# Chem 366: Inorganic Chemistry

Days: Time: Room:

Me: Professor Brian Zeglis Phone: 212-896-0443

E-mail: bz102@hunter.cuny.edu

Office: Belfer 430

Office Hours: By appointment

(Optional) Textbook: *Inorganic Chemistry* by Shriver, *et al.* I'm using the 6th Edition, but you can pick up any edition you'd like via Amazon or any other online bookseller.

#### Important Dates (see schedule):

August 25<sup>th</sup>: No class (BZ travel) August 29<sup>th</sup>: No class (BZ travel) September 1<sup>st</sup>: No class (BZ travel)

September 19<sup>th</sup>: No Class; Rosh Hashanah September 26<sup>th</sup>: Problem Set #1 Due September 29<sup>th</sup>: No Class; Yom Kippur

October 10th: Midterm #1

October 27th: BZ Traveling; Problem Set #2 Performed in Class

November 13th: Midterm #2

November 20<sup>th</sup>: Date of Last Possible Approval for Presentation Topic One Night the Week of December 3<sup>rd</sup>: Pizza 'N' Presentations Night

December 12th: Last Day of Class

December 15th: Final Exam, 11:30-1:30, Usual Classroom

## **Grading Policies:**

Your grade will be a combination of the following:

PS#1:5%

Midterm #1: 20%

PS#2:5%

Midterm #2: 20% Presentation: 25% Final Exam: 25%

## Lecture Topics (open to change):

Lecture #1: Introduction
Lecture #2: Wave Functions

Lecture #3: Orbitals in Many-Electron Atoms
Lecture #4: Molecular Orbital Theory – Part 1
Lecture #5: Molecular Orbital Theory – Part 2
Lecture #6: Molecular Symmetry – Part 1
Lecture #7: Molecular Symmetry – Part 2

Lecture #8: Molecular Symmetry – Part 3 Lecture #9: Molecular Symmetry – Part 4

Lecture #10: Introduction to Coordination Chemistry

Lecture #11: Coordination Chemistry Basics Lecture #12: Crystal Field Theory – Part 1 Lecture #13: Crystal Field Theory – Part 2

Lecture #14: Ligand Field Theory

Lecture #15: Inorganic Reactions – Part 1 Lecture #16: Inorganic Reactions – Part 2

Lecture #17: Redox Reactions

Lecture #18: Organometallic Chemistry – Part 1 Lecture #19: Organometallic Chemistry – Part 2

Lecture #20: Catalysis

Lecture #21: Bioinorganic Chemistry

## Other Policies (i.e. this is where things get a little mean):

Do not cheat. Do not think about cheating. If something you're thinking about doing has even a whiff of academic dishonesty around it, do not do it. If I catch you cheating, I will give you a 0 on that assignment, and I will do everything possible to make sure that you receive an F in the class and are punished to the fullest extent allowable by college rules. Unfortunately, I actually had to do this during the Fall 2016 semester. It made me sad (I love to see students succeed), but ethics are the foundation of science, so I really had no choice.

Do not use your cell phone during class. Ever. Not even as a calculator (just use a calculator). I used to have a long explanation here about what I'd do if people repeatedly used their cell phones, but it makes me sound like such a grouch. Just don't do it, ok?

## **Hunter College required statements for syllabi**

- Academic Integrity Statement: "Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures."
- 2. <u>ADA Statement</u>: "In compliance with the ADA and with Section 504 of the Rehabilitation Act, Hunter College is committed to ensuring educational access and accommodations for all its registered students. Hunter College's students with disabilities and medical conditions are encouraged to register with the Office of AccessABILITY for assistance and accommodation. For information and appointment contact the Office of AccessABILITY located in Room E1214 or call (212) 772-4857 /or VRS (646) 755-3129."
- 3. <u>Hunter College Policy on Sexual Misconduct</u> "In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationships. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.
  - a. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, or contacting the College's Public Safety Office (212-772-4444).
  - b. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.

CUNY Policy on Sexual Misconduct Link: <a href="http://www.cuny.edu/about/administration/offices/la/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf">http://www.cuny.edu/about/administration/offices/la/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf</a>"