






## Instrumental Analysis

CHEM 221 (graduate)

### Instructor Info —

-  David Punihaole, PhD
-  TBD
-  Innovation Hall E352
-  [David.Punihaole@uvm.edu](mailto:David.Punihaole@uvm.edu)

### Course Info ———

-  CHEM 121
-  MWF
-  08:30 - 09:20
-  VOTEY 305

## Grading Scheme

### Grading Scale

|     |                          |
|-----|--------------------------|
| 40% | Exams, 10% each          |
| 10% | Paper                    |
| 10% | Presentation             |
| 30% | Projects, 10% each       |
| 10% | Attendance/Participation |



C.A.R.E.If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <https://www.uvm.edu/studentaffairs>

### Alcohol and Cannabis Statement

As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to learn and retain information not only in the moment you may be using, but up to 48 hours or more afterwards. In addition, alcohol and cannabis can:

- ^ Cause issues with attention, memory and concentration
- ^ Negatively impact the quality of how information is processed and ultimately stored
- ^ Affect sleep patterns, which interferes with long-term memory formation

### Mosaic Center for Students of Color

The Mosaic Center for Students of Color (MCSC) Vision is to create a diverse and rich community of empowered, engaged, and enthusiastic students of color at UVM. We fully support the holistic development of self-identified students of color so that they can obtain their goals for academic achievement, personal growth, identity formation, and cultural development.

<https://www.uvm.edu/mcsc>

### Women & Gender Equity Center

The UVM Women & Gender Equity Center cultivates joyful community while advancing gender equity across identities. We envision a brave, diverse, and equitable learning environment for all members of the UVM community. We provide advocacy services for those in our community who have experienced sexual or intimate partner violence, and strive to provide programming, education, and events that ask our community to explore the intersections of their gender and other identities.

<https://www.uvm.edu/wagecenter>

Students are encouraged to attend class, do homework, come to office hours, work with peers, and ask questions to help them succeed in class. In case the course goes fully online, here are a few resources for students on remote/online learning:



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|--------|------------|--|
| Mar 20 | Lecture 23 | Infrared/Raman Spectroscopy Applications (guest lecture) (Exam 2, Project 2 Due) |
| Mar 22 | Lecture 24 | Theory of Nuclear Magnetic Resonance (guest lecture by Dr. Monika Ivancic)       |
| Mar 24 | Lecture 25 | Environmental Effects on Chemical Shift (guest lecture by Dr. Monika Ivancic)    |
| Mar 27 | Lecture 26 | Spectral Integration, Spin-Spin coupling (submit first draft of paper)           |
| Mar 29 | Lecture 27 | NMR Instrumentation  |
| Mar 31 | Lecture 28 | NMR Spectroscopy Applications (Part 1) (Exam 2 Due)                              |
| Apr 3  | Lecture 29 | NMR Spectroscopy Applications (Part 2)   |
| Apr 5  | Lecture 30 | Intro to Molecular Spectroscopy Applications, MS SamTJ 0.3& 1 Ivz                |
| Mar    |            |  |

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