

NAVAL SCIENCE I ACADEMIC SYLLABUS SY-11/12
INSTRUCTOR: OSCS (SW) ROBERT BRILEY

FIRST REPORTING PERIOD

INTRODUCTION TO NJROTC: THE CADET WILL BE EXPECTED TO DEMONSTRATE KNOWLEDGE OF AND RESPECT FOR THE RESPONSIBILITIES OF LOYAL CITIZENS IN A DEMOCRATIC SOCIETY, AND EXPECTED TO DEMONSTRATE KNOWLEDGE OF AND ABILITY TO PRESENT HIMSELF/HERSELF PROPERLY GROOMED IN A CORRECTLY COMPOSED DESIGNATED UNIFORM.

- PROGRAM HISTORY
- CAREER PLANNING
- NAVY CORE VALUES
- UNIFORM REGULATIONS
- NJROTC RATES AND RANKS
- INTRODUCTION TO UNARMED BASIC DRILL
- PERSONNEL INSPECTION

SECOND REPORTING PERIOD

NAVY SHIPS AND AIRCRAFT: THE CADET WILL BE EXPECTED TO DEMONSTRATE KNOWLEDGE OF THE MISSION, CONSTRUCTION, AND DIFFERENT CLASSES OF NAVY SHIPS AND AIRCRAFT USED TO CARRY OUT THE MILITARY STRATEGY OF THE UNITED STATES.

- NAVY SHIPS AND MISSIONS
- SHIP TERMINOLOGY
- PHONETIC ALPHABET
- SHIPBOARD CUSTOMS AND COURTESIES
- NAVAL AVIATION
- NAVAL AIRCRAFT AND MISSIONS

THIRD REPORTING PERIOD

LEADERSHIP: THE CADET WILL BE EXPECTED TO DEMONSTRATE KNOWLEDGE OF FOLLOWERSHIP AND LEADERSHIP PRINCIPLES AND OPPORTUNITIES IN NJROTC, AND INTERPERSONAL SKILLS SUCH AS MOTIVATION, RELATIONSHIPS, ATTITUDES, AND EMOTIONS.

- FOLLOWERSHIP
- LEADERSHIP
- LEADERSHIP OPPORTUNITIES IN NJROTC
- MOTIVATION

FOURTH REPORTING PERIOD

CADET FIELD MANUAL: THE CADET WILL BE ABLE TO DEMONSTRATE THE PRESCRIBED MOVEMENTS IN BASIC & ARMED DRILL & CEREMONIES. UNDERSTAND SENIOR AND SUBORDINATE RELATIONSHIPS AND THOSE SKILLS NEEDED TO INTERACT WITH OTHER CADETS. UNDERSTAND SEXUAL HARRASSMENT AND DEALING WITH ANGER & STRESS. AND, THE ABILITY TO ADMINISTER FIRST AID TO HELP SAVE A LIFE, PREVENT FURTHER INJURY, AND MINIMIZE/PREVENT INFECTION.

- INTRODUCTION TO ARMED BASIC DRILL
- RELATIONSHIPS
- ATTITUDES AND EMOTIONS
- BASIC FIRST AID (CPR)

NAVAL SCIENCE II,III, & IV ACADEMIC SYLLABUS SY-11/12

INSTRUCTOR: LCDR BRIAN JACOBSON

NAUTICAL SCIENCES

FIRST REPORTING PERIOD

UNDERSEAS LANDSCAPES: The cadet will be expected to demonstrate an understanding of the significance of oceanographic study.

- Relief of the Earth
- The Ocean Floor
- Continental Slope
- The Deep Ocean Floor
- Sediments of the Deep Ocean Floor

SEAWATER: ITS MAKEUP & MOVEMENTS: The cadet will be expected to demonstrate an understanding of the significance of oceanographic study.

- What is Water?
- Physical Behavior of Water
- Salts of the Sea
- Water Temperature
- The Color of Water
- Waves
- Measurement and Movement of Waves
- Beach and Coastline Erosion
- Wave Power
- Ocean Currents and Gyres
- The Japan Current
- Subsurface or Countercurrents
- Tides
- Height and Speed of Tides
- Tidal Energy

NAVAL SCIENCE II,III, & IV ACADEMIC SYLLABUS SY-11/12

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SECOND REPORTING PERIOD

NAUTICAL SCIENCES

OCEANOGRAPHY ~ LIFE IN SEAS: The cadet will be expected to demonstrate an understanding of the significance of oceanographic study.

- Plankton, Start of the Life Cycle
- The Food Cycle in the Sea
- Life at the Edge of the Sea
- Life in the Shallow Sea
- Marine Animals
- Life in the Open Ocean
- Sea Noises and Bioluminescence
- Biological Aspects of Fishing
- Fouling and Deterioration
- Dangerous Marine Life
- Underwater Research
- The Threat of Pollution

METEOROLOGY ~ INTRODUCTION TO OUR ATMOSPHERE: The cadet will be expected to demonstrate a working knowledge of meteorology and how it affects us.

- The Weather
- Meteorology and History
- The Atmosphere
- The Troposphere
- The Tropopause
- The Stratosphere
- The Ionosphere
- The Exosphere
- Atmospheric Pressure
- What makes the Weather
- Measuring Temperature
- Measuring Relative Humidity

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THIRD REPORTING PERIOD

NAUTICAL SCIENCE

METEOROLOGY ~ CLOUDS AND FOG: The cadet will be expected to demonstrate a working knowledge of meteorology and how it affects us.

- Definition of a Cloud
- Cloud Classifications
- Low Clouds
- Middle Clouds
- High Clouds
- Clouds at Sea
- Rain
- Rainmaking
- Sleet, Hail, Snow, Frost, and Dew
- Fog

METEOROLOGY ~ WIND AND WEATHER: The cadet will be expected to demonstrate a working knowledge of meteorology and how it affects us.

- Wind
- Wind and Earth's Rotation
- Prevailing Winds
- Wind and Earth's Revolution
- Secondary Wind Circulation
- Highs (Anticyclones)
- Lows
- Mountain Winds
- Valley Winds
- Monsoons
- Winds and the Beaufort Wind Scale

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FOURTH REPORTING PERIOD

NAUTICAL SCIENCES

METEOROLOGY ~ FRONTS AND STORMS: The cadet will be expected to demonstrate a working knowledge of meteorology and how it affects us.

- Development of Fronts
- Frontal Zones
- Cold Front
- Warm Front
- Occluded Front
- Thunderstorms
- Weather Phenomena within the Thunderstorm
- Tornado
- Tropical Cyclone
- Life of a Hurricane
- Hurricanes, Typhoons and their Tracks
- Signs of an approaching Tropical Cyclone
- Storm Warning Signals
- Hurricane Warning System

METEOROLOGY ~ WEATHER FORECASTING: The cadet will be expected to demonstrate a working knowledge of meteorology and how it affects us.

- National Weather Service
- Navy Weather Service
- Forecast Services
- Weather Satellites
- Weather Maps and Charts