

# CHM328H1 S

## Modern Physical Chemistry

### Winter 2025 Syllabus

#### Course Meetings

##### CHM328H1 S

Section	Day & Time	Delivery Mode & Location
LEC0101	Tuesday, 3:00 PM - 4:00 PM	In Person: MP 118
	Thursday, 3:00 PM - 4:00 PM	In Person: MP 118
TUT0101	Wednesday, 1:00 PM - 2:00 PM	In Person: SK 222

Refer to ACORN for the most up-to-date information about the location of the course meetings.

Tutorials start on the second week. See the Quercus site for the course for further updates as well as tutorial details

#### Course Contacts

**Instructor:** Prof Dr Anatole von Lilienfeld

**Email:** [anatole.vonlilienfeld@utoronto.ca](mailto:anatole.vonlilienfeld@utoronto.ca)

**Office Hours and Location:** By appointment

#### Course Overview

This course explores the microscopic description of macroscopic phenomena in chemistry. Statistical mechanics is introduced as the bridge between the microscopic and macroscopic views, and applied to a variety of chemical problems including reaction dynamics. More advanced topics in thermodynamics are introduced and discussed as required.

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**Prerequisites:** (CHM220H1/ CHM222H1, CHM223H1), MAT235Y1/ MAT237Y1

**Corequisites:** None

**Exclusions:** JCP322H5, CHMC20H3

**Recommended Preparation:** None

**Credit Value:** 0.5

## Marking Scheme

Assessment	Percent	Details	Due Date
Questions	20%	Students will be called and questioned during the lectures. Students are expected to attend all classes and take handwritten notes.	No Specific Date
Homework Assignment	20%	5 homework assignments will be given. The homework solutions have to be submitted prior to the tutorials where they will be discussed.	No Specific Date
Quiz	20%	5 quizzes will take place during the tutorials.	No Specific Date
In-Person Final Exam	40%		Final Exam Period

### Late Assessment Submissions Policy

Late submissions of homework assignments will not be accepted. Grades for missed assignments or quizzes will be obtained by averaging the remaining ones.

## Policies & Statements

### Mobile Device Usage

Technology can support student learning, but it can also become a distraction. Research indicates that multi-tasking (texting, surfing the Internet, using social networks) during class time can have a negative impact on learning (Clapp, Rubens, Sabharwal & Gazzaley, 2011; Ellis, Daniels, Jauregui, 2010; Hembrooke & Gay, 2003). Participants are strongly encouraged to take hand-written notes since research has shown that it improves memorization. To ensure improved learning outcome and to minimize distraction (also for your fellow learners) all students are expected to entirely refrain from using laptops or mobile phones during class. Tablets may only be used for legitimate classroom purposes, such as taking hand-written notes. Checking social media, emailing, texting, gaming, and surfing the Web are not legitimate classroom purposes. Such inappropriate device use is distracting to you and those seated around you.

### Late/Missed Assignments

This item is listed here to remind you to include your late/missed assignment policy; if you have late penalties, you are required to publish them in your syllabus. Please see the [A&S Academic](#)

[Handbook \(https://www.artsci.utoronto.ca/faculty-staff/teaching/academic-handbook\)](https://www.artsci.utoronto.ca/faculty-staff/teaching/academic-handbook) sections on missed term work (Section 4.7), late term work and extensions (section 4.8), and missed term tests (Section 5.3) for more information.

## **Plagiarism Detection Tool**

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>).

## **Students with Disabilities or Accommodation Requirements**

Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year by visiting <https://studentlife.utoronto.ca/departments/accessibility-services/>. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

## **Academic Integrity**

All suspected cases of academic dishonesty will be investigated following procedures outlined in the [Code of Behaviour on Academic Matters \(https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019\)](https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019). If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to me. Note that you are expected to seek out additional information on academic integrity from me or from other institutional resources. For example, to learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at <http://www.writing.utoronto.ca>. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see [A&S Student Academic Integrity \(https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity\)](https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity) and the [University of Toronto Website on Academic Integrity \(https://www.academicintegrity.utoronto.ca\)](https://www.academicintegrity.utoronto.ca).

## **Late/Missed Assignments**

Late assignments will be counted as missed assignments. Grades for missed assignments and missed quizzes will be estimated based on the averaged grade obtained for the other assignments or quizzes, respectively.