**CHM 257 Lectures MWF 4:30-5:20 pm WTHR 104 Spring 2016**

**Undergraduate Organic Chemistry**

*GOAL: Gaining basic understanding on the principles of organic chemistry*

*Attendance required on all scheduled activities outlined in this document*

**Professor**

**Hilkka Kenttämaa**

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**TA’s**

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Office Hours: by appointment

**Recitations**

Section 002 14122 Xin Tuesday 3:30-4:20 pm BRWN 3104

Section 003 14123 Yuyang Thursday 7:30-8:20 am BRWN 3102

Section 004 14124 Xin Tuesday 4:30-5:20 pm BRWN 3104

Section 005 14125 Rashmi Tuesday 8:30-9:20 am BRWN 3100

Section 006 14126 Yuyang Tuesday 1:30-2:20 pm BRWN 3104

Section 007 14127 Rashmi Tuesday 7:30-8:20 am BRWN 3104

There will be no lecture on January 20 and January 22.

**Recommended (not required) text:** Introduction to Organic Chemistry, 5th Ed., W. Brown & T. Poon, Wiley

**Homework:** Sapling Learning - Organic Chemistry Question Sets (you must purchase

access to the web site) will be posted on sapling web site about once a week.   
  
To get started:

1. Go to [http://saplinglearning.com](http://saplinglearning.com/) and click on your country at the top right.        
   2a. If you already have a Sapling Learning account, log in and skip to step 3.        
   2b. If you have a Facebook account, you can use it to quickly create a Sapling Learning account. Click “Create an Account”, then “Create my account through Facebook”. You will be prompted to log into Facebook if you aren't already. Choose a username and password, then click “Link Account”. You can then skip to step 3.        
   2c. Otherwise, click "Create an Account". Supply the requested information and click "Create My Account". Check your email (and spam filter) for a message from Sapling Learning and click on the link provided in that email.        
   3. Find your course in the list (you may need to expand the subject and term categories) and click the link.        
   4. If your course requires a key code, you will be prompted to enter it.        
   5. If your course requires payment, select a payment option and follow the remaining instructions.

**Notes**: Lecture notes will be available in the Chemistry Department Resource Room

(WTHR 117B).

**Quizzes:** Graded quizzes will be given occasionally during the semester in Friday lectures and in some recitation sessions (attendance required in all).

**Grading:** Homework 100 pts

Hour Exams (3 x 100 pts) 300 pts

Comprehensive Final Exam 200 pts

Quizzes 50 pts

**Total 650 pts**

**Exams:** **February 11,** **March 8, and April 6, all at 6:30 pm in PHYS 112**, and during **finals week** (time and place for the final exam will be announced later).

**No make-up exams, homework assignments or quizzes will be given.**

Accepted excuses for missing an exam or other activity require issuance from the Dean of Student’s Office.

**Re-grades:** If you feel that a quiz or exam problem has been graded incorrectly, or that an addition error has been made, check the crib first. If you still believe than an error exists, bring the quiz/exam and a written statement of the error to a TA for re-grading. **This must be done within two weeks of you receiving the document.** The entire quiz/exam will be re-graded and the grade may be revised up or down. **NOTE: papers written with a pencil will not be re-graded.**

**Grade cutoffs:**

The following are the guaranteed grade cutoffs: A: >87% (>565 pts), B: >74% (>481 pts), C: >61% (>396 pts), D: >48% (>312 pts), F < 48% (<312 pts)

**Cheating:** ***A student found cheating or assisting it will receive an F for the course***. Copying another student’s answers to a quiz or exam is considered cheating.

*NOTE: CHM 257 Lab manual and goggles can be purchased in Chemistry Resource Room* (WTHR 117B)*. Goggles and a proper attire are required during check-in to the laboratory course. This lab course is a separate course supervised by another faculty member.*

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**In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by circumstances beyond the instructor’s control. Relevant changes to this course will be posted onto the course website or can be obtained by contacting the instructors or TAs. You are expected to read your @purdue.edu email on a frequent basis. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Tentative Lecture Schedule CHM 257 Spring 2015**

Date Lecture # Lecture Topic Book Chapter Week

Jan 11 1 Electronic Structure of Atoms 1 1

Jan 13 2 Lewis Model of Bonding 1 1

Jan 15 3 continued 1 1

Jan 18 **Martin Luther King Day (no lecture)** 2

Jan 20 No lecture 2

Jan 22 No lecture 2

Jan 25 4 Alkanes 3 3

Jan 27 5 continued 3 3

Jan 29 6 continued 3 3

Feb 1 7 continued 3 4

Feb 3 8 Alkenes and Alkynes 4 4

Feb 5 9 continued 4 4

Feb 8 10continued 4 5

Feb 10 11Reactions of Alkenes and Alkynes 5 5

Feb 11 **EXAM I at 6:30 pm in PHYS 112**  5

Feb 12 12 continued 5 5

Feb 15 13continued 5 6

Feb 17 14 Chirality 6 6

Feb 19 15 continued 6 6

Feb 22 16 continued 6 7

Feb 24 17 continued 6 7

Feb 26 18 Haloalkanes 7 7

Feb 29 19 continued 7 8

Mar 2 20 continued 7 8

Mar 4 21 continued 7 8

Mar 7 22 Alcohols, Ethers 8 9

Mar 8 **EXAM II at 6:30 pm in WTHR 200** 9

Mar 9 23 continued 8 9

Mar 11 24 continued 8 9

Mar 14 **SPRING BREAK** 10

Mar 16 **SPRING BREAK** 10

Mar 18 **SPRING BREAK** 10

Mar 21 25 Resonance, Benzene 9 11

Mar 23 26continued 9 11

Mar 25 27 continued 9 11

Mar 28 28 continued 9 12

Mar 30 29 Amines 10 12

Apr 1 30 IR Spectroscopy 11 12

Apr 4 31 NMR Spectroscopy 12 13

Apr 6 32 Mass Spectrometry 13

Apr 6  **EXAM III at 6:30 pm in PHYS 112**  13

Apr 8 33Aldehydes and Ketones 13 13

Apr 11 34 continued 13 14

Apr 13 35 continued 13 14

Apr 15 36 continued 13 14

Apr 18 37 Carboxylic Acids 14 15

Apr 20 38 Derivatives of Carboxylic Acids 15 15

Apr 22 39 Carbohydrates 18 15

Apr 25 40 Amino Acids and Proteins 19 16

Apr 27 41 Nucleic Acids 20 16

Apr 29 42 Lipids 21 16

May 2 – May 6 **FINAL EXAM** 17

**EMERGENCY PREPAREDNESS SYLLABUS ATTACHMENT**

**EMERGENCY NOTIFICATION PROCEDURES are based on a simple concept – if you hear a fire alarm inside, proceed outside.  If you hear a siren outside, proceed inside.**

**Indoor Fire Alarms** mean to stop class or research and immediately **evacuate** the building.

* + Proceed to your Emergency Assembly Area away from building doors.  **Remain outside** until police, fire, or other emergency response personnel provide additional guidance or tell you it is safe to leave.
* **All Hazards Outdoor Emergency Warning Sirens** mean to immediately seek shelter (**Shelter in Place**) in a safe location within the closest building.
  + “Shelter in place” means seeking immediate shelter inside a building or University residence. This course of action may need to be taken during a tornado, a civil disturbance including a shooting or release of hazardous materials in the outside air.  Once safely inside, find out more details about the emergency\*. **Remain in place** until police, fire, or other emergency response personnel provide additional guidance or tell you it is safe to leave.

*\*In both cases, you should seek additional clarifying information by all means possible…Purdue Emergency Status page, text message, email alert, TV, radio, etc…review the Purdue Emergency Warning Notification System multi-communication layers at* [*http://www.purdue.edu/ehps/emergency\_preparedness/warning-system.html*](http://www.purdue.edu/ehps/emergency_preparedness/warning-system.html)

**EMERGENCY RESPONSE PROCEDURES:**

* Review the **Emergency Procedures Guidelines** <https://www.purdue.edu/emergency_preparedness/flipchart/index.html>
* Review the **Building Emergency Plan**  (available on the Emergency Preparedness website or from the building deputy) for:
  + evacuation routes, exit points, and emergency assembly area
  + when and how to evacuate the building.
  + shelter in place procedures and locations
  + additional building specific procedures and requirements.

**EMERGENCY PREPAREDNESS AWARENESS VIDEOS**

"Shots Fired on Campus: When Lightning Strikes," is a 20-minute active shooter awareness video that illustrates what to look for and how to prepare and react to this type of incident.  See:  <http://www.purdue.edu/securePurdue/news/2010/emergency-preparedness-shots-fired-on-campus-video.cfm>  (Link is also located on the EP website)

**MORE INFORMATION**

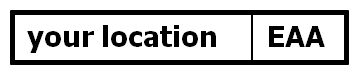
Reference the Emergency Preparedness web site for additional information: <https://www.purdue.edu/ehps/emergency_preparedness/>

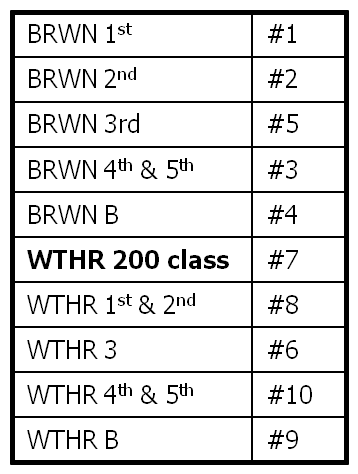
Emergency preparedness is your personal responsibility.  Purdue University is actively preparing for natural disasters or human-caused incidents with the ultimate goal of maintaining a safe and secure campus.

* For any emergency call 911.

* There are nearly 300 Emergency Telephone Systems throughout campus that connect directly to the Purdue Police Department (PUPD).  If you feel threatened or need help, push the button and you will be connected to the PUPD.

* If we hear a fire alarm we will immediately evacuate the building and proceed to Emergency Assembly Area (EAA) # 8 (location).
  + **Do not use the elevator.**
  + Go over evacuation route…see specific Building Emergency Plan.



* If we are notified of a Shelter in Place requirement for a tornado warning we will shelter in the lowest level of this building away from windows and doors.  Our preferred location is WTHR Basement.

* If we are notified of a Shelter in Place requirement for a hazardous materials release we will shelter in our classroom shutting any open doors and windows.

* If we are notified of a Shelter in Place requirement for a civil disturbance such as a shooting we will shelter in a room that is securable preferably without windows.  Our preferred location is WTHR 104.

***(NOTE:  Each building will have different evacuation & shelter locations.  The specific Building Emergency Plan will provide specific locations and procedures)***