INSTRUCTOR:

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COURSE MATERIALS (3 required, 1 highly recommended, 1 optional, 1 no-cost)

1.) ***BOOKS:***

a. (required) "Organic Chemistry", 8th or 9th or 10th or 11th edition, by T.W. Graham Solomons and Craig B. Fryhle and
b. (required) corresponding "Study Guide and Solutions Manual to Accompany Organic Chemistry".

2.) ***IN-CLASS TRANSMITTER*** (required):

A Turning Technologies response device (model "Response Card NXT") available at the bookstore is required for the course and should be brought to every class except when an exam is scheduled. More information about the Turning Technologies device is at http://www.cetl.gatech.edu/it/clicker/student

If you use a SmartPhone, we will also setup the system to recognize responses from your phone instead of the Response Card. You will need the Response Ware license with a Smart Phone. See above link.

You will need to enter your GT account (e.g., jsmith3) into your transmitter clicker. You will also need to register your device on T-square. If you forget your transmitter, do not borrow someone else's. Your GT account name is matched to your unit. To receive credit, you must answer a question. Simply joining a session does not receive credit. The system only records answers. If you enter answers for another student in the class or you get another student to enter answers into your clicker this is a violation of the GT honor code and it will be treated as an honor violation just like cheating on an exam or assignments.

You will need to register your unit in T-Square. Log on to http://tsquare.gatech.edu, go to your course site, click Turning Technologies on the left menu, and you will see instructions on how to register your device there. You may choose to use the clicker in all your courses or just this course.

Your clicker ID can be found at the bottom on the back of your clicker, for example, Device ID: 0DB23C. Please note that these three letters are not used in any device ID, O, I, and L (NO **OIL**). If you get an error when registering your clicker, please make sure that you enter 0 (zero) instead of letter O.

3.) ***ACS Organic Chemistry Study Guide (highly recommended)***

The final exam for this course is the American Chemical Society (ACS) standardized exam in organic chemistry. The exam covers the entire year of introductory organic chemistry. A valuable study guide for the final is the ACS "Organic Chemistry Official Study Guide" please see http://www3.uwm.edu/dept/chemexams/guides/index.cfm for instructions on how to purchase it ($21). You may also purchase a copy from the GT Student Affiliates chapter of the American Chemical Society. We will set up a time and place if you are interested in purchasing the ACS guide from the GT SAACS Chapter. ($21)

4.) ***MODEL KITS (optional)***

Many students find model kits useful when studying organic chemistry. You do not need an expensive kit. A small selection of atoms and bonds is useful. Model kits could certainly be shared. Model kits maybe used during exams. Make sure you know how to use them so as not to waste time during exams.

5.) ***PIAZZA.COM (no cost)*** We will use piazza.com for class Q&A. An invitation will be sent to you for you to join.

POLICIES, PROCEDURES AND GRADES

Exam 1	Topic 1	100 points
Exam 2	Topic 2	100 points
Exam 3	Topic 3	100 points
Exam 4	Topics 4 & 5	100 points
Exam 5	Topic 6	100 points
In-Class Quizzes	In-Class (% total points earned in semester) scoring each question correct=2, wrong=1 pt	100 points
Drop Lowest	Drop lowest exam 1-5 or In-Class	-100 points
Final Exam	Comprehensive (multiple choice) Required	200 points
Total		**700 points**

The lowest score from the mid-term exams, or In-Class will be dropped.

The course will be graded on the basis of 700 points:

88% (616 points) or greater will guarantee an "A"
78% (546) or greater guarantees a "B"
68% (476) or greater guarantees a "C"
58% (406) or greater guarantees a "D"

The Final Is Required.

LECTURE ATTENDANCE

It is strongly recommended that you attend all lectures. In-Class quizzes will be daily.

REGRADES

Regrade requests must be submitted within one week after the assignment was available to be picked up. All regrades requests must be submitted according to the following procedure. Write a summary of what you want regarded (question number), an explanation of why your answer is correct, and attach this page to the front of the assignment. Turn in the request to Dr. Baron. Please note that when you submit something for a regrade the entire assignment is subject to regrading. If a grading mistake is discovered that resulted in you receiving too many points, your grade could be lowered. Regrade requests will NOT be accepted after one week after the assignment was returned, even those for math errors.

CLASS NOTES

Notes for each topic should be downloaded from the course T-Square set (as PDF files) and printed prior to the first lecture dealing with the material. Topics correspond fairly closely to the chapters, with a little reorganization. These notes are not designed to be comprehensive. In fact, they are specifically designed to be incomplete. They are designed to serve as the basis for lecture notes, not as a replacement for attending lectures. The notes should minimize the use of lecture time for information transfer, and allow time to work problems in class. The notes and subsequent annotated notes are intended to enhance your learning. *They may <u>not</u> be sold*.

Other Problems (not graded)

You should work the problems in each reading assignment as you get to them. Suggested end of chapter problems are listed in the Student Aids folder in T-square. You should work through as many of these as possible. These will serve as a guide for the types of questions to appear on examinations. Do not submit answers to these problems, they will not be graded. Solutions are in the "Study Guide and Solutions Manual to Accompany Organic Chemistry".

EXAMS: SCHEDULE, MAKE-UPS AND DROPS

You must take the exam at the assigned time. All exams are closed to textbooks and notes. The only valid reasons for missing an exam are: illness, official Tech business and out-of-town job interviews. Make-ups can only be given if advance notification is given or upon presentation of a doctor's note. All make-up exams must be administered before the exams are returned to the class in the next lecture. Exams not made-up by this time, for any reason, will receive a score of zero and will be the drop grade for the class. The lowest score from Exam 1, 2, 3, 4, 5, and In-class quizzes will be dropped. If an exam is

missed for any reason that score (zero) will be dropped. However, do not miss an exam just because you know that you can drop it! Similarly, don't ignore the In-Class assignments simply because you can elect to drop this score.

RETURNED WORK

All graded assignments will be returned as soon as possible, usually at the next lecture. Work not picked up in lecture will be available at the next class meeting or from Dr. Baron. All returned work must be picked up promptly or at the latest by the end of the last lecture class. A 10% penalty per uncollected item will be assessed.

MATERIAL COVERED / STUDENT RESPONSIBILITIES

You are responsible for all material presented in lectures and in assigned readings. You are also responsible for announcements made in class, which will also be posted on the course web page(s) or distributed by email. You must check the web site and your email account on a regular basis.

WORKING IN GROUPS

Most learning takes place outside of the classroom. Although lectures should put things in perspective, working through the textbook, and solving the problems is when you will come to terms with the material. We encourage you to work together on these reading and problem assignments. For most students, it is actually unwise to try to work alone. Although you might study in groups, remember that you are ultimately responsible for your learning. Everybody can benefit from team work. If you are struggling with the material you stand to learn a lot; if you are an "Organic Wiz" you also stand to learn from the challenge of presenting your understanding to others. You will learn through teaching.

COMPETITION AND GRADING

Formal education often puts students in competition with each other for good grades. We do not believe that competition for grades, and the exclusion of everything else, is the most effective way to foster student development. Although grades will be assigned based on a numerical score which judges attainment on exams, We hope that the course is structured such that if you show a desire to learn, put the effort in, and have some intellectual ability, you can get the grade you want. With this in mind, please take the time to read the Grades, Expectations and Minimum Requirements section, and decide what you want from the course.

EXAMS

All of the problems in the exam will be similar to those in the book and/or covered in lecture. The processes by which you can solve the problems will be exactly the same as those in the book. Work as many problems in the text or on the Wiley Plus site as practical. Occasionally, an exam question will be taken directly from the text. You must understand the processes required to answer assigned problems to do well on exams. An example for each exam, with answers, is available from the web site. The best use of these practice exams is to study for the exam, then try the practice exam, in one hour, undisturbed. THEN look at the answers, gauge your success, and assess your needs for further study. The actual exams will be different than the practice exams.

CANCELLATION OF CLASSES

If class is cancelled by Georgia Institute of Technology owing to campus closing, the entire schedule for the course will be delayed by one lecture. This will move exam dates back by one lecture.

TIME COMMITMENTS

We all have extensive demands on our time. For each lecture you should aim to put in at least another two hours of your own time. You will need to spend more time preparing for exams. Some students will require more, some less.

GRADES, EXPECTATIONS AND MINIMUM REQUIREMENTS

adapted from J. H. Williams in The Teaching Professor, (Aug 1993)

"D" -58%- Some demonstration of detailed knowledge of organic reactions.

"C" -68%- Detailed knowledge of structure and bonding, be able to show movement of electrons during reactions, and know individual organic reactions.

"B" -78%- Requirements for a "C", plus some demonstrated success of multistep synthesis of molecules, some success showing movement of electrons for multistep reactions.

"A" -88%- Requirements for a "B", plus: write consistently good complete pathways for multistep reactions based on simple mechanistic concepts showing flow of electrons in each step. Propose good syntheses for molecules using a string of individual organic reactions.

"A" students have virtually perfect performance. Their commitment to the class resembles that of the teacher. They always read the assignment, and their attention to detail is such that the occasionally catch the teacher’s mistakes (we all make them!). An "A" student is creative, committed, organized, and curious, has a retentive mind (and exercises it), has a winning attitude, and shows initiative.

"V" audit - same as for "S"

"S"atisfactory (S/U) - Exams 1-5 to a "C" level (no drops), Final not required, or "D" including Final.

If every student gets 88+%, everyone gets an "A"

SOME STUDY TIPS

Understand and Rationalize. Read the text, prepare your own summaries. Typically each section in the text can be generalized in one or two lines or equations. Read the chapter summaries. Do you understand each point? Can you apply each concept? Work as many of the problems in the book as possible. Do them in order. If you have no trouble with the first few parts of a multi-part question, you might want to pick a few of the latter parts at random. Study in groups. Keep up to date! Ask questions!!

STUDENT CLASS ACCOMMODATIONS

Students with disabilities who require reasonable accommodations to fully participate in course activities or meet course requirements are encouraged to register with ADAPTS-Disability Services Program at (404) 894-2564 or www.adapts.gatech.edu and contact me to discuss access issues.

COURSE WEBSITE

We will utilize the GT course management site called “T-Square”, which you can access via tsquare.gatech.edu. Included on the site will be course policies, reading and lecture schedules, practice exams and keys, lecture notes and your grades.

HONOR CODE

Students are expected to adhere to the Georgia Tech honor code during all aspects of this course (see http://www.honor.gatech.edu/ for details).

COURSE SCHEDULE (next page)

Department of Chemistry and Biochemistry

William J. Baron

Chem 2312
Organic Chemistry II
MWF
11:05 to 11:55AM

Revised 7/27/2015

Fall 2015	Date	*lecture #*	*Exams*	*Reading 10th edition* *Solomons & Fryhle*	*Reading 11th edition* *Solomons & Fryhle*
TOPIC 1	Monday, August 17, 2015	1		*Chapters 1-11*	*Chapters 1-11*
CONJUGATED SYSTEMS & AROMATICITY	Wednesday, August 19, 2015	2		*13.1-3 and 15.12-13*	*13.1-3 and 15.12-13*
Ch 13 & 14, parts of 15	Friday, August 21, 2015	3		*13.4-5*	*13.4-5*
	Monday, August 24, 2015	4		*13.6-10*	*13.6-10*
	Wednesday, August 26, 2015	5		*13.11, 14.1-9*	*13.11, 14.1-9*
	Friday, August 28, 2015	6			
	Monday, August 31, 2015	7		*Review Readings*	*Review Readings*
	Wednesday, September 2, 2015	-	EXAM 1		
TOPIC 2	Friday, September 4, 2015	8		*15.1-5*	*15.1-5*
REACTIONS OF ARENES	Monday, September 7, 2015	Holiday		*15.6-9*	
Ch 15 & 21, parts of 20	Wednesday, September 9, 2015	9		*15.10,11,13C*	*15.6-9*
	Friday, September 11, 2015	10		*15.14-15 and 20.6A-B,7*	*15.10,11,13C*
	Monday, September 14, 2015	11		*21.1-9*	*15.14-15 and 20.6A-B,7*
	Wednesday, September 16, 2015	12			*21.1-11*
	Friday, September 18, 2015	13		*Review Readings*	*Review Readings*
	Monday, September 21, 2015	14		*Review Readings*	*Review Readings*
	Wednesday, September 23, 2015	-	EXAM 2		
TOPIC 3	Friday, September 25, 2015	15	*(progress report due)*	*12.1-9, Special topic G.3*	*12.1-9, Special topic G.3*
ALDEHYDES AND KETONES	Monday, September 28, 2015	16		*16.1-16.14*	*16.1-16.14*
Chapters 12 & 16	Wednesday, September 30, 2015	17			
	Friday, October 2, 2015	18			
	Monday, October 5, 2015	19			
	Wednesday, October 7, 2015	20			
	Friday, October 9, 2015	21		*Review Readings*	*Review Readings*
	Monday, October 12, 2015	Recess			
	Wednesday, October 14, 2015	-	EXAM 3		
TOPIC 4	Friday, October 16, 2015	22		*17.1-10*	*17.1-10*
ACID DERIVATIVES	Monday, October 19, 2015	23		*20.1-6, 20.12-13*	*20.1-6, 20.12-13*
Ch 18 (or 10e: 17)	Wednesday, October 21, 2015	24			
TOPIC 5	Friday, October 23, 2015	25	*(Drop Date)*		
AMINES	Monday, October 26, 2015	26			
Ch 20	Wednesday, October 28, 2015	27			
	Friday, October 30, 2015	28		*Review Readings*	*Review Readings*
	Monday, November 2, 2015	-	EXAM 4		
TOPIC 6	Wednesday, November 4, 2015	29		*18.1-18-10*	*18.1-18-10*
ENOLS AND ENOLATES	Friday, November 6, 2015	30		*19.1-19.9*	*19.1-19.9*
Ch 17 & 19 (or 10e: 18 & 19)	Monday, November 9, 2015	31			
	Wednesday, November 11, 2015	32			
	Friday, November 13, 2015	33			
	Monday, November 16, 2015	34			
	Wednesday, November 18, 2015	35		*Review Readings*	*Review Readings*
	Friday, November 20, 2015	36		*Review Readings*	*Review Readings*
	Monday, November 23, 2015	-	EXAM 5	*Review Readings*	*Review Readings*
	Wednesday, November 25, 2015	No Class		*Review Readings*	*Review Readings*
	Thursday, November 26, 2015	Holiday		*Review Readings*	*Review Readings*
TOPIC 7	Monday, November 30, 2015	38	*Dead Week*	*Review Readings*	*Review Readings*
Review	Wednesday, December 2, 2015	39	*Dead Week*	*Review Readings*	*Review Readings*
Ch 1-20	Friday, December 4, 2015	40	*Dead Week*	*Review Readings*	*Review Readings*
Final on Dec 09th (Wednesday) 8:00 - 10:50 AM	**Wednesday, December 9, 2015**		**FINAL**		

The Final Exam will be a standardized ACS exam* covering CHEM 2311 and CHEM 2312 topics.

* ACS Official Guide ISBN 0-9708042-1-0
1.) purchase from GT Student Affialtes of the American Chemical Society or
2.) see http://www3.uwm.edu/dept/chemexams/guides/index.cfm for instructions on how to purchase.

Allow enough time for delivery.

Topic 1	100 points
Topic 2	100 points
Topic 3	100 points
Topics 4 & 5	100 points
Topic 6	100 points
In-Class % earned of total points available in semester	100 points
Drop lowest Exam 1-5 or In-Class	-100 points
Comprehensive (multiple choice) Required	200 points
Total	**700 points**