3 due – TBA**		