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
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 – 12
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