# Organic Chemistry I CHEM2070

#### Prof. Anne E. V. Gorden

- Class Hours: CHEM 151 Mon., Wed., & Fri. 9-9:50
- Office Hours: Monday 2-3:30 CHEM 261

Wednesday 1:30-3

Canvas! <a href="https://auburn.instructure.com/">https://auburn.instructure.com/</a>

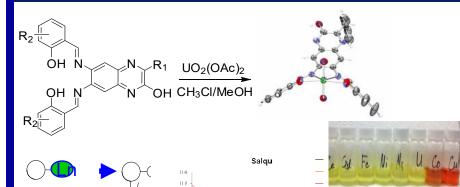
- Email anne.gorden@auburn.edu
  - please put CHEM 2070 in the subject heading.
- SI –Will Cordell
  - Tuesday! 5:30-7:00pm in Mell 3550b
  - Thursday! 5:30-7:00pm in Mell 3550b

# A little about me

- Anne Elizabeth Vivian Gorden
- anne.gorden@auburn.edu
- Grew up in Texas
- Undergrad at Emory Chemistry and Literature
- Ph.D. in Organic Chemistry
  - University of Texas with Jonathan Sessler
  - Expanded Porphyrins, Texaphyrin, and Pharmacyclics
  - Research at Los Alamos National Laboratory
- Postdoctoral research
  - University of California Berkeley
  - With Kenneth N. Raymond
  - Plutonium decorporation agents



## Sensors Supports



CH DMSO

CH DMSO

CH NHyTh,O

CH NHy

CH NHy

CH NHy

CH NH

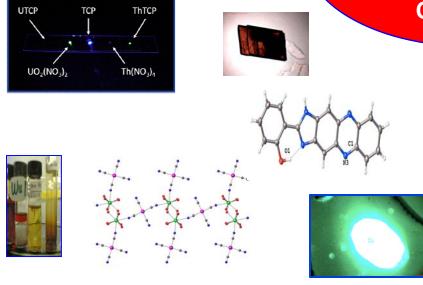
CH N

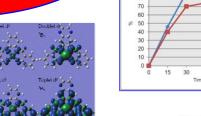
#### Solids

Wavelength (nm)

Synthesis,
Molecular Recognition,
Coordination Chemistry,
And Environmental
Chemistry

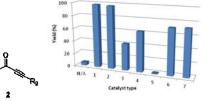
#### Catalysis





siqu copper (II) catalysi TBHP 2.5 eo

0.5 mmol







## What is Organic Chemistry?

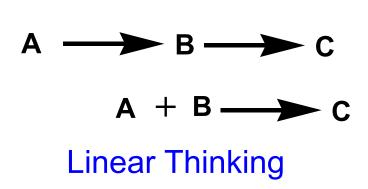
Organic Chemistry was originally defined as the chemistry "of life."

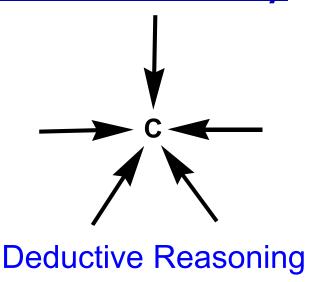
1780 - The compound Urea was isolated by Roulle from urine.

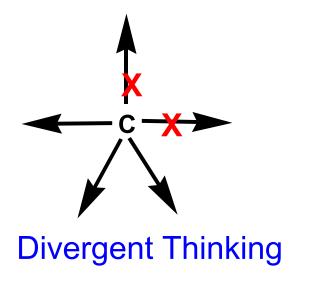
1828 - Whöler synthesizes urea from two "inorganic" compounds

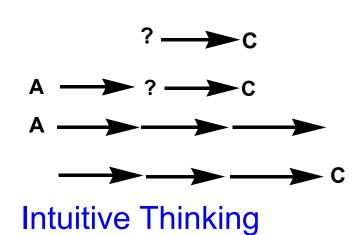
We define organic chemistry as the chemistry of carbon compounds. — <u>August Kekulé</u>

- Why is this class HARD?
- 1. You cannot memorize everything.
- 2. The class starts with its own language and pictographs or "nomenclature."
- 3. There is a great deal of visualization in understanding how structure affects the function or reactivity of a compound.
- 4. You will need to develop a different set of thinking skills.









## Organic Chemistry – Part I

#### **Text:** Organic Chemistry, David Klein **3rd edition 2017**

- Access to the WileyPlus online homework.
- Ball and Stick Model Set.

#### **Recommended:**

- Chemistry: The Central Science Brown, LeMay, Bursten, Murphy or Chemistry: Atoms First – Burdge, Overby
- Organic Chemistry as a Second Language I Klein

#### Canvas: https://auburn.instructure.com/

- Skeleton Notes
- Weblinks
- Handouts
- Announcements

## **Grading:**

- ▶ The PRE-LECTURE QUIZZES will be <u>5%</u> of your grade.
- ▶ The ONLINE HOMEWORK will be **10%** of your grade.
- ▶ The three MIDTERM EXAMS will be <u>60%</u> of your grade.
- ▶ The FINAL EXAM will be <u>25%</u> of your grade.
- Requests for regrades may be submitted in writing within one week after a midterm is handed back.
- During the semester, if you miss an exam with a university excused absence, make-up exams will be given Friday afternoons in CHEM 134.

## **Exam Rules:**

NO – notes, books, PDAs, cell phones, pagers, molecular models, graphing calculators, or programmable calculators.



- → nothing that looks like an apple watch
- Use blue or black ink.
- NO − red ink will be graded.
- NO − erasable ink.
- Exams in pencil will not be eligible for a regrade.
- You will be asked to show your AU ID when you take your test.

## How to do Well in Organic Chemistry

- 1. Prior to lecture read the textbook.
- 2. Set aside at least 1 hour each day just for studying organic chemistry.
- 3. Read the book aloud to yourself.
- Find a "Study Buddy"
- 5. Print out the notes before coming to class.
- 6. Rewrite your notes from class after class.
- 7. Do the end of the chapter homework problems.
- 8. Only after you do the reading and the practice problems *then* use the online homework to quiz yourself.
- 9. Participate in the in class activities

#### **10.COME to CLASS!**

## For Next Time....

- Wednesday Sections 1.1-1.7
- ▶ Friday Sections 1.8 1.11
- Monday Chapter 2
- Homework Practice Problems Chapter 1 #8,12,15,37,39,43,45,48,49,53,56
- ▶ If you will be needing Accommodations please contact me as soon as possible.

That which we persist in doing becomes easier for us to <u>do</u>; not that the nature of the thing itself is changed, but that our <u>power to</u> <u>do</u> is increased.

Ralph Waldo Emerson, 1803-1882