

Western University
Department of Chemistry

Chemistry 9603T
Winter 2025
Advanced NMR Spectroscopy II

Course Description: An overview of the most commonly used two-dimensional NMR spectroscopic techniques. Topics may include: COSY, TOCSY, HETCOR, HSQC/HMQC, HMBC, INADEQUATE, NOESY, EXSY, DOSY and dynamic NMR spectroscopy. Students who enroll in this course should already have a strong background in the fundamentals of NMR spectroscopy and the interpretation of one-dimensional spectra.

Instructor: Prof. J.A. Wisner, jwisner@uwo.ca, Chem. Bldg. Room 215

Lectures/Tutorials: In-person Tues. and Thurs. 2 – 4 pm ChB 115
from Mar. 4th to Apr. 10th approximately

Evaluation:	Problem Sets (4 x 15%)	60 %
	Final exam (End of April)	40 %

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf

Recommended Texts:

Spectrometric Identification of Organic Compounds, 8th Edition, R.M Silverstein, F.X. Webster, David J. Kiemle

Organic Structural Spectroscopy, 2nd Edition, J.B. Lambert, S. Gronert, H.F. Shurvall, D. A. Lightner

Basic One- and Two-dimensional NMR Spectroscopy, 5th Edition, H. Friebolin

Course Attendance and Missed/Late Assignments

If you are unable to meet a course requirement due to illness or other serious circumstances, you must contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor once the accommodation has been approved, and the instructor has been informed.

Notes on the Use of Artificial Intelligence Tools

While clearly an important and emerging resource, the use of generative Artificial Intelligence (AI) tools/software/apps is unacceptable for the completion of assignments and tests for this course.

Health and Wellness

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. For example, to support physical activity, all students, as part of their registration, receive membership in Western's Campus Recreation Centre.

Numerous cultural events are offered throughout the year. For example, please check out the Faculty of Music web page <http://www.music.uwo.ca/>, and our own McIntosh Gallery <http://www.mcintoshgallery.ca/>. Information regarding health- and wellnessrelated

services available to students may be found at <http://www.health.uwo.ca/>.

Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), or other relevant administrators in their unit.

Campus

mental health resources may be found at

http://www.health.uwo.ca/mental_health/resources.html.

Statement on Gender-Based and Sexual Violence

Western is committed to reducing incidents of gender-based and sexual violence (GBSV) and providing compassionate support to anyone who is going through or has gone through these traumatic events. If you are experiencing or have experienced GBSV (either recently or in the past), you will find information about support services for survivors, including emergency contacts at the following website:

https://www.uwo.ca/health/student_support/survivor_support/get-help.html. To

connect with a case manager or set up an appointment, please contact support@uwo.ca.