# Bossier Parish Community College Master Syllabus

Course Prefix and Number: FRSC 220 Credit hours: 3

**Course Title**: Fire Protection Hydraulics and Water Supply

Course Prerequisites: MATH 098, ACT Math sub score of 17, or appropriate placement test

score

Textbook(s): Crapo, W., Fire Protection and Hydraulics and Water Supply, 3rd ed., Jones and

Bartlett

### **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)

## **Course Description:**

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and solve water supply problems.

## **Learning Outcomes:**

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

- A. Apply water hydraulic principles
- B. Demonstrate knowledge of water hydraulics as it relates to fire protection

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

- 1. Apply the application of mathematics and physics to the movement of water in fire suppression activities. (A,B)
- 2. Identify the design principles of fire service pumping apparatus. (B)
- 3. Analyze community fire flow demand criteria. (B)
- 4. Demonstrate, through problem solving, a thorough understanding of the principles of forces that affect water, both at rest and in motion. (A)
- 5. List and describe the various types of water distribution systems. (B)
- 6. Discuss the various types of fire pumps. (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> 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=	Α
80-89=	В
70-79=	C
60-69=	D
0-59=	F

#### **Attendance Policy:**

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

#### **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 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 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.

# Reviewed 5/22 Bevan