

Instructor: Ted Burkey      Office: SM205      phone: 678-2634      email: [tburkey@memphis.edu](mailto:tburkey@memphis.edu)

Smith 220, MW 5:30-6:55 PM

**A mostly paperless course:** Homework and links to Course Notes will be submitted online or by email.

<http://www.memphis.edu/chem/faculty-burkey/tjb-4311.php>

**Texts:** "A Guidebook to Mechanism in Organic Chemistry", 6<sup>th</sup> Ed. P. Sykes

**Review Organic Text on Stereochemistry:** conformer (gauche, anti, eclipse) cyclohexane conformations (equatorial/axial substituents), chiral compounds, enantiomers, and diastereomers.

**Problem Sessions:** to be announced. **Grade:** Assigned problems, two interval exams and Final, 25% each.

| Week of      | Topics and reading assignments   |
|--------------|--|
| August 26    | Structure Reactivity Mechanisms CH1  |
| September 2  | <b>Labor Day 3<sup>th</sup></b> Energetics and Kinetics of Reactions CH2     |
| September 9  | Energetics and Kinetics of Reactions CH2                                     |
| September 16 | Acid/Base Chemistry CH3  |
| September 23 | Nucleophilic Substitution CH4  |
| September 30 | Carbon cations, electron-deficient N and O CH5                               |
| October 7    | Exam Wednesday, Aromatic substitution CH6                                    |
| October 14   | <b>Fall Break 15<sup>th</sup>-16<sup>th</sup>:</b> Elimination reactions CH9 |
| October 21   | Addition to C=C CH7  |
| October 28   | Addition to CO CH8   |
| November 4   | Carbanions CH10  |
| November 11  | Exam Wednesday Radical Reaction CH11   |
| November 18  | Symmetry controlled reactions CH12 <b>Thanksgiving break</b>                 |
| November 25  | Linear Free Energy Relations CH13  |
| December 2   | December 5 last day of classes   |
| December 11  | <b>Final Exam Wednesday, 5:30 - 7:30 pm</b>                                  |

**Homework:** All homework must be submitted in a single Word file. No hand written documents accepted.

Structure drawing software can be obtained at <http://sitesubscription.cambridgesoft.com/><sup>1</sup>

Register with a memphis.edu email address and you are eligible to download the latest version.

### Academic Integrity and Student Conduct:

Expectations for academic integrity and student conduct are described in detail in the Code of Student Rights and Responsibilities (<http://www.memphis.edu/studentconduct/pdfs/csrr.pdf>). Please take a look, in particular, at the sections about "Academic Integrity," and "Disruptive Behavior". I will expect students to be aware of these guidelines and to conduct themselves accordingly.

Any student who anticipates physical or academic barriers based on the impact of a disability is encouraged to speak with me privately. Students with disabilities should also contact Disability Resources for Students (DRS, <http://www.memphis.edu/drs/>) at 110 Wilder Tower, 901-678-2880. DRS coordinates access and accommodations for students with disabilities. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS).