Bossier Parish Community College Master Syllabus

Course Prefix and Number: FRSC 250

Credit hours: 3

Course Title: Hazardous Materials Chemistry

Course Prerequisites: FRSC 100, FRSC 110, FRSC 120, FRSC 130, FRSC 140, FRSC 150 or instructor approval

Textbook(s): Bevelacqua & Norman. *Hazardous Materials Chemistry* 3 ed. Jones and Bartlett Learning.

Software / Hardware:

An electronic textbook is available with added learning resources available from the publisher of the text book. The student must have access to a computer with applicable hardware, software and internet access the online learning management system (Canvas)

<u>**Course Description</u>**: This course provides basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity, and health hazards encountered by emergency services.</u>

Learning Outcomes:

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

- A. Demonstrate a basic understanding of hazardous materials chemistry
- B. Demonstrate proficiency in the use of DOT guidebooks through effective reading comprehension and research skills

To achieve the learning outcomes, the student will be able to:

- 1. Identify and describe the common elements of the Periodic Table. (A)
- 2. Distinguish between elements, compounds, and mixtures. (A)
- 3. Explain the difference between ionic and covalent bonding. (A)
- 4. Define the basic chemistry involved with common hydrocarbon derivatives. (A)
- 5. Describe the basic chemical and physical properties of gases, liquids, and solids. (A)
- 6. Discuss the nine U.S. Department of Transportation hazard classes and their respective divisions. (B)
- 7. Demonstrate the utilization of guidebooks, MSDS, and other reference materials to determine an initial course of action. (A,B)

<u>Course Requirements</u>: To earn a grade of "C" or higher the student must earn 70% of the total points for the course and meet <u>all</u> of the following course requirements.

1. The student must successfully complete the course with an average of 70% or above on the combined learning outcomes.

2. Each student is expected to attend classes regularly; excessive unexcused absences constitute grounds for suspension (refer to the student handbook for attendance policies).

3. Each student must have access to a reliable Internet connection to complete online discussion boards, course assignments, quizzes and tests.

Course Grading Scale:

90-100= A 80-89= B 70-80= C 60-79= D 0-59= F

Attendance Policy:

The college attendance policy is available at <u>http://www.bpcc.edu/catalog/current/academicpolicies.html</u>

Course Fees:

This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams, and/or clinical fees

Non-Discrimination Statement

Bossier Parish Community College does not discriminate based on 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 6220 East Texas Street Bossier City, LA 71111 Phone: 318-678-6056 Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends. KB 3/21