

**ALLAN HANCOCK COLLEGE  
COURSE OUTLINE**

**DEPARTMENT:** FIRE, SAFETY AND EMS

**PREFIX & NO.:** FT 342

**CATALOG TITLE:** Fireground Hydraulics

**SCHEDULE TITLE:** Fireground Hydraulics

**UNITS:** .5

**TOTAL LECTURE HOURS:** 8 -16

**TOTAL LAB HOURS:** 0 - 24

**TOTAL NUMBER OF WEEKS:** (if other than 16)

**GRADING OPTION:** Letter Grade Only

**PREREQUISITE:** None

**CATALOG DESCRIPTION**

Students will learn field hydraulic formulas that have been field tested and proven. Student will learn the study of water in motion and fire stream control.

**SCHEDULE DESCRIPTION**

Students will learn field hydraulic formulas that have been field tested and proven. Student will learn the study of water in motion and fire stream control.

**COURSE GOALS To encourage and enable students to:**

1. become familiar with hydraulic formulas.
2. develop awareness of water in motion theories.
3. become skilled at applying nozzle tip sizes to water flow calculations.

**INSTRUCTIONAL OBJECTIVES** At the end of the course, the student will demonstrate the ability to:

1. analyze specific field hydraulic situations.
2. where appropriate, perform hydraulic calculations.

**COURSE OUTLINE**

	Hours
1. Introduction	0.5 – 1.0
2. Basic study of water in motion	1.0 – 2.0
3. Basic field hydraulics formulas	2.0 - 4.0
4. K Factors for fire streams	2.0 – 4.0
5. Nozzle and tip sizes	1.5 – 1.2
6. Review and test	1.0 – 1.0

**APPROPRIATE READINGS (other than textbook)**

IFSTA Hydraulics Manual Latest Edition

**ASSIGNMENTS**

1. Use department apparatus and equipment, develop fire ground hydraulics skills on the training grounds.
2. Use hydraulic formulas in the firehouse using tabletop simulations to develop skills.

**EVALUATION**

1. Written test
2. Classroom participation

**TEXTS AND SUPPLIES**

Adopted Text: Handouts provided

Other Materials: None