College of San Mateo
Official Course Outline

1. COURSE ID: FIRE 812   TITLE: Firefighter Cadet III
   Units: 3.0 units   Hours/Semester: 144.0-162.0 Lab hours
   Method of Grading: P/NP Only
   Prerequisite: FIRE 811, with a minimum grade of P. Acceptance into a fire agency cadet program. Cadets (or volunteer firefighters) are subjected to an interview process by a fire department before being chosen as a cadet. Minimum requirements to be chosen as a cadet are successful completion of, or concurrent enrollment in, a Fire Academy, successful completion of an EMT course and possession of an EMT certificate, age of 18 or older, and a valid California Driver License.

2. COURSE DESIGNATION:
   Non-Degree Credit
   Transfer credit: none

3. COURSE DESCRIPTIONS:
   Catalog Description:
   Under supervision, students will complete their assignment working in a firehouse environment alongside professional firefighters. Students will continue hands-on training, emergency response, clerical responsibilities and other duties as assigned. Students will be able to use these hours towards their requirement for their Firefighter I State Certification. (Units do not apply towards AA/AS degree.)

4. STUDENT LEARNING OUTCOME(S) (SLO'S):
   Upon successful completion of this course, a student will meet the following outcomes:
   1. Demonstrate an understanding of fire service concepts and apply learned knowledge and skills to manipulative and technical skills as determined by the State Fire Training Office of California.
   2. Demonstrate the ability to work as part of a team in a fire service environment.

5. SPECIFIC INSTRUCTIONAL OBJECTIVES:
   Upon successful completion of this course, a student will be able to:
   1. Demonstrate the ability to make correct decision during critical situations
   2. Employ effective human relations techniques
   3. Discuss and demonstrate specific knowledge regarding fire protection
   4. Identify, compare and contrast the various aspects of communication
   5. Apply and evaluate appropriate problem solving techniques
   6. Discuss and demonstrate necessary physical skills appropriate to fire service needs

6. COURSE CONTENT:
   Lecture Content:
   No lecture in this course
   Lab Content:
   1. Laws and Regulations
      A. Interpret Government Organization
      B. Interpret and Use Personnel Regulations
      C. Interpret Retirement Systems and Worker's Compensation Laws
      D. Interpret Fire Service Agency Rules and Regulations
   2. Personnel and Functions
      A. Identify Fire Department Functions
      B. Identify and Interpret Duties of Personnel
      C. Participate in Personal Development Programs
      D. Identify Necessity for Obedience and Obligation to Duty
   3. Professional Organization
      A. Recognize National Fire Service Organizations
      B. Recognize State Fire Service Organizations
      C. Recognize Local Fire Service Organizations
   4. Forcible Entry and Miscellaneous Tools
      A. Operate Cutting, Boring, Fusing and Sawing Tools and Equipment
      B. Use Battering, Carrying, Digging, Prying and Striking Tools
C. Operate Lighting Equipment
D. Operate Ventilation Equipment

5. Lifting and Hoisting Equipment
   A. Use Ropes, Knots and Hitches
   B. Operate Lifting and Spreading Equipment
   C. Operate Hoisting and Pulling Equipment

6. Extinguishers, Generators and Proportioners
   A. Operate Portable Fire Extinguishers
   B. Operate Foam and Water-additive Proportioners and Generators

7. Hose, Nozzles and Fittings
   A. Couple Hose
   B. Roll, Fold, Carry, Reel and Unreel Hose
   C. Connect and Operate Nozzles, Valves, Fittings and other Hose Devices
   D. Siamese and Wye Lines of Hose
   E. Extend and Reduce Hoselines
   F. Load Hose on Apparatus

8. Hose Evolutions
   A. Operate Hydrants
   B. Lay Single Line of Hose
   C. Lay Multiple Lines of Hose
   D. Connect Hoselines to Auxiliary Appliances
   E. Operate Master Stream Appliances
   F. Lay and Operate Hoselines Above and Below Street Level

9. Ladders
   A. Carry, Raise and Lower Ladders
   B. Climb, Lock-In, On and Foot Ladders
   C. Use Ladders as Improvised Equipment

10. Building Equipment
    A. Operate elevators (optional)
    B. Operate Fire Protection Systems
    C. Operate Fire Escape Ladders (optional)

11. Fire Service Hydraulics
    A. Determine Range and Reaction of Fire Streams

12. Rescue Tools and Equipment
    A. Use Breathing Apparatus
    B. Use Life Lines and Belts (optional)
    C. Use Personal Protective Clothing and Equipment

13. Fire Behavior
    A. Identify Classes of Fire
    B. Identify Theory and Fundamentals of Extinguishment
    C. Identify Products of Combustion
    D. Identify Hazardous and Explosive Materials
    E. Identify the Effects of Extinguishing Agent Application
    F. Identify Theory and Fundamentals of Combustion
    G. Identify Theory and Fundamentals of Heat Transfer
    H. Identify Fire Characteristics of Ordinary Combustible Solids
    I. Identify Fire Characteristics of Flammable Liquids and Gases

14. Strategy
    A. Describe Size-Up
    B. Describe Rescue Techniques
    C. Describe Exposure Tactics
    D. Describe Ventilation Methods
    E. Describe Methods to Confine Fires
    F. Describe Extinguishing Methods
    G. Describe Overhaul Methods
    H. Describe Salvage Operations
    I. Describe Pre-Incident Plans

15. Fireground Operations
    A. Control Traffic
    B. Describe Mutual Aid Plans
C. Describe Disaster Plans
D. Determine Origin and Cause of Fire
E. Identify Fires, Methods and Motives

16. Driving
   A. Operate communications Equipment

7. REPRESENTATIVE METHODS OF INSTRUCTION:
   Typical methods of instruction may include:
   A. Other (Specify): Students will function as part of a fire crew during their assigned shift.

8. REPRESENTATIVE ASSIGNMENTS
   Representative assignments in this course may include, but are not limited to the following:
   Writing Assignments:
   Written report of experience, duties and responsibilities in the firehouse

9. REPRESENTATIVE METHODS OF EVALUATION
   Representative methods of evaluation may include:
   A. Class Participation
   B. Class Performance
   C. Papers

10. REPRESENTATIVE TEXT(S):
    Other:
    A. None - no lecture. Students will be working in firehouse.

   Origination Date: September 2016
   Curriculum Committee Approval Date: October 2016
   Effective Term: Fall 2017
   Course Originator: Michelle Schneider