Course Documentation Outline

School of Business, Biosciences and Justice Studies

SECTION I

1. Program (s): Chemical

2. Course Name: Polymer Chemistry

3. Course Code: CHEM 2004 4.Credit Value: 3

5. Course Hours: 3

Class	Lab	Field	Other	Total
45				45

6. Prerequisites/Co-requisites/Equivalent Courses

PR/CO/EQ	Course Code	Title
Organic Chemistry	Chem 1002	

7. **Faculty:** **Ron Ford** **Date:** **Nov. 2010** **Effective Date: Jan. 2010**

8. **Dean/Chair Approval:** *Jim Whiteway* **Date: Nov 2010**

9. **Revision Number:** **Date:** **Effective Date:**

10: **Notes: Passing grade is 60%.**

Section II

11. **Calendar Description: This course is an introduction to polymer chemistry. It introduces basic nomenclature, physical and chemical properties, classification, and uses of the more common polymers. It also covers theoretical aspects of the synthesis and properties of various polymers.**

12. **Provincial Context:**
This course meets the following Ministry of Education and Training requirements:

a). **Prior Learning Assessment (PLA)**
Students may apply to receive credit by demonstrating achievement of the course learning outcomes through previous life and work experiences.

This course is eligible for challenge through the following method(s) indicated by *

Challenge Exam	Portfolio	Interview	Other	Not Eligible
Final theoretical exam.				

PLAR Contact:

13. **Employability Skills emphasized in this course**

	communication - written		communication - visual		communication - oral
x	analytical		creative thinking		decision making
	interpersonal	x	numeracy	x	organizational
x	problem solving	x	technological		other (specify)

14. No required Texts.

15. **Evaluation Plan**
Students will demonstrate learning in the following ways:

Assignment Description	Evaluation Methodology		Due Date
Assignments	Two (10% each)	20%	
Mini-quizzes	7 in Total	20%	
Mid-Term		25%	Feb. 22
Final comprehensive exam		35%	

16.Other:

Loyalist College has a Violence Prevention policy:

- All College members have a responsibility to foster a climate of respect and safety, free
- from violent behaviour and harassment.
- Violence (e.g. physical violence, threatening actions or harassment) is not, in any way,
- acceptable behaviour.
- Weapons or replicas of weapons are not permitted on Loyalist College property.
- Unacceptable behaviour will result in disciplinary action or appropriate sanctions.
- More information can be found in the "Student Manual and Guide - Rights &
- Responsibilities".

Section III

17. **Curriculum Delivery, Learning Plan and Learning Outcomes:**

COURSE COMPONENTS and CONTENT	**RELATED LEARNING OBJECTIVES and EVALUATION CRITERIA**	LEARNING ACTIVITIES **and RESOURCES**
Introduction	• Review basic chemistry principles • Recognize the importance of polymers in nature and industry	• Individual Assignments • Group Work
Polymers Nomenclature, structure, properties and applications Polymer Classification Behaviour of Polymers	• Basic definitions and terminology • Relate structural properties of various polymers to their properties and their applications	• Laboratory Work • Field Trip • Guest Lecturer • Web Resources • Mid-Term
Polymer Synthesis	• Understand main synthetic routes to polymer formation • Describe reaction mechanisms	• Final Exam