**Bossier Parish Community College**
**Master Syllabus**

**Course Prefix and Number:** CHEM 250 **Credit Hours:** 3

**Course Title:** Organic Chemistry I

**Course Prerequisites:** Chemistry 101 and 102 or permission of the instructor

**Textbook:** McCurry, John; Fundamentals of Organic Chemistry, 7th edition

**Course Description:** A course designed for students pursuing a bachelor's degree in science, pre-medicine, clinical laboratory science or other related fields. Topics include nomenclature, chemical reactions, synthesis, functional groups, structure and property relationships, stereochemistry, spectroscopy, and mechanistic theory (pre-professional, science majors).

**Learning Outcomes:**

At the end of this course, the student will be able to:

A. classify, contrast, and apply the names of organic molecules into functional groups and families to predict properties and products of reactions;
B. determine and explain how organic molecules react and the mechanisms involved in these reactions;
C. explain and investigate the consequences of stereochemistry on molecular reactions in the human body; and
D. relate the applicability of organic molecules to other scientific disciplines.

To achieve the learning outcomes, the student will:

1. classify organic molecules into functional group families. (A)
2. recognize the main carbon chain in a molecule and identify constitutional and stereoisomers. (A)
3. draw structures of organic molecules given the name (both IUPAC and common name). (A)
4. name organic molecules given the condensed or line structure. (A)
5. recognize and list the general physical properties of the different classifications of organic molecules. (A)
6. predict the products of the reactions of the different classifications of organic molecules. (A), (B)
7. predict the products of reactions of alkanes, alkenes, alkynes and aromatic compounds.(A), (B), (C)
8. predict the products of polymerization reactions of alkenes. (A), (B), (C),(D)
9. predict the products of reactions of alcohols, phenols, ethers and carbonyl compounds and describe the mechanisms for the reactions. (A), (B), (C),(D)
10. describe the differences in properties among all of the classifications of organic molecules. (A), (B), (C),(D)

11. describe the properties of the organic molecules relative to polarity, hydrogen bonding, boiling point, freezing point and water solubility. (A), (B)
12. apply the knowledge of organic molecules to products used in everyday life (C).,(D)
13. relate concepts of organic chemistry to other scientific disciplines (C)(D).

**Course Requirements**

To earn a grade of "C" or higher the student must earn 70% of the total points for the course and meet all of the following course requirements.

- minimum of 70% average on tests
- minimum of 50% on comprehensive final test
- minimum of 70% completion of assigned homework

**Course Grading Scale:**

A- 90% or more of total possible points with a minimum of 50% on the comprehensive final exam and satisfactory completion of at least 70% of assigned homework.

B- 80% or more of total possible points with a minimum of 50% on the comprehensive final exam and satisfactory completion of at least 70% of assigned homework

C- 70% or more of total possible points with a minimum of 50% on the comprehensive final exam and satisfactory completion of at least 70% of assigned homework

D- 60% or more of total possible points with a minimum of 50% on the comprehensive final exam and satisfactory completion of at least 70% of assigned homework

F- less than 60% of total possible points or less than 50% on the comprehensive final exam or failure to complete 70% of assigned homework

**Attendance Policy**: The college attendance policy is available at http://www.bpcc.edu/catalog/current/academicpolicies.html

**Nondiscrimination Statement**

Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

COORDINATOR FOR SECTION 504 AND ADA
Angie Cao, Student and Disability Services Specialist
Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111
318-678-6511

acao@bpcc.edu
Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator
Teri Bashara, Director of Human Resources
Human Resources Office, A-105
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Bossier City, LA 71111
Phone: 318-678-6056
Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Reviewed by: D. Hoston 06/2021