1. Course Information

**Course Name:** Chemistry 9522A – Analytical Separations  
**Lectures:** Thursdays, from 5:30 pm to 7:15 pm (starting September 12th)  
**Location:** ChB 115

2. Instructor

Prof. Ken Yeung  
Office: MSA 0201, MSB 374  
E-mail: kyeung@uwo.ca

3. Course Description

This course deals with the fundamental principles of gas and liquid chromatography, and their applications as analytical tools particularly in biological sciences. Tentative topics include: a review on the operating modes of chromatography, the roles of stationary and mobile phases, thermodynamics of phase distribution, and the rate model of band broadening.

Upon successful completion of this course, the student will be able to: identify the role and potential effects of each chromatographic experimental parameter when provided with a set of conditions; critically assess the suitability of chromatography in addressing a research question; effectively contribute and receive ideas in short group discussion; and represent the group in sharing information with the class for further discussion.

4. Course Materials

There will be no official textbooks. Students will be provided with reading materials such as journal articles and book chapters throughout the course.

5. Evaluation

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<tr>
<th>Component</th>
<th>Percentage</th>
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<tr>
<td>Participation</td>
<td>30%</td>
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<tr>
<td>Presentation</td>
<td>40%</td>
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<tr>
<td>Open-book Exam</td>
<td>30%</td>
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Lectures will be delivered in a ‘flipped-classroom’ manner, where students will discuss and/or articulate of previous distributed reading materials in class. A peer-reviewed evaluation system will be used for the participation grades. For this reason, you must not miss more than two classes, excused or not, to receive a passing grade in this course.
Each student prepare and present a 20-minute presentation on a current development research topic in analytical separations. Evaluation will be done by both the instructor (50%) and all students attending the presentations (50%).

An open-book final examination will probe the understanding and application of concepts covered in lectures and presentations. Students may be asked to contribute questions on the topic chosen for their presentations.

**Missed course attendance or exam.** If you are unable to meet a course requirement due to illness or other serious circumstances, you must contact your instructor within 48 hours after you are able to resume academic duties.

Once your absences have been excused, an alternate date for *presentation* or *final exam* will be arranged.

No make-up evaluation will be provided for the *participation* component of the course, as it is impossible to do so. If the absence is excused, missed participation marks will be reweighted toward the *final exam*.

6. Statement on Academic Offences

**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 Website: [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).