

Instructor:	Dr. Ronald K. Castellano (Office: Sisler Hall 201A; phone: 352-392-2752)
E-mail:	castellano@chem.ufl.edu
Required Text:	Eric V. Anslyn and Dennis A. Dougherty, <i>Modern Physical Organic Chemistry</i>
Recommended Text:	F. A. Carey and R. J. Sundberg, <i>Advanced Organic Chemistry</i> , 5 th Edition, 2007
Classroom:	142 Leigh Hall
Class Sessions:	T and R, 4 th –5 th periods (10:40 a.m. – 12:35 p.m.) (<i>see course schedule</i>)
Problem Sessions:	T or R, 5 th period (11:45 a.m. – 12:35 p.m.) (<i>see course schedule</i>)
First Exam:	T, Feb. 25 th (11:45 a.m. – 1:40 p.m.)
Second Exam:	T, April 7 th (11:45 a.m. – 1:40 p.m.)
Office Hours:	T and R (2:00 – 3:00 p.m.); other times by appointment
e-Learning Website:	https://elearning.ufl.edu/ (<i>updated regularly with announcements, exam scores and information, supplementary course material, etc.</i>)

Course Description:

The majority of the course will focus on fundamental aspects of physical organic chemistry. Topics in this area will include: Structure and bonding, stereochemistry, thermodynamics, kinetics, free-energy correlations, selected reactions and their mechanisms, and photochemistry. The final portion of the course will focus on supramolecular chemistry topics. Selected class periods will be used as problem solving sessions and for student presentations. Students will be invited to present the solutions to specific problems from homework assignments. Students will also complete a project that will involve a presentation of peer-reviewed literature in physical organic chemistry. Additional details will be posted on the e-Learning website.

Prerequisites:

It is assumed that you are familiar with the core and physical organic content taught in sophomore organic chemistry (e.g., CHM2210/2211) and Basic Principles for Organic Chemistry (CHM5224).

Textbook and Outside Reading:

The course notes will serve as the outline for the course material. Chapters and sections in textbooks should be read as appropriate to supplement the material discussed in the lecture. Primary references to the literature should be read when they are provided during the lectures or as needed to supplement the reading. When problems from the text are assigned, reading the respective chapters may help you to answer the questions.

Grading:

Your final grade will be based on a class “curve” that is developed throughout the course. I will do my best to keep each of you informed as to your performance in the class as we go along. *Course grades will be determined based on the student’s performance in the following areas:*

Exams: 30% each

Problem sets: 10%

Problem session participation: 10%

Literature project: 20%

Attendance/Makeup Policy and Class Expectations:

I expect you to come to class and be there on time. When you are in class please be respectful of others. Cell phone use is strictly prohibited at all times in the classroom. Please adjust your phone so that it does not ring. If you come late on exam days you will not be given additional time.

Excused absences (which include, but are not limited to, religious observances, participation in official university activities, military obligations, and court-imposed legal obligations) must be in compliance with University policies as stated in the Graduate Catalog (<https://catalog.ufl.edu/graduate/regulations/>). In such cases, students will be given the opportunity to take a makeup exam provided that the absence is a) properly documented and b) disclosed to Dr. Castellano at least one week before the scheduled exam. Unpredicted absences due to illness or a significant personal/family emergency will be handled on an ad hoc basis. Unless negotiated individually, **late assignments will not be accepted.**

Students Requiring Accommodations:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Health and Wellness:

U Matter, We Care: Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the [Office of Title IX Compliance](#), located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, title-ix@ufl.edu

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

Other Important Information:

- *Division of Student Affairs* (Counseling, Dean of Students Office): <https://ufsa.ufl.edu/>.
- *UF Grades and Grading Policies:* <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.
- *Lose or find something during class?* Visit the Chemistry lost-and-found (Leigh Hall 214).

Student Honor Code:

The UF Student Honor Code (see <https://sccr.dso.ufl.edu/process/student-conduct-code/> 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.”*

Honor Code violations include copying on an exam (or helping another student to copy) and/or turning in an exam for regrading that has been changed since it was graded by the instructor.

Any student found responsible for an academic honesty violation in this course will be recommended sanctions consistent with the offense.

CHM6225 Advanced Principles of Organic Chemistry
Spring 2020 (Class Number 11108)
Course Schedule

Lecture Dates	Lecture Topic(s)	Problem Set*
1/7, 1/9	Structure and Bonding	
1/14, 1/16	Structure and Bonding, Conjugated Systems, Aromaticity	Set #1 (1/16)
1/21, 1/23	Stereochemistry and Thermochemistry	
1/28, 1/30	Thermodynamics, Conformational Analysis, Stereoelectronic Effects	Set #2 (1/30)
2/4	Reactive Intermediates	
2/6, 2/11, 2/13	Kinetics	Set #3 (2/11)
2/13, 2/18	Linear Free Energy Relationships and Isotope/Solvent Effects	Set #4 (2/18)
2/20	Isotope/Solvent Effects	
2/25	Exam #1	
2/27, 3/10	Substitution, Rearrangements, Elimination, Aromatic Substitution	Set #5 (3/10)
3/12, 3/17	Aromatic Substitution, Photochemistry	Set #6 (3/17)
3/19, 3/24	Photochemistry, Supramolecular Chemistry Topics	Set #7 (3/24)
3/26	Class Cancelled	
3/31, 4/2	Supramolecular Chemistry Topics	Set #8 (4/2)
4/7	Exam #2	
4/9, 4/14	Literature Presentations	
4/16, 4/21	Literature Presentations	

* Problem sets will be posted at least one week before the associated problem session. Problem sets must be handed in immediately following the problem session on the date shown.