SYLLABUS

Inorganic Chemistry 2 (26:160:413), Fall 2023

Location: Smith 240, Newark Campus
Class Periods: Monday/Wednesday 10:00-11:20 am

INSTRUCTOR

Prof. Frieder Jäkle
Olson Hall; Room 230; Phone (973) 353-5064
Email contact: fjaekle@rutgers.edu

OFFICE HOURS

Wed. 11:30-12:30 pm, Fri 10:00-11:00 am; Location: Olson Hall, Room 230

PREREQUISITES

Grade of at least “D” in Inorganic Chemistry I and Physical Chemistry I

TEXT

Optional: "Solutions Manual for Inorganic Chemistry"

HOMEWORK

Homework will be assigned from the text and/or posted on the website

Add/Drop Period without "W" Grades
ADD/DROP BY 09/14/2023

Dropping Courses to receive "W" Grade
DROP BY 10/30/2023

Academic Calendar: https://myrun.newark.rutgers.edu/f23
GRADING

<table>
<thead>
<tr>
<th>Quizzes &amp; Homework</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>50%</td>
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</tbody>
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Short quizzes (ca. 20 min) will be held regularly during the class period (the lowest score will be dropped; make-up quizzes will not be given).

The midterm exam will be held during the regular class period, the final exam at the end of the semester. The exams will consist of questions that typically require a detailed written answer.

Makeup exams will not be given unless legitimate reasons established according to "University Policy" are presented in writing.

COURSE TOPICS

<table>
<thead>
<tr>
<th>LECTURES</th>
<th>DATE (estimate)</th>
<th>Text [b]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination Chemistry: Structures</td>
<td>Sept 6; Sept 11</td>
<td>Ch. 19 (20)</td>
</tr>
<tr>
<td>- Brief Review of MO Treatments -</td>
<td>Sept 13; Sept 18</td>
<td>Ch. 2 &amp; 5</td>
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<tr>
<td>Coordination Chemistry: Bonding</td>
<td>Sept 20; Sept 25; Sept 27</td>
<td>Ch. 20 (21)</td>
</tr>
<tr>
<td>Coordination Chemistry: Properties</td>
<td>Oct 2; Oct 4; Oct 9</td>
<td></td>
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<tr>
<td>Coordination Chemistry: Reactivity</td>
<td>Oct 11; Oct 16</td>
<td>Ch. 26</td>
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</tbody>
</table>

Exam 1 (Midterm) Monday, Oct. 23 in class

<table>
<thead>
<tr>
<th>Acids-Base and Donor-Acceptor Chemistry</th>
<th>Oct 18; Oct 25</th>
<th>Ch. 7 &amp; 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected Aspects of Main Group Chemistry,</td>
<td>Oct 30; Nov 1; Nov 6;</td>
<td>Ch. 10-14 &amp;</td>
</tr>
<tr>
<td>Emphasizing Organometallic Chemistry</td>
<td>Nov 8, Nov 13</td>
<td>Ch. 23 (19)</td>
</tr>
<tr>
<td>Organometallic Chemistry of the Transition Metals</td>
<td>Nov 15; Nov 20; [a]; Nov 27;</td>
<td>Ch. 24</td>
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<tr>
<td>Catalysis</td>
<td>Nov 29; Dec 4; Dec 6</td>
<td></td>
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<tr>
<td></td>
<td>Dec 11; Dec 13</td>
<td>Ch. 25 (27)</td>
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</tbody>
</table>

Exam 2 (Final Exam) Dec. 18, 11:45-2:45 pm

[a] Nov 22: Thanksgiving Recess (Friday schedule)
[b] Chapter numbers in brackets for older Edition(s) of Textbook

➤ THE USE OF CELLULAR PHONES OR OTHER ELECTRONIC GADGETS DURING THE CLASS PERIOD IS NOT ACCEPTABLE.

➤ THE CLASS PERIOD STARTS AT 10:00 AM SHARP.
**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:

https://academicintegrity.rutgers.edu/sites/default/files/pdfs/current.pdf

Your health and well-being matter, and Rutgers has put in place a number of resources that are intended to help students through the challenges that might emerge during these times. Information on many of these resources appears below. Please let us know immediately if you are experiencing circumstances that are negatively impacting your academic performance. We also strongly encourage you to contact your academic advisor.

**Accommodation and Support**

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:

- **Absences:** All students are responsible for timely notification of their instructor regarding any expected absences. The Division of Student Affairs can provide assistance for absences related to religious observance, emergency or unavoidable conflict (illness, personal or family emergency, etc.) Students should refer to the University’s Course Attendance policy (10.2.7) at https://policies.rutgers.edu/sites/default/files/10.2.7%20-%20current.pdf, for complete expectations and responsibilities. The office can be contacted at: (973) 353-5063 or deanofstudents@newark.rutgers.edu.

- **Disabilities:** The Office of Disability Services (ODS) is responsible for the determination of appropriate accommodations for students who encounter barriers due to disability. Once a student has completed the ODS process (registration, initial appointment, and submitted documentation) and reasonable accommodations are determined to be necessary and appropriate, a Letter of Accommodation (LOA) will be provided. The LOA must be given to each course instructor by the student and follow up with a discussion. 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.

- **Temporary Conditions/Injuries:** The Division of Student Affairs can assist students who are experiencing a temporary condition of injury (broken or sprained limbs, concussions, or recovery from surgery). Students experiencing a temporary condition or injury should submit a request for assistance at: https://temporaryconditions.rutgers.edu.
• **Pregnancy:** The Office of Title IX and ADA Compliance is available to assist students with any concerns or potential accommodations related to pregnancy. Students may contact the office at (973) 353-1906 or TitleIX@newark.rutgers.edu.

• **Gender or Sex-Based Discrimination or Harassment:** The Office of Title IX and ADA Compliance can assist students experiencing any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking. Students can report an incident to the office at: (973) 353-1906 or TitleIX@newark.rutgers.edu. Incidents may also be reported by using the following link: tinyurl.com/RUNReportingForm. For more information, students should refer to the University’s Student Policy Prohibiting Sexual Harassment, Sexual Violence, Relationship Violence, Stalking and Related Misconduct located at: https://uec.rutgers.edu/policies/title-ix/.

• **Interpersonal Violence:** The Office for Violence Prevention and Victim Assistance can provide any student with confidential support. The office is a confidential resource and does not have a reporting obligation to report information to the University’s Title IX Coordinator. Students can contact the office at: (973) 353-1918 or run.vpva@rutgers.edu. There is also a confidential, text-based line students can text for support: (973) 339-0734.

• **Crisis and Concerns:** The Campus Awareness Response and Education (CARE) Team works with students in crisis to develop a support plan to address personal situations that might impact academic performance. Students may contact the CARE Team at: http://tinyurl.com/RUNCARE or careteam@rutgers.edu.

• **Stress, Worry, or Concerns about Well-Being:** The Counseling Center https://studentaffairs.newark.rutgers.edu/health-wellness/counseling-center has confidential therapists available to support students. To schedule an appointment: counseling@newark.rutgers.edu or (973) 353-5805. If a student is not quite ready to make an appointment with a therapist but is interested in self-help, check out https://studentaffairs.newark.rutgers.edu/health-wellness/counseling-center/sanvello-app.

• **Emergencies:** Call 911 or contact Rutgers University Police Department (RUPD) at (973) 353-5111.

**Learning Resources:**

• **Rutgers Learning Center (tutoring services)**
  (973) 353-5608
  https://sasn.rutgers.edu/student-support/tutoring-academic-support/learning-center

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