Course Title - Inorganic Chemistry 1
Full Course Number - 21:160:313 sec. 01
Semester/Year - Fall 2021
Lecture format - In person class. Location, Smith Hall 240
Meeting Day(s) & Time(s) – Mondays 1.00–2.20 pm and Thursdays 1.00–2.20 am.
NOTE: WEDNESDAY SEPT. 8TH Follows A MONDAY SCHEDULE AND CLASS
WILL BE HELD AT 1 PM THAT DAY.
Final Exam: Thursday December 21st 3 pm to 6 pm.

Instructor(s) Information:
Instructor Name – John B. Sheridan
Contact Information: jsheridn@rutgers.edu
Office Hours: By appointment, available times will be announced during class. The times
will be flexible to accommodate all students and some office hours will be given
remotely via Zoom.

Required Textbook:
The text is available free as a pdf file.
https://www.academia.edu/34602222/Inorganic_Chemistry_Housecroft

Optional: Housecroft "Solutions Manual for Inorganic Chemistry"

Prerequisites
General Chemistry, 21-160-114,116.
Organic Chemistry 21-160-335,6 are also strongly recommended as pre-requisites,
though not required.
## Course Schedule

<table>
<thead>
<tr>
<th>Topic</th>
<th>Lecture dates</th>
<th>Sections/Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Concepts: Atoms</td>
<td>9/2, 9/8</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>Basic Concepts: Molecules</td>
<td>9/8, 9/9, 9/13</td>
<td>Chapter 2</td>
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<tr>
<td>Molecular Symmetry</td>
<td>9/16-9/23</td>
<td>Chapter 3</td>
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<tr>
<td>Bonding in Polyatomic Molecules</td>
<td>9/27 - 10/07</td>
<td>Chapter 5</td>
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<tr>
<td><strong>Exam 1</strong></td>
<td>10/11</td>
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<tr>
<td>Experimental Techniques:</td>
<td>10/14-10/25</td>
<td>Chapter 4</td>
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<tr>
<td>NMR Spectroscopy</td>
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<tr>
<td>Structures of Metallic and Ionic Solids</td>
<td>10/28-11/4</td>
<td>Chapter 6</td>
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<tr>
<td>Acids, Bases and Ions in Aqueous Solution</td>
<td>11/4 - 11/11</td>
<td>Chapter 7</td>
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<tr>
<td><strong>Exam 2</strong></td>
<td>11/15</td>
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<tr>
<td>Hydrogen and some introductory</td>
<td></td>
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<tr>
<td>Main Group Chemistry</td>
<td>11/18-12/9</td>
<td>Chapters 10 - 18</td>
</tr>
<tr>
<td><strong>Final Exam (Cumulative)</strong></td>
<td>12/21</td>
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## Quizzes, Exams and Grading

There will be 7 short quizzes (20 Mins), announced ahead of time usually covering a chapter.

There will two mid-terms and a final exam.
The Midterm Exams are during the class periods on Monday, October 11th and Monday November 15th.
The Final Exam will be December 21st at 3 pm.

Makeup exams will only be given when legitimate reasons established by "University Policy" and are presented to me in writing. If you do not provide the proper documentation justifying your absence, a makeup exam will not be given. No makeups are given for quizzes, the lowest quiz score is dropped.

Overall course grading will be determined as follows:

- Quizzes 10%
- Exam 1 25%
- Exam 2 25%
- Final exam (cumulative) 40%

As a guide to what total score corresponds to a specific grade, the grade ranges and averages for this course given by Prof. Sheridan in F2019, F2016, F2015 and F2020 will be provided after the first exam.
Academic Integrity

As an academic community dedicated to the creation, dissemination, and application of knowledge, Rutgers University is committed to fostering an intellectual and ethical environment based on the principles of academic integrity. Academic integrity is essential to the success of the University’s educational and research missions, and violations of academic integrity constitute serious offenses against the entire academic community. The entire Academic Integrity Policy can be found here: http://academicintegrity.rutgers.edu/academic-integrity-policy/

☐ Accommodation and Support Statement (The following statement and information is recommended for inclusion on all syllabi):

Rutgers University Newark (RU-N) is committed to the creation of an inclusive and safe learning environment for all students. RU-N has identified the following resources to further the mission of access and support:

Students with Disabilities: Rutgers University welcomes students with disabilities into all of the University’s educational programs. The Office of Disability Services (ODS) is responsible for the determination of appropriate accommodations for students who encounter barriers due to disability. In order to receive consideration for reasonable accommodations, a student with a disability must contact ODS, register, have an initial appointment, and provide documentation. Once a student has completed the ODS process (registration, initial appointment, and documentation submitted) and reasonable accommodations are determined to be necessary and appropriate, a Letter of Accommodation (LOA) will be provided to the student. The student must give the LOA to each course instructor, followed by a discussion with the instructor. This should be completed as early in the semester as possible as accommodations are not retroactive. More information can be found at ods.rutgers.edu. Contact ODS: (973) 353-5375 or ods@newark.rutgers.edu.

Religious Holiday Policy and Accommodations: Students are advised to provide timely notification to instructors about necessary absences for religious observances and are responsible for making up the work or exams according to an agreed-upon schedule. The Division of Student Affairs is available to verify absences for religious observance, as needed: (973) 353-5063 or DeanofStudents@newark.rutgers.edu.

Counseling Services: Counseling Center Room 101, Blumenthal Hall, (973) 353-5805 or http://counseling.newark.rutgers.edu/.

Students with Temporary Conditions/Injuries: Students experiencing a temporary condition or injury that is adversely affecting their ability to fully participate in their courses should submit a request for assistance at: https://temporaryconditions.rutgers.edu.
Students Who are Pregnant: The Office of Title IX and ADA Compliance is available to assist students with any concerns or potential accommodations related to pregnancy: (973) 353-1906 or TitleIX@newark.rutgers.edu.

Gender or Sex-Based Discrimination or Harassment: Students experiencing any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking, should know that help and support are available. To report an incident, contact the Office of Title IX and ADA Compliance: (973) 353-1906 or TitleIX@newark.rutgers.edu. To submit an incident report: tinyurl.com/RUNReportingForm. To speak with a staff member who is confidential and does NOT have a reporting responsibility, contact the Office for Violence Prevention and Victim Assistance: (973) 353-1918 or run.vpva@rutgers.edu.

☐ Learning Resources:

Rutgers Learning Center (tutoring services)
   Room 140, Bradley Hall
   (973) 353-5608
   https://sasn.rutgers.edu/student-support/tutoring-academic-support/learning-center

Writing Center (tutoring and writing workshops)
   Room 126, Conklin Hall
   (973) 353-5847
   nwc@rutgers.edu
   https://sasn.rutgers.edu/student-support/tutoring-academic-support/writing-center