**The University of Western Ontario**  
**Chemistry 9651S**  
**Organometallic Chemistry for Bond Activation**

**Instructor**  
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**Description**  
This 0.25 course will cover fundamental principles of bond activation by transition metal complexes, with examples of applications in the petrochemical industry and in organic synthesis.

**Outline**  
1. Bond activation by ligand substitution and addition reactions  
2. Bond activation by oxidative addition and related reactions  
3. Bond activation by insertion and related reactions  
4. Applications in homogeneous catalysis and synthesis  
5. Current challenges

**Lectures**  
Tuesdays and Thursdays from 3:00-4:00 pm

**Evaluation**  
Assignments and problems 40%  
Major Essay 40%  
Oral Presentation 20%

**Course Materials**  
Copies of slides will be provided. Any textbook on organometallic or inorganic chemistry will also be a valuable resource.

**Course attendance and missed tests/exams**  
Appeals related to information missed due to course absences will not be considered for the basis of a grade appeal.  
If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to 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. The weight of missed course material will be transferred to the final examination in cases where medical accommodation has been granted.

**Notes on Academic Honesty:**  
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:  
[www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf)  
All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

**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 wellness-related 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.