COURSE OUTLINE
Surface Water Rescue

Course Description
FS 149. Surface Water Rescue. 1 hour credit. Prerequisite: FS 100 with a C or better or concurrent enrollment in FS 100. This course will enable the student to recognize conditions requiring a surface water rescue by meeting National Fire Protection Association’s 1006 and 1670 standards pertaining to Surface Water Rescue. The student will also be capable of hazard recognition, equipment use, and techniques necessary to operate at a surface water rescue incident.

Course Relevance
The student will learn successful water rescue techniques for employment in rescue and firefighting meeting the NFPA 1006 and 1670 Standard Operations and Training Search and Rescue Incidents.

Required Materials
For complete material(s) information, refer to https://bookstore.butlercc.edu

Learning Outcomes
The intention is for the student to be able to:
1. Identify procedures for initiating the emergency response system where surface water rescue is required.
2. Identify procedures for carrying out site control and scene management.
3. Recognize hazards associated with surface water rescue and the procedures to mitigate these hazards.
4. Identify and utilize personal protective equipment assigned for use at a surface water rescue incident.

Learning PACT Skills that will be developed and documented in this course
Through involvement in this course, the student will develop ability in the following PACT skill area(s):

Analytical Thinking Skills
1. Problem solving
   - Through the use of analytical processes, the student will gather data during an initial scene size-up and determine the proper and safest course of actions to take.

Technology Skills
1. Discipline-specific technology
   - Through the demonstration of various surface water rescue skills and techniques the student will gain proficiency in the use of discipline-specific technology.
Major Summative Assessment Task(s)
These learning outcome(s) and the Learning PACT skill(s) will be demonstrated by:
1. Performing a series of cognitive and psychomotor assessments to demonstrate
   proficiency in surface water rescue techniques per the National Fire Protection
   Associations 1006 and 1670 standards.

Course Content
I. Skills or Competencies – Actions that are essential to achieve the course outcomes:
   (The following skills and competencies are taken from the National fire Protection
   Association Standards and the Fire and Emergency Services Higher Education
   Model and incorporated into each specific course.)
   A. Recognize of the need for a water search and rescue
   B. Identify of resources necessary to conduct safe and effective water operations
   C. Demonstrate site control and site management measures
   D. Identify general hazards associated with water operations and the procedures
      necessary to mitigate these hazards
   E. Perform risk/benefit analysis

Learning Units
I. Procedures for sizing up existing and potential conditions
   A. Scope, magnitude, and nature of the incident
   B. Location, number and condition of victims
   C. Risk/benefit analysis
   D. Access to the scene
   E. Environmental factors
   F. Available and necessary resources

II. Personal safety at water operations
   A. Personal flotation devices
   B. Thermal protection
   C. Appropriate head protection
   D. Acceptable cutting devices
   E. Contamination protection

III. Conducting shore-base operations
   A. Separate, isolate, secure, and interview witnesses
   B. Determine method of victim entrapment
   C. Assess water conditions in terms of hazards to the victim
   D. Throw bag operations
   E. Rigging and mechanical advantage systems used in water operations
   F. Survival swimming and self rescue
   G. Victim packaging devices
   H. Boat- assisted and boat based operations
   I. Rapid extrication of accessible victims
   J. Surface water-based search operations
IV. Dive rescue operations
   A. Unique hazard identification
   B. Surface support operations
   C. Support equipment utilized in dive rescue operations
   D. Dive operations in various climates

V. Ice operations
   A. Ice operations hazard identification
   B. Water and ice characteristics
   C. Support equipment utilized in ice rescue operations
   D. Hypothermia issues
   E. Self rescue

VI. Surf rescue operation
   A. Surf rescue operation hazard identification
   B. Support equipment utilized in surf rescue operations

VII. Swift water operations
   A. Swift water rescue operation hazard identification
   B. Victim entrapment
   C. Zip lines
   D. Self rescue

Learning Activities
Activities will include, but not be limited to, class discussion, lectures, course projects, and practical skill evolutions.

Grade Determination
The student will be evaluated through written exams, skills proficiency assessments, and other methods of evaluation at the discretion of the instructor.