CHM 2210, Organic Chemistry I

3 credits

This course is 100% online.

Instructor: Dr. Jason D. Portmess (Dr. J) **Office:** Sisler 328
Office Hours: By appointment **Email:** thru Canvas only

Whose "Brilliant" Idea Was It for Me to Take Organic Chemistry? Good question. What is the issue with Organic Chemistry that causes students to view the course with so much anxiety? Maybe you've heard comments from students who have recently finished the course. Something like: "You have to memorize five gazillion reactions, and then they don't even ask you the ones you've had in class on the exams!" How you approach the course will go a long way in how you will perform in the course. I view the process of learning Organic Chemistry as learning a new language or driving a car. No one ever became fluent in a foreign language by memorizing sentences nor do we memorize the steps to back the car out of the driveway and take off to a particular destination, while navigating traffic with variable environmental conditions. We acquire these skills through consistent practice, repetition and exposing ourselves to new situations and scenarios. Memorizing a list of chemical reactions will take you as far as memorizing a list of vocabulary words in a foreign language. In short, not very far. Instead, you will need to refresh yourself with some of the basic properties of atoms and molecules, so that we can delve into the principles that help us to describe, and predict, how and why Organic reactions take place. With steady practice and repetition, we will be able to acquire another skill that is necessary for this course and beyond – pattern recognition. Pattern recognition is the cornerstone of all diagnostics, and every diagnostician will tell you that this is a skill that must be honed, never memorized. You'll be expected to learn about and *really understand* the ground rules of chemical change, so that you can apply them in a logical way to completely new kinds of situations and come up with sensible answers and alternatives. We live in a world now where the answers to past questions are easily found. This is no longer considered a marketable skill in today's information society. It is up to you to develop your mind so that you will be better equipped to answer the questions that have not even been asked yet. That path begins here. And now, here's all the technical stuff…

Email and Discussion Board Etiquette: Unless it is unavoidable, I will NEVER send you an email (or Canvas announcement) during "off-business hours", and I would hope you would respect this etiquette and do the same. We will use typical business hours as our guidance for email and Discussion Board correspondence. If you send me an email (or post a message on our Discussion Board) M-F between the hours of 8am-5pm then I will make every effort to reply on the same day. Any email sent after 5pm (or on the weekend) should never expect a reply until the next business day.

Course Description and Objectives: This is the first of two basic courses that describe the chemistry of hydrocarbon-based compounds. Specific topics to be covered include structure, nomenclature, stereochemistry, and the reactivity of various organic functional groups with a particular emphasis on the following: alkanes, cycloalkanes, alkyl halides, alkenes, alkynes, alcohols and ethers. The importance of understanding and writing detailed mechanisms will be emphasized throughout the course in addition to developing the strategies necessary for routine and multi-step synthesis problems. *Bottom Line: This course is designed to prepare you for the complex, integrated world of Organic 2!*

> This course is participating in UF All Access, the least expensive and fastest way to get access to your course materials for the semester. Please visit the bookstore All Access Site to opt-in and purchase your required Connect code. This provides access to the eBook, textbook solutions manual, and the OWLv2 practice assignments.

Text: Brown, Foote, Iverson, Anslyn, *Organic Chemistry*, 6th, 7th or 8th Edition (highly recommended) and accompanying, *Solutions Manual, Organic Chemistry*, 6 th,7 th or 8th Edition (recommended – **with caution…*it can be addictive and lead to a false sense of self***). Traditional CHM 2210 course coverage will be Chapters 1-11.

Technology Requirements: Students are required to have a functioning webcam, microphone, and speakers for proctored exams. See the technical requirements at www.proctoru.com. Verify that your operating system is compatible with ProctorU. (ProctorU currently does not support Chromebooks, for example.)

Students may require Adobe Acrobat Reader, Adobe Flash Player, Microsoft Silverlight and other software. You may wish to use Microsoft Excel or Word for written assignments. Free tutorials on many software applications can be found at Lynda.com. All UF students are expected to have reliable access to a computer, especially for an online course. ProctorU has specific hardware/software requirements: Go to http://www.proctoru.com/tech.php for details.

Lecture Topic Presentations: All course content this semester will be made available to you via our Canvas site. The materials will be presented by utilizing a variety of different presentation platforms (handouts, emails, pre-recorded video lectures, etc.). This platform will allow you to watch the Lecture Topic Presentations (LTPs) at your convenience, but you

must maintain a diligent, consistent routine that works best for you (see **PHILOSOPHY** on page 3) to keep up with our scheduled assessments. *Organic Chemistry is not a sprint – it is a journey*. No one can become proficient at Shakespeare by reading SparkNotes, nor can you become proficient in this course by buying LTP summaries. To assist you in your time management, I have prepared a weekly **LTP Pacing Guide** that can be found on our Canvas home page (click on the *Course Resources* button). These LTPs will have embedded PlayPosit questions. These questions are designed to reinforce your learning, but they DO NOT count toward your final grade. However, your effort on these questions should matter and you should never approach this process as a race to "check off a box". If you are struggling to effectively answer these questions, then you may need to change your approach.

Evaluation Items for the Semester

1) Pacing Assessments: To ensure that you are maintaining the proper pacing that the course demands, I have prepared a weekly **LTP Pacing Guide** which can be found on our Canvas homepage (click on the *Course Resources* button). To further enhance this promoted outcome, there will be periodic graded **Pacing Assessments** that will focus on the cumulative and current aspects of the course based on the timing of the **LTP Pacing Guide.** Review the **LTP Pacing Guide** for dates and times.

2) Exams: Any non-university sanctioned scheduling conflicts must be resolved by the student and the second party. Again, special exam scheduling due to work or other obligations is not the responsibility of the instructor. You must make the appropriate arrangements. **All exams are scheduled for 90 minutes and will be administered via ProctorU**. It is your responsibility to register with ProctorU on the assigned dates, during available times. Exam dates can be found on the **LTP Pacing Guide**.

Midterm Exam: See LTP Pacing Guide, time TBA
Final Exam: See LTP Pacing Guide, time TBA

To do so, click on the ProctorU tab in Canvas. Reservations (exam start times) are available for each exam beginning at 6 pm, through 8 pm only. If you fail to make a reservation sufficiently in advance (>72 h) a late fee may be assessed by ProctorU, and you may have difficulty obtaining a desirable time. Failure to reserve a time slot in advance is not an accepted excuse for a late exam. If you encounter technical difficulties with ProctorU, contact ProctorU directly. If you have trouble navigating their reservation system, call them for assistance.

It is possible for you to earn up to 100 points for each exam. All assessments will be cumulative, but the emphasis (60-70%) of each assessment will be focused on unevaluated ("new") material and 30-40% will be considered foundational ("old") material. All language courses build on a solid foundation of fluency. Organic Chemistry is no different.

Considerations for scheduling conflicts (religious holidays, higher ranking assembly exams, and university sponsored events) will be made but must be presented to the instructor 5 days prior to the scheduled assessment.

Attention: DRC Students. If you receive DRC accommodations, it is the responsibility of the student to register for an ATR and adhere to the DRC's deadlines if they wish to receive their time accommodation for examinations.

Exam Absences: These will be handled in accordance with official UF academic regulations. For more information, see https://catalog.ufl.edu/UGRD/academic-regulations/. Please read below for further clarification for the most common situations:

(1) *Conflicts with other events*: Acceptable reasons to miss a scheduled exam include conflicting evening exams in courses with higher course numbers, religious holidays, military obligations, special curricular requirements (*e.g.*, attending professional conferences), or participation in official UF sanctioned activities such as athletic competitions, *etc*. For more information on such absences see the official UF Policy at https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext). If you must be absent for an exam due to a documented and approved conflict known in advance, you must e-mail your instructor the relevant documentation at least ***one week prior*** to the scheduled exam and an early conflict exam will be scheduled.

(2) *Missing an exam due to an emergency or sudden illness*: If you are absent for an exam due to an unpredicted documented medical reason or family emergency, **YOU MUST contact the instructor prior to the start of the exam, and have your excuse submitted to the Dean of Students Office (DSO)**. Your instructor will follow UF academic regulations in evaluating the notification and/or documentation received by you and by the DSO on your behalf. The DSO confirmation will be sent directly to your instructor. Once received, your instructor will reach out to you to schedule a make-up. If your documentation is deemed insufficient to excuse your absence, you will receive a zero for the missed assessment.

Grading: The final grade will be determined based on a possible 300 points. The points will be broken down into the following categories:

2 Progress Exams -	200 points (100 each)
4 Pacing Assessments -	100 points (25 each)
Total Points -	300 points

Grading Scale

Letter Grade:	A	A-	B+	B	B-	C+	C
Cutoff:	90.00	86.00	83.00	80.00	77.00	73.00	65.00

A minimum grade of "C" is required to move on to CHM 2211

I watched live on TV when Michael Phelps won his 7th gold medal in a single Olympics by 0.01 seconds. I remember feeling awful for the other swimmer that came so close to their goal. What I did not hear was how the runner up asked to have their time changed by 0.01 seconds so he could get to the next level medal.

2024 Olympic Update: I saw Jamica's Kishane Thompson fall 0.005 seconds to Noah Lyles in the 100m final. Falling that short is heartbreaking, but lines are drawn for a reason, and they are non-negotiable.

PHILOSOPHY

Daily Activity: This course is not an attendance-based course, but your success in this class will most certainly be determined by your level of effort and discipline. Having said that, time spent is NOT an accomplishment. Simply spending a large amount of time on a subject will not make you an expert and it will not provide the confidence to perform well on assessments. To be successful, the time you spend must be planned and properly executed to generate maximum performance with minimal effort. I seriously doubt there is a single student in this course that is looking to spend one more minute on this material than is necessary to achieve the outcome they desire. The only exception to that should be if you are a chemistry major looking to one day pursue a career in Organic Chemistry. In the COVID semester of Spring 2021, I had over 950 students in my Organic 2 course, and only one student proclaimed that to be their plan. *I wonder what the number will be this semester?* Many semesters the answer to that question is zero. However, this course is so much more than just another "weed-out" class that stands in the way of your goal. It is a course that forces you to ask serious questions about yourself. *Where do I want to go? What do I want to be? What am I willing to do? What am I willing to sacrifice? How bad do I want it?* My greatest hope for each of you will be that you can confidently answer these questions when our course comes to an end. To leave a course better off than when you arrived. That should be the goal for any course. Much more so than, "*What is more basic, a methyl Grignard or sodium acetylide?*"

The key to success in this class is to approach it the way it should be treated – like a language course. Languages are not memorized - they are practiced daily in situational based scenarios. Think of it like learning how to drive a car. If you want to learn how to drive a car, then you do it by….driving a car. I seriously doubt that any of you made a stack of note cards on how to back out of the driveway. Organic Chemistry is alive and dynamic so studying with static, lifeless materials does not make a lot of sense and it will limit your abilities to move forward and deal with more complex situations (kind of like knowing how to drive on a slick road after a summer shower). Organic 1 taught you the basics of this language but it was limited in the depth of content to what you could problem solve or communicate. In most cases, only a single path to a solution was possible. This semester, like a language, you will see there are a multitude of ways of "getting the point across." This is why it is so important that you deal with the material a little bit at a time, but rarely should there be a day that you do not deal with it at all. Let that become your mantra – *A little bit - All the time*. Short, super-concentrated, uninterrupted bursts multiple times per day would be ideal. The Lecture Topic Presentations (LTPs) will be presented in this manner.

The game plan this semester is to provide the lecture content that you will need, with LTPs that average less than 30 minutes in length. To ensure that you are maintaining the proper pacing that the course demands, I have prepared a **Weekly LTP Pacing Guide** which can be found on our Canvas homepage. To further enhance this promoted outcome, there will be periodic **Pacing Assessments** that will focus on cumulative and current aspects of the course based on the timing of the **LTP Pacing Guide.** Viewing and supplementing a shorter LTP everyday (M-F) should promote an improved cumulative buildup of knowledge compared to larger blocks of time in fewer days. Here is where your discipline becomes so very important. Binge watching to catch up is great for a Netflix series, however it can be counterproductive for learning a language like Organic Chemistry.

As far as the total time commitment to watching LTPs, there will be approximately 1700 minutes of video to be presented this semester, whereas a live lecture course would normally meet for more than 2200 minutes. Please, do not consider this time savings and yell "*Woo Hoo!*" like Homer Simpson. Consider it an opportunity to spend more time on what is critical in being successful in this class….*organization, integration, and practice*. If you want your stress level to be lessened during graded assessments, then your confidence level needs to be riding high. Use this "freed-up" time wisely.

Doing Problems: *"I must have studied 50 hours and not a single thing on the test is what I studied. I understand what you are saying in lecture, I do ALL of the problems, but why did I get a 52 on the exam?"* These statements and this question are as frustrating for me to hear and answer as it is for you to say and ask. My best advice to you is to work as many problems as YOU can. Honestly work them - write them out on paper, balance equations, show lone pairs, draw arrows, identify non-zero formal charges, etc. Don't turn to the solutions manual at the first moment of struggle. The struggle is real, and the struggle is essential to make the mental connections required to be successful. Successful diagnostics is born out of identifying pattern recognition. Don't deny yourself this opportunity by simply turning to an answer. Answers are irrelevant without a logical, diagnostic process. Relying on the solutions manual or watching someone on YouTube can be a monumental mistake. Maybe this will sound familiar…"*Let me just see how they did it…. Hmmm….Yep, that's what I thought the answer was supposed to be. Next question….*" Before you know it, you have convinced yourself that you did the problem. Even worse, that you understand the problem. Unfortunately, when the exam comes along, you don't know where to begin. Suddenly you feel the stress of the exam because you are not confident in your preparation. This is not a scare-tactic, but it will become a reality if you do not spend the time developing a reliable problem-solving process.

This is not a course where your performance is determined by your ability to regurgitate facts or figures. To be successful in this class, you must be fluent enough in the language of Organic Chemistry to diagnose the problem, determine the best course of action, and apply what you have learned to new situations. The best way to acquire this skill is to work *a lot* of problems. The more problems YOU attempt, the more YOU will learn. It is that simple. *Knowledge Comes from the Learning*. Watching me, teaching assistants, YouTube videos or paid off-campus services solve problems will not acquire a skill for YOU any more than watching Tiger Woods videos will make you a better golfer. If YOU are not the one getting frustrated, then YOU are not the one who will do well. If YOU are not the one exhausted from doing more problems in a single subject than you have ever done in your life….then YOU will be the one wondering "*What happened?*" after an exam.

"So how many problems should I attempt from each chapter?" There are two basic philosophies in practicing anything to acquire great skill (physical or mental). Some people practice until they get it right, and some practice until they CAN'T get it wrong. *Which group do you think is the most successful?* Answer this question and you will be well on your way to knowing how many problems to attempt. Having said that, each LTP will have *Pertinent Practice Problems* to reinforce the presented material and there will be select problems from the Textbook that are available on our Canvas site (*Textbook Problems Page*) to give you the practice in developing the necessary pattern recognition skills to be successful.

FINAL NOTE:

If you did not know how to swim and you suddenly found yourself overboard you would scream for help. You would not worry how people would think of you and the fact that you could not swim. If you feel like the waves of Organic Chemistry are beginning to crash around you, come and get help before it is too late. *Getting help is not a sign of weakness…it is a sign of strength*. Better yet, seek out guidance before you need help, so that bad habits do not set in.

With literally hundreds and hundreds of students registered this semester, using the Discussion Board (DB) can be one of the most effective ways to answer questions and keep them organized for all students to view. The DB provides a platform where a greater number of questions can be asked, organized and permanently available for later review. The DB also provides an opportunity for students to read commonly asked questions and follow my responses without redundancy.

However, if you are still not seeing what needs to be seen by utilizing our Discussion Board make sure to reach out to me and we will set up a time to meet. Another option that you have available to you is free tutoring through the UF Teaching Center. Click on this link to set up a Zoom appointment: Academic Resources – College of Liberal Arts & Sciences (ufl.edu)

Standard Syllabus Statements

Listed below are standard syllabus statements that meet the College of Liberal Arts and Sciences and UF requirements for undergraduate and graduate courses. All of these topics must be included in the syllabus. These cover the minimum requirements. More details can be added at the instructor's discretion.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "*We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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*."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g., assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester. Please contact the DRC in Reid Hall at 352-392-8565 or go to their website at: www.dso.ufl.edu/drc/

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. 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.**Campus Helping Resources**

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575,* www.counseling.ufl.edu/cwc/

  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Training Programs
  Community Provider Database

- *Career Resource Center*, First Floor JWRU, 392-1601 or at: www.crc.ufl.edu/

Absences and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies and can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Online Student Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/ . Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/ . Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Grades and Grade Points

For information on current UF policies for assigning grade points, see https://www.advising.ufl.edu/resources/gpa-calculator/

Software Use:

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.