

**Naval Junior Reserve Officer Training Corps
(NJROTC)**

28.02 NAVY JROTC COURSES

The performance standards in this course are based on the performance standards identified in the curriculum for Navy JROTC. Successful completion of at least three units of credit in the Navy JROTC program will qualify the student for advance placement in a college ROTC program or accelerated promotion in the military service.

Each semester equals 1 Carnegie unit. All of the courses listed below include advance instruction with an emphasis on functional literacy, communications, and, leadership. Students will have an opportunity to apply the ideas, concepts, principles, and theories they learn in practical exercises. Naval Science Courses 28.02700 and 28.02800 are designed to be taught in the fourth (4th) year.

Course Number	Course Title
28.02100	NJROTC Cadet Field Manual
28.02200	Introduction to NJROTC
28.02300	Maritime History
28.02400	Nautical Sciences
28.02500	Naval Knowledge
28.02600	Naval Orientation and Skills
28.02700	Naval Leadership and Ethics
28.02800	Effective Communications

ACKNOWLEDGMENTS

Georgia's competency-based curriculum framework for Junior Reserve Officers Training Corps (JROTC) would not have been possible without the efforts of many people. Representatives of the Army headquarters played a vital role in collaborating with educators to ensure that curriculum reflects the realities of the workplace and effectively prepares students for further education and productive careers. Members of the writing/development team, focus group participants, the State Department of Education program specialist for JROTC, and Instructors throughout the state gave their time and expertise in developing these standards. In addition, their employers generously granted them time off to work on this professional development project. The following individuals provided valuable service in the development of Georgia's competency-based curriculum standards.

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CORE EMPLOYABILITY SKILLS

BASIC SKILLS

1. Locates, understands, and interprets written information in a variety of formats, including such documents as manuals, graphs, reports, and schedules.
2. Communicates thoughts, ideas, information, and messages in writing and technologically, and creates documents such as letters, directions, manuals, reports, graphs, and flowcharts.
3. Performs and applies numerical concepts and calculations, and solves problems by choosing appropriately from a variety of mathematical techniques using mental, manual, and technological methods.
4. Receives, interprets, and responds to verbal and nonverbal messages in a manner appropriate to a given situation.
5. Organizes ideas and communicates orally in a clear, concise, and courteous manner.

THINKING SKILLS

6. Specifies goals, objectives, constraints, and supporting factors.
7. Identifies problems, alternative solutions, consequences of alternative solutions, and uses appropriate techniques to resolve given problems.
8. Implements a plan of action making modifications as needed to achieve stated objectives.
9. Uses effective learning techniques to acquire and apply new knowledge and skills.

PERSONAL QUALITIES

10. Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.
11. Chooses ethical courses of action.
12. Takes initiative to accomplish tasks in a timely manner.
13. Exerts a high level of effort and perseveres towards goal attainment.
14. Demonstrates adaptability, dependability, and responsibility and such social behaviors as tolerance, honesty, empathy, and courtesy.

INTERPERSONAL SKILLS

15. Participates and interacts as a team member and leader.
16. Shares knowledge and skills with others.
17. Performs effectively in various environments with people of different ages, genders, cultures, socio-economic backgrounds, attitudes, and abilities.

18. Works to satisfy customer/client expectations.
19. Uses strategies appropriate to a given situation to prevent and resolve conflicts.

RESOURCES

20. Selects goal-relevant activities, prioritizes them, manages time, and prepares and follows schedules.
21. Uses or prepares budgets, makes projections, keeps records, and makes adjustments to meet objectives.
22. Acquires, stores, allocates, and uses materials and space efficiently.

TECHNOLOGY

23. Prevents, identifies, or solves problems with technical or electronic equipment.
24. Operates and maintains technical equipment and the work environment safely following applicable industry regulations and guidelines.
25. Utilizes a variety of technologies.

BUSINESS ASPECTS

26. Demonstrates understanding of basic economic concepts and how they are applied in business functions and activities.
27. Identifies forms of business ownership.
28. Demonstrates understanding of the scope of a business, its place within an industry, and the interrelationship of its parts.
29. Demonstrates understanding of the individual's role, responsibilities, and relationships in the organizational structure of a business.
30. Maintains safety, health, and environmental standards, and addresses ergonomic concerns.

CAREER DEVELOPMENT

31. Makes potential career decisions based upon interests, abilities, and values and formulates appropriate plans to reach career goals.
32. Demonstrates understanding of the relationship between educational achievement and career planning and how career choices impact family patterns and lifestyle.
33. Demonstrates effective skills for seeking and securing employment.
34. Demonstrates understanding of education and career development as a lifelong learning process which requires preparation for change.

28.02100 JROTC Navy I

NAVAL SCIENCE 1 Cadet Field Manual

Course Description: The purpose of this course is to combine all information on military drill and ceremonies, uniform regulations, physical fitness, orienteering, principles of health, first aid, survival, leadership, and communications. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officer Training Corps. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

NJROTC UNIFORM REGULATIONS

- 35 Explain the uniform as an important element in the morale, pride, discipline, and effectiveness of the NJROTC program.
- 36 Demonstrate the correct uniform composition.
- 37 Demonstrate the wearing of the NJROTC uniform and explain the uniform standards described in the Cadet Field Manual.
- 38 Demonstrate how the wearing of the NJROTC uniform reflects upon your NJROTC unit, your school, the U.S. Navy, your community and your country.
- 39 Explain the importance of proper appearance and grooming standards for wearing an NJROTC uniform.
- 40 Demonstrate the procedures for wearing the necktie with the NJROTC male uniform.
- 41 Cite the requirements for wearing insignia's and devices on the NJROTC uniform.
- 42 Explain where awards and decorations (medals, etc...) are worn on the NJROTC uniform.

NJROTC RATES/RANKS AND U.S. NAVY RATES/RANKS

- 43 Explain and recognize various NJROTC rates and ranks and be able to understand assignments associated with each billet.
- 44 Describe and recognize the rates and ranks of active duty Navy personnel.

MILITARY CUSTOMS, COURTESIES, ETIQUETTE AND CEREMONIES

- 45 Explain the types of military customs to include their purposes and when courtesies are rendered.
- 46 Describe the flag of the United States as a standard of honor.
- 47 Explain the procedures in pledging allegiance to the flag.
- 48 Describe the sequence of events in military ceremonies, reviews, and parades.
- 49 Demonstrate the prescribed movements in the handling of weapons and military drills and ceremonies

PERSONNEL INSPECTION

- 50 Describe the techniques for conducting a personnel inspection.
- 51 Explain the inspecting officer's duties (tour) when he or she inspects a platoon.
- 52 Explain the general inspection guidelines (items) that inspecting officers look for when inspecting a cadet in a platoon.
- 53 Demonstrate the proper procedures for inspecting.

INTRODUCTION TO MILITARY DRILL

- 54 Explain the purpose of military drill.
- 55 Define terms used in military drill.
- 56 Explain the different types of commands.
- 57 Describe the general rules for drill.
- 58 Demonstrate the proper techniques for giving commands

DRILL WITHOUT ARMS

- 59 Explain and demonstrate the positions and instructions for basic drill without arms.
- 60 Demonstrate the correct formations and instructions for basic drill without arms.
- 61 Discuss and then demonstrate the correct marching steps for basic drill without arms.
- 62 Demonstrate the commands for changing direction for basic drill without arms.

MANUAL OF ARMS WITH THE NJROTC DRILL RIFLE

- 63 Explain the make-up of the rifle nomenclature.
- 64 Explain the importance of all the positions of the rifle.
- 65 Explain all of the positions of the rifle.
- 66 Explain the procedures for salutes under arms given by individuals.
- 67 Discuss and demonstrate the procedure for stacking arms.
- 68 Demonstrate authorized movements in the Manual of Arms with the NJROTC rifle.
- 69 Explain and demonstrate the procedures for the platoon to take arms.

MANUAL OF THE SWORD

- 70 Explain sword history as it relates to symbol of authority, sword etiquette, ancient history and sword salute.
- 71 Explain and demonstrate how the sword is used at sword ceremonies.
- 72 Explain the nomenclature and the general rules of the sword.
- 73 Demonstrate the commands and movements of the Sword Manual.

GUIDON MANUAL

- 74 Demonstrate and explain the execution of the Guidon Manual.
- 75 Demonstrate and explain the positions of the guidon.

NATIONAL AND ORGANIZATIONAL FLAGS

- 76 Demonstrate the hoisting and lowering and folding the national ensign.
- 77 Explain the meaning of the color guard.
- 78 Demonstrate the execution of commands in the Manual of the Color(s).
- 79 Demonstrate the execution of the movements for the Manual of the Color(s).

HEALTH EDUCATION

- 80 Explain and become familiar with the fundamentals of human growth and development.
- 81 Explain and become familiar with principles of health hygiene.
- 82 Explain and become aware of the dangers of drug, alcohol, and tobacco use and abuse.

PHYSICAL FITNESS AND EXERCISE

- 83 Explain the principles associated with the term fitness.
- 84 Explain the principles associated with physical fitness.
- 85 Explain the principles of a sound exercise program.
- 86 Explain the principles for the prevention of heat stress and dehydration.
- 87 Demonstrate basic warm-up and cardiovascular exercise.

PHYSICAL FITNESS EXERCISE AND QUALIFYING MINIMUMS

- 88 Explain the requirements of the physical fitness test.
- 89 Explain the physical fitness test procedures.
- 90 Demonstrate the ability to perform physical fitness exercises correctly.
- 91 Explain the scoring of the physical fitness test.

INTRODUCTION TO FIRST AID

- 92 Gain familiarity with the fundamentals of first aid.
- 93 Explain first aid for maintenance of basic life support.
- 94 Explain basic first aid for bleeding and other circulatory problems.
- 95 Explain basic first aid for injuries to bones and joints.
- 96 Explain injuries and basic first aid for exposure to temperature extremes.
- 97 Explain basic first aid for poisoning.
- 98 Explain first aid for common medical emergencies.
- 99 Demonstrate basic first aid for shock.
- 100 Demonstrate basic first aid for soft tissue injuries.
- 101 Demonstrate basic emergency transport methods.

ORIENTEERING

- 102 Explain the sport of orienteering.
- 103 Explain how an orienteering course is laid out.
- 104 Explain the various forms of orienteering activities.
- 105 Explain the qualification requirements for the NJROTC orienteering ribbon.
- 106 Demonstrate and explain the features and how to read orienteering and other topographical maps.
- 107 Describe the four possible adverse impacts of international legal rules affecting the deployment and navigation of naval vessels.

- 108 Demonstrate how distances are measured in orienteering.
- 109 Demonstrate the land navigation techniques used by the orienteer.

SURVIVAL

- 110 Explain the fundamentals of survival.
- 111 Demonstrate the principles for survival in tropical areas.
- 112 Demonstrate the principles for survival in cold areas.
- 113 Demonstrate the principles of survival in water.

CHAIN OF COMMAND

- 114 Gain familiarity with the chain of command from the President of the United States to the junior seaman recruit.
- 115 Understand the NJROTC chain of command is organized like a pyramid with one person on top and many on the bottom.
- 116 Explain the positions that fall under the NJROTC chain of command.
- 117 Explain how the cadet's uniform and insignia show his or her level of authority in the chain of command.

ORDERS TO THE SENTRY

- 118 Gain familiarity with the orders to the sentry.
- 119 Explain how the orders to the sentry are used as a means of security for a ship or a duty station.
- 120 Understand that security involves sentry duty, guard duty, fire watches and barracks watches.
- 121 Demonstrate the proper response to sentry orders and the correct method of posting a sentry.

28.02200 JROTC Navy II

NAVAL SCIENCE 1 Introduction to NJROTC

Course Description: The purpose of this course is to help students understand the mission, goals, and opportunities available as members of the NJROTC program. This course will also introduce students to the basic principles of leadership, which combined with the many opportunities for practical experience in the NJROTC program will prepare them for leadership roles in school and upon graduation. More importantly, this course will assist students in developing an understanding of our nation, our values, traditions, heritage, respect for our laws, and becoming informed responsible citizens. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officer Training Corps. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

INTRODUCTION TO THE NJROTC COURSE

History and Background of the NJROTC Program

- 35 Cite the public law that established the Junior ROTC program.
- 36 Cite under whose guidance the NJROTC program is administered.
- 37 Describe the team members/instructors teaching the NJROTC program.
- 38 Cite the type of support provided by the Navy for the naval science classroom, and for the cadets enrolled in the program.

Mission, Goals, and Policies of the NJROTC Program

- 39 Cite the mission and goals the NJROTC program expects to achieve.
- 40 Cite where the focus of the NJROTC program will lie.
- 41 Cite the policies a student must meet in order to enroll in the NJROTC unit.
- 42 Explain the procedures used to disenroll cadets from the NJROTC program.
- 43 Cite the Navy's core values and explain what it means for everyone to be committed to their fellow cadets in the NJROTC program.

The Naval Science Curriculum

- 44 Cite how the course will discuss the history of the U.S. Navy and the role it has played in building our nation.
- 45 Cite how the course will use the nautical sciences as areas of scientific study in the program.
- 46 Cite how the course will include various areas of naval knowledge in the study of sea power.
- 47 Cite how the course will use various areas of naval skills in the study of life in the Navy.
- 48 Discuss how the basic principles of ethics and morals will be used to teach leadership in the course.

NJROTC Unit Activities

- 49 Explain the purpose of having all students participate in learning the basics of military drill.
- 50 Explain why the NJROTC program encourages physical fitness for all students.
- 51 Discuss the opportunity to take orientation trips during the school year, and what it does for cadet leadership training.
- 52 Discuss the objectives of the NJROTC Leadership Academy and the opportunities for cadet advanced leadership training.

Benefits of the NJROTC Program

- 53 Cite the main reasons for enrolling in NJROTC.
- 54 Discuss the kind of self-discipline a cadet hopes to achieve by being a cadet in the NJROTC program.
- 55 Discuss the opportunities to develop leadership skills when placed in an NJROTC leadership position.
- 56 Cite the special military pay grade benefits that can be earned through the NJROTC program.

Career Planning

- 57 Cite individual short-term, mid-term, and long-term goals for the future.
- 58 Understand how a school transcript can be used for admittance to college, scholarships, and job training.
- 59 Cite good study habit and the traits of a successful student.
- 60 Discuss some advantages of enlistment in the Navy.
- 61 Discuss the eligibility requirements for admission to the U.S. Naval Academy and the benefits of the NROTC college scholarship program.

LEADERSHIP

Followership

- 62 Define followership.
- 63 Describe the different types of followers.
- 64 Describe the qualities of a good follower, and the importance of obedience in a military organization.
- 65 Describe the duties of a good follower.

Leadership

- 66 Define leadership.
- 67 Cite the traits of an effective leader.
- 68 Cite the personal qualities of an effective leader.
- 69 Discuss the range of leadership styles and strategies of successful leaders, from the very autocratic to the very democratic.

Leadership Opportunities in NJROTC

- 70 Discuss the typical NJROTC unit organizational chart.
- 71 Describe the leadership positions found in the unit.

Motivation

- 72 Discuss Maslow's priority of human needs.
- 73 Discuss the main motivating factors in people's actions, and how it impacts on their attitude to do a better job.

- 74 Define punishment as a negative approach to motivation.
- 75 Define rewards as a positive approach to motivation.

Relationships

- 76 Discuss senior and subordinate relationships in a typical military situation.
- 77 Cite three reasons for the chain-of-command.
- 78 Discuss roadblocks and their effect on relationships in the NJROTC unit.
- 79 Define prejudice and how people show prejudice in their general behavior.
- 80 Discuss how frustration, anger, sexual harassment, being picked-on, and unfair situations cause conflicts in human relationships.
- 81 Discuss what the individual can do to learn about solving conflicts.

Attitudes and Emotions

- 82 Discuss how an individual's attitude influences others around him/her and contributes to the success of the NJROTC unit.
- 83 Discuss the key to having a good attitude.
- 84 Discuss the difference between winning and losing attitudes.
- 85 Discuss how physical activity can help work out the feelings associated with an intense emotional buildup.
- 86 Discuss how the ability to retain a sense of humor can be a big asset in the construction of expression of emotions.

CITIZENSHIP

Laws, Authority, Responsibility

- 87 Define the words "citizen" and "citizenship."
- 88 Discuss the 24 characteristics of a good citizen.
- 89 Discuss how laws affect the way we live.
- 90 Define "constituted authority" as it relates to the making of laws.
- 91 Describe the relationship between authority, responsibility and accountability.
- 92 Discuss the eleven parts of the Bill of Responsibilities and what they represent when accepted by members of a free society.

The Role of Government

- 93 Discuss how the invention of radio and television forced many changes in our government.
- 94 Define the absolute monarchy type of government.
- 95 Define socialism as a form of government.
- 96 Discuss the rise of the fascist movement in two European countries in the early 1920's as a form of government.
- 97 Discuss the communist ideology of combining the economic and political systems as a form of government.
- 98 Describe the success of the democratic form of government and how it is based upon equality, justice, and freedom for all citizens.

Students' Role as Citizens: Rights and Responsibilities

- 99 Cite the three ways a person can become a citizen of the United States.
- 100 Discuss a person's rights as a citizen.
- 101 Discuss a citizen's duty to obey and respect the laws of his/her country.
- 102 Discuss a person's loyalty to their government, their state, and their community.

FOUNDATIONS OF OUR GOVERNMENT

The Declaration of Independence

- 103 Discuss the significance of the Declaration of Independence.
- 104 Discuss the 5 parts of the Declaration of Independence.
- 105 Describe how the role of the government in an American democracy is to serve the people.

The Constitution of the United States

- 106 Discuss the significance of the Articles of Confederation.
- 107 Discuss the series of checks and balances in the Constitution, and how they protect the rights of the people and establish boundaries of authority between state and federal government.
- 108 Discuss the purpose of the Constitution, the preamble, and the power in each of the seven articles.
- 109 Describe the three branches of the federal government and the specific law-making duties of each branch.
- 110 Discuss the significance of the Bill of Rights as amendments to the Constitution.

National Defense

- 111 Discuss the relationship of the U.S. Navy with the U.S. government and its role in our national defense.
- 112 Discuss the role of the Secretary of Defense under the President of the United States.
- 113 Discuss the membership of the National Security Council.
- 114 Cite the different departments under the Department of Defense.
- 115 Cite the military responsibilities of the Secretary of the Navy and the Chief of Naval Operations.

Organization of the Navy

- 116 Discuss the overall mission of the U.S. Navy.
- 117 Cite the geographical locations of the U.S. Navy operating forces throughout the world, and discuss their various missions.
- 118 Explain the difference between Navy operating forces and Navy shore establishment.

NAVY SHIPS

The Mission of Navy Ships

- 119 Describe the mission of the Navy as it relates to carrying out the military strategy of the United States.
- 120 Discuss the objective of strategic deterrence in the Navy's mission.
- 121 Discuss the Navy's ability to control the use of the seas.
- 122 Discuss the projection of power ashore as it relates to the Navy's ability to deploy its forces to carry the fight to the enemy.
- 123 Discuss the Navy's presence throughout the world on the open seas as a show of force.

Ship Terminology

- 124 Discuss the differences between civilian and Navy language when referring to various parts and locations aboard ship.
- 125 Discuss how ships are identified by name and designation.
- 126 Discuss how the speed of a ship is stated in terms of nautical miles per hour over water, and how this compares to statute miles per hour over land.

Navy Ships

- 127 Discuss Navy ships in terms of type, size, displacement, length, beam and missions performed.
- 128 Describe how the ships of the United States Navy are divided into two categories: combatant ships and auxiliary ships.
- 129 Cite the two types of submarines deployed by the Navy.

NAVAL AVIATION**Background of Naval Aviation**

- 130 Discuss the beginning of naval aviation and the four approaches used to integrate aircraft with the fleet.
- 131 Discuss the differences between fixed-wing aircraft and rotary wing aircraft and the missions they perform.
- 132 Describe the tri-service aircraft model designation symbols used for air identification purposes.

Naval Aircraft and Missions

- 133 Discuss how naval aircraft of the same type are organized into squadrons for the purpose of training, maintenance and administration.
- 134 Discuss the variety of Navy aircraft available in each of its striking forces, and the missions they perform.

28.02300 JROTC Navy III

NAVAL SCIENCE Maritime History

Course Description: The purpose of this course is to build on the general introduction provided in Naval Science I, to further develop the traits of citizenship and leadership in students, introduce cadets to the maritime history of the world and the United States from the American Revolution through the present time. The material includes Bosnia, the demise of the Soviet Union, and the September 11, 2001 terrorists' attacks upon the United States. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officer Training Corps. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

SEA POWER AND EARLY WESTERN CIVILIZATION

- 35 Describe the importance of sea power.
- 36 Explain how sea power evolved and its influence on the ancient world.
- 37 Describe the fall of the Roman Empire and the subsequent thousand years of turmoil that followed.
- 38 Describe the events that caused the Turks to lose the Battle of Lepanto in 1571 and their control of the Mediterranean area.
- 39 Describe the conflict between England and Spain in 1570.
- 40 Explain how the English defeated the Spanish Armada.

THE AMERICAN REVOLUTION

- 41 Describe the taxing system used by England on the colonies and the subsequent events that led to the American Revolution.
- 42 Explain the difficulties the British faced in fighting naval battles with the colonies.
- 43 Describe how the American Navy was born and the significance of building the Navy.
- 44 Cite the importance of the first American Naval operation against the English Navy in the American Revolution.
- 45 Describe the two major events (turning point) of the battle of Saratoga and the impact it had on the American Revolutionary War.
- 46 Explain how naval power affected the outcome of the War at Sea.
- 47 Describe the events leading up to the battle of Yorktown and the subsequent end of the fighting in the colonies.

THE GROWTH OF AMERICAN SEA POWER, 1783-1860

- 48 Explain the reasons why the American economy suffered in 1783.
- 49 Cite the events surrounding the Navy Act of 1794.
- 50 Explain the events during the quasi-war between American and France.
- 51 Cite the events surrounding the capture and destruction of the USS Philadelphia.
- 52 Describe the events that led to the final moves toward war between the United States and Britain.
- 53 Describe the major sea battles between the American and the British forces during the War of 1812.
- 54 Cite other high sea battles that occurred during the War of 1812.

- 55 Explain other major incidents where the British prevailed over America's sea vessels.
- 56 Cite the offensive maneuvers used by the British Navy during the War of 1812.
- 57 Explain how sea power influenced the spread of Western Civilization and the formative years of the new American republic.
- 58 Explain the contribution the U.S. Navy made to the progress of world trade between 1815 and 1860.

THE CIVIL WAR, 1861-1865

- 59 Describe how the issue of slavery divided the North and South and led to the outbreak of the Civil War in 1861.
- 60 Describe the major events that occurred during 1860-61 in America.
- 61 Describe the resources of both the North and the South and the preparations required to fight the Civil War.
- 62 Describe the role of the Union Navy during the Civil War.
- 63 Describe the CSS *Virginia* (Formerly USS Merrimack) and the USS *Monitor*.
- 64 Describe how General Robert E. Lee was able to prolong the life of the Confederacy after the Battle of Hampton Roads.
- 65 Describe the Emancipation Proclamation as a significant psychological move for the North in the Civil War.
- 66 Describe the Battle of Gettysburg as the turning point in the Civil War.
- 67 Explain the role that Captain Semmes and the CSS Alabama played in the Civil War.
- 68 Explain the primary reason General Robert E. Lee was forced to surrender.
- 69 Explain the changes to American life that occurred during or as a result of the Civil War.

THE RISE TO WORLD POWER STATUS, 1865-1914

- 70 Describe the changes in foreign relations and technology that affected the U.S. Navy following the Civil War.
- 71 Describe the education and training programs that were developed after the Civil War for the U.S. Navy.
- 72 Describe five major contributions Alfred T. Mahan made to modern navies.
- 73 Explain how the United States rebuilt its Navy or contributed to its expansion following the Civil War.
- 74 Explain American reaction to the sinking of the USS Maine and the war preparations made by the United States before the start of the Spanish-American War.
- 75 Describe the advances in naval power and technology under Theodore Roosevelt.
- 76 Explain America's international relations from 1903 until World War I.
- 77 Explain the difficulties and importance of building the Panama Canal.

WORLD WAR I, 1914-1918

- 78 Explain the war plans made by Great Britain and Germany during World War I.
- 79 Describe actions taken by the German and the British during the Pacific Action.
- 80 Explain the operational advantages of the German U-boats over the Allies during World War I.
- 81 Explain the events that brought America into World War I.
- 82 Explain the operation and significance of the convoy system that was used by Great Britain during World War I.
- 83 Describe the antisubmarine operations used by the U.S. Navy during World War I.

- 84 Describe the role America played during World War I.
- 85 Briefly describe events leading up to the surrender of Germany.

THE INTERWAR YEARS, 1918-1941

- 86 Explain the conditions set forth in the Naval Disarmament Treaty.
- 87 Identify the dictatorships that grew out of the great world depression.
- 88 Explain the condition of the U.S Navy during the pre-war years.
- 89 Explain the final steps toward war in Europe.
- 90 Explain U.S isolationism/involvement from 1935 until the United States declared war on Japan on 8 December 1941.
- 91 Explain and demonstrate the procedures for the platoon to take arms.

WORLD WAR II: THE ATLANTIC WAR, 1941-1945

- 92 Explain the events that led up to the Japanese attack on Pearl Harbor.
- 93 Describe the state of U.S. military readiness during and after the attack on Pearl Harbor.
- 94 Explain three miscalculations the Japanese made during and after the attack on Pearl Harbor.
- 95 Explain the outcome of the battle of Anzio.
- 96 Explain why successful Allied air attacks in Operation Overlord were essential to the success of the invasion of Normandy.
- 97 Describe the major events of D-Day in Normandy.
- 98 Describe the major events of Operation Anvil: Invasion of Southern France.

WORLD WAR II: PACIFIC WAR, 1941-1945

- 99 Explain the events that led up to the Japanese attack on Pearl Harbor.
- 100 Describe the state of U.S. military readiness during and after the attack on Pearl Harbor.
- 101 Explain three miscalculations the Japanese made during and following the attack on Pearl Harbor.
- 102 Cite two reasons the Battle of the Coral Sea was important.
- 103 Explain the significance of the Battle of Midway.
- 104 Describe the battles of Guadalcanal.
- 105 Explain the submarine war in the Pacific.
- 106 Describe the battle of the Philippines Sea.
- 107 Describe the condition of the Imperial Japanese Navy following Battles for Leyte Gulf.
- 108 Describe the U.S. occupation of Iwo Jima and its logistic significance.

THE COLD WAR ERA, 1945-1991

- 109 Describe the views and events during the demobilization following World War II.
- 110 Describe the events leading to the “Cold War.”
- 111 Explain the postwar views and actions in relations to the unification of the armed forces and provisions for national security.
- 112 Describe the events leading to formation of the North Atlantic Treaty Organization (NATO).
- 113 Describe postwar activities in the Far East in regard to insurgencies, nationalism, and anticolonialism.

- 114 Describe initial stages of the Korean War.
- 115 Describe naval contributions in the Korean War.
- 116 Describe the events involved with Operation Chromite: Inchon.
- 117 Describe the events involved in the Chinese Intervention within the Korean War.
- 118 Describe the events involved in the Truce Talks of the Korean War.
- 119 Describe the outcome of the Korean War in regard to naval participation, U.S. government policy, global perspective, and Communist objectives.
- 120 Describe naval confrontations in the post-Korean era.
- 121 Describe the Korean post-war period as it related to the U.S. Navy.
- 122 Describe the Navy's movement into the nuclear age.
- 123 Describe major events in the Cuban missile crisis.
- 124 Describe the major events which led to the breakup of Vietnam into North and South Vietnam.
- 125 Describe the restrictions placed on military forces stationed in Vietnam.
- 126 Describe the Vietnamization process established by the United States.
- 127 Describe the major events that led to the end of the Vietnam War.
- 128 Describe the events that were included in the Post-Vietnam Modernization efforts.
- 129 Describe the joint U.S. task force's role in Grenada during the fall of 1983.
- 130 Describe the role the United States played in restoring democracy to Panama and the importance of Operation Just cause to U.S. interests in Panama.
- 131 Describe the rise of terrorism worldwide with events in the Middle East during the 1980's.
- 132 Describe the major events that occurred between Iran and Iraq in the Persian Gulf region.
- 133 Describe the great changes experienced by the Soviet Union since 1985 and the rapid rise of the democratic movement within the Soviet Union after the demolition of the Berlin Wall.

THE 1990s AND BEYOND

- 134 Describe the terms of START II signed by the U.S. and Russia in 1993.
- 135 Describe the major events that occurred between Iran and Iraq in the Persian Gulf region.
- 136 Describe the major events that occurred during both operations Desert Shield and Desert Storm.
- 137 Describe the conflicts that took place in Somalia during the early 1990s.
- 138 Describe some of the actions taken by the U.S. in the aftermath of Desert Storm.
- 139 Describe international terrorist attacks against the U.S. during the late 1990s.
- 140 Describe domestic terrorist events that occurred in the late 1990s and September 11, 2001.
- 141 Describe the challenging years facing our Navy.

28.02400 JROTC/Navy IV

NAVAL SCIENCE Nautical Sciences

Course Description: The purpose of this course is to introduce the various nautical sciences through classroom work and some laboratory time. The development of core skills that students should master are integrated throughout the course and include geography, oceanography, astronomy, physical science, meteorology, and weather. Minimum performance requirements of this course are based on successful completion accordance with and based on current Chief of naval Education Training instructions. The cadet will be expected to illustrate an understanding of maritime geography as it relates to our national resources, landforms, climate, soil bodies of water, people governments, military, and geopolitics. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officer Training Corps. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

MARITIME GEOGRAPHY OF THE WESTERN SEAS

- 35 Explain three important reasons for the study of geography.
- 36 Describe the subdivisions of the World Ocean.
- 37 Cite the importance of geography in military planning and operations.
- 38 Describe the Atlantic Ocean, Arctic Ocean, and Mediterranean Sea in terms of their economic and strategic importance to the United States and its allies.
- 39 Explain the importance of the Caribbean Sea and Gulf of Mexico to the United States.

MARITIME GEOGRAPHY OF THE EASTERN SEAS

- 40 Cite the importance of the Red Sea and the Gulf of Aden to American interest.
- 41 Explain the role of the United States and its allies in the Persian Gulf and the Gulf of Oman.
- 42 Describe the Indian Ocean in terms of its economic and strategic value to the United States and its allies.
- 43 Describe the value of the Pacific Ocean to the United States and its allies.
- 44 Describe the special features of the Antarctic Ocean.

OCEANOGRAPHY

- 45 Describe the significance of oceanographic study.
- 46 Explain four reasons for the great interest now being shown in the world's oceans.
- 47 Describe those historical events that created the great bodies of water.
- 48 Describe the continental drift theory.
- 49 Explain those great geological phenomena that occur today as a result of our changing Earth.

UNDERSEA LANDSCAPES

- 50 Explain methods used to explore the ocean floor.
- 51 Describe the benefits of the continental shelf.

- 52 Describe the make-up of the continental slope.
- 53 Explain the features of the deep ocean basin.
- 54 Describe the sediments found on the ocean floor.

SEAWATER: ITS MAKE UP AND MOVEMENTS

- 55 Describe the chemical makeup and physical properties of water
- 56 Describe the composition of seawater.
- 57 Describe the causes of waves.
- 58 Cite the causes of beach, coastline erosion, ocean currents, and gyres.
- 59 Describe the effects of tides on coastal areas.
- 60 Describe the theory of tidal energy.

LIFE IN THE SEAS

- 61 Describe how microscopic plant life is involved in the ecological system of the oceans.
- 62 Describe life-sustaining characteristics of marine life at the edge of the sea.
- 63 Describe the two major divisions of marine animals and their characteristics.
- 64 Describe four categories of harmful marine animals that pose a threat to man.
- 65 Describe the types of equipment used to improve man's capability to penetrate the sea.
- 66 Describe the six major groups of pollutants and their effects on marine life.

METEROLOGY

- 67 Describe the aspects of the science of weather and the Earth's atmosphere.
- 68 Describe the significance of weather in history.
- 69 Describe the meaning and characteristics of the troposphere, tropopause, stratosphere, ionosphere, and exosphere.
- 70 Describe the aspects of atmospheric pressure.
- 71 Describe the aspects in measuring temperature, relative humidity, and dew point.

CLOUDS AND FOG

- 72 Describe the factors associated with cloud formation.
- 73 Describe cloud classifications as they relate to cloud types, altitudes, classes, and overall appearance.
- 74 Describe the factors associated when clouds are at sea.
- 75 Explain the formation of rain.
- 76 Describe the process of how fog is formed on the Earth's surface as well as hazards in relation to fog formation.

WIND AND WEATHER

- 77 Describe the conditions that cause wind movements.
- 78 Describe the effects of the Earth's revolution and inclination movement on our weather patterns.
- 79 Describe the characteristics of low-pressure and high-pressure areas.
- 80 Describe the type of monsoons in Southeast Asia.
- 81 Describe the Beaufort Scale and how it is used.

FRONTS AND STORMS

- 82 Describe the development of weather fronts.
- 83 Describe the primary frontal zones: Inter-tropical Convergence Zone, Arctic Frontal Zone, and Polar Frontal Zone.
- 84 Describe the characteristics of cold, warm, and occluded fronts.
- 85 Describe the formations, characteristics, and developmental stages of a thunderstorm, hurricane, and tornado.
- 86 Describe the purpose and function of Storm Warning Signals and Hurricane Warning System.

WEATHER FORECASTING

- 87 Describe the function and structure of the National Weather Service.
- 88 Describe the function of the Navy Weather Service.
- 89 Describe the purpose of weather satellites.

ASTRONOMY

- 90 Explain the theories of the creation of the universe.
- 91 List the methods for astronomical observation.
- 92 Describe the methods for using the telescope.
- 93 Identify the methods for using the spectrum and balloon observatories.
- 94 Describe examples of satellites and other exploratory spacecraft.
- 95 Explain the efforts in exploring the Solar System.
- 96 Explain the important events in the field of astronomy and space exploration in the next 20 years.

THE MOON

- 97 Recognize basic facts about the Moon such as size, distance from Earth, and atmosphere.
- 98 Describe the surface features and geographical structure of the Moon.
- 99 Explain those theories that describe Moon craters and their formations.
- 100 Describe the mountain ranges and riles on the surface of the Moon.
- 101 Explain the effect moonquakes have on the Moon.
- 102 Explain the basic reasons for Moon exploration.

THE SUN

- 103 Explain the basic facts about the Sun, and its relationship to the Earth.
- 104 Describe the composition of the Sun.
- 105 Explain sunspots and the effects they have on the Earth's atmosphere.
- 106 Explain the effects the Sun has on the Earth's magnetic field.
- 107 Describe the effects the Sun's energy has on the Earth.
- 108 Explain the importance of developing solar energy systems.

THE PLANETS

- 109 Describe the solar system in which we live.
- 110 Describe the major features and characteristics of the planets Mercury, Mars, Jupiter, Uranus, and Pluto.
- 111 Describe special features of Venus as it relates to our solar system.

- 112 Describe the prime features of Saturn and explain how it differs from other planets in our solar system.
- 113 Describe the relationship of Neptune and Uranus.

ASTEROIDS, COMETS, AND METEORS

- 114 Identify the asteroid belt as it relates to our solar system.
- 115 Describe the composition of comets and their movement.
- 116 Identify the difference between meteoroids, meteors, and meteorites.

THE STARS

- 117 Explain the theory adopted as the common unit of astronomical distances.
- 118 Explain the system used to classify stars.
- 119 Explain the terms used to identify temporary stars from 134 B.C. to the present.
- 120 Describe the three Nebulae stars and their makeup.
- 121 Describe the characteristics of our galaxy and the three ways other galaxies are classified according to their shapes.

PHYSICAL SCIENCE

MOTION, FORCE, AND AERODYNAMICS

- 122 Describe the two main topics in the field of physical science.
- 123 Describe the six steps in the scientific method approach.
- 124 Describe the differences in a theory and a law.
- 125 Describe Newton's three laws of motion.
- 126 Discuss Bernoulli's theorem.

BUOYANCY

- 127 Describe Archimedes Law.
- 128 Explain how objects float.
- 129 Explain how a submarine floats and submerges.
- 130 Explain stability in a ship and its importance .

BASIC ELECTRICITY

- 131 Describe the fundamental theory of electricity.
- 132 Describe the properties of conductors and insulators.
- 133 Describe the six common methods of producing voltage.
- 134 Describe battery construction and significant characteristics.
- 135 Explain the principle of electrical circuits.
- 136 Describe Ohm's Law as it relates to current and resistance.
- 137 Describe the electrical power theory.

ELECTRONICS

- 138 Discuss the principles of radio-frequency wave transmission.
- 139 Describe the principles of radar.
- 140 Describe the use of radar as a navigational aid.
- 141 Describe the use of radar in combat.

SOUND AND SONAR

- 142 Explain the effects that density and temperature have on sound.
- 143 Explain how the ear detects sound.
- 144 Describe Doppler shift.
- 145 Explain the characteristics of sound in seawater.
- 146 Describe sonar and its characteristics.

28.02500 JROTC Navy V

NAVAL SCIENCE: Naval Knowledge

Course Description: The purpose of this course is to further the foundation in citizenship and leadership established in Naval Science One and Two and to expound upon the virtues of United States citizenship with knowledge of uses of the world's waterways through the viewpoint of National power and International law. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officer Training Corps. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

SEA POWER AND NATIONAL SECURITY

The Importance of Sea Power

- 35 Define the importance of sea power as it relates to America.
- 36 Describe four major developments since World War II that have increased the importance of the oceans of the world.
- 37 Describe the strategic ocean areas.
- 38 Describe the hot spots and chokepoints of the world's waterways and the importance of keeping them open.
- 39 Describe the purpose and function of the United States Merchant Marine.
- 40 Describe the relationship between maritime commerce and its effects on the total economy of the United States.

Grand Strategy, and Preparedness

- 41 Name the major strategist from 400 B.C. to the mid-nineteenth century.
- 42 Describe the three classic schools of strategy.
- 43 Describe the evolution of modern strategy during World War I.
- 44 Describe the global strategy during World War II.
- 45 Describe the national grand strategy following World War II, and the preparedness for maintaining appropriate strength.

United States Strategy

- 46 Describe the importance of a sound national security program.
- 47 Explain the three principal phases of the United grand strategy.
- 48 Describe the U.S. military strategy.
- 49 Describe the U.S. Navy's mission in national strategy.

U.S. Strategy and Naval Tactics

- 50 Describe the posture of U.S. Naval forces and their commitment of overseas deployment.
- 51 Describe the U.S. Navy's role in our national military strategy.
- 52 Describe the three major characteristics of naval warfare.
- 53 Explain the two major categories for naval tactical forces.
- 54 Explain the tactics of naval presence used to achieve political objectives.

National Security and Modern Conflict

- 55 Explain the major concerns and elements used to evaluate national strategy.
- 56 Describe the national grand and military strategies that are used to protect U.S. interest.
- 57 Describe the United States' three conventional schools of military strategy and how they work together in the interest of this country.
- 58 Explain the possible causes of general war.
- 59 Describe the principal elements of war.

MERCHANT MARINE

- 60 Cite a historical view of the United States Merchant Marine from 1850 to the present.
- 61 Describe the Merchant Marine Act of 1936 and the amending Act of 1970 that placed a dual role on the U.S. Merchant Marine.
- 62 Describe the basic method of moving vast quantities of primary products and manufactured trade goods on water.
- 63 Explain the Merchant Marine's role in supporting our military forces in both peace and war.
- 64 Identify the contribution of the Merchant Marine to national defense, and its role in support of foreign policy.

NAVAL OPERATIONS, COMMUNICATIONS, AND INTELLIGENCE

Naval Operations

- 65 Describe the role the U.S. naval forces play in national strategies.
- 66 Explain the capabilities of the U.S. Naval Forces.
- 67 Describe the purpose of the Navy's task force.
- 68 List the methods used by U.S. Navy's strike forces.
- 69 Describe the purpose of air, surface, and undersea warfare.
- 70 Describe the phases of an amphibious operation.

Naval Communications

- 71 Describe the major functions of naval telecommunications.
- 72 Describe the major telecommunications commands under the Chief Of Naval Operations.
- 73 Explain the purpose of International Morse Code.
- 74 Describe the advantages of visual communication.
- 75 Describe the general information that all officers must be familiar with concerning naval messages.

Naval Intelligence and Counterintelligence

- 76 Describe the historical background and significance of intelligence and counterintelligence.
- 77 Describe the roles that collection, planning and direction, processing, analysis and production and disseminating play in the intelligence process.
- 78 Describe the make-up of the U.S. intelligence community and its defense attack

system.

- 79 Describe the role of the Office of Naval Intelligence (ONI).
- 80 Describe the basis of foreign intelligence organizations.
- 81 Describe the roles of spies and diplomat in espionage operations.
- 82 List and discuss the three different security classifications.
- 83 Cite four ways in which classified materials are protected.
- 84 Explain the purposes of security clearances.

NAVAL LOGISTICS

- 85 Describe the Navy's logistics supply and services system that began in World War I.
- 86 Describe the handling of the logistic details in the Desert Shield/Desert Storm operation.
- 87 Describe those major elements that go into Navy logistic planning.

NAVAL RESEARCH AND DEVELOPMENT

- 88 Describe the science and technology program of the Department of Defense.
- 89 Describe the Navy's strategic research and development program.
- 90 Describe the Naval Research Laboratory and its four main research areas.

MILITARY JUSTICE AND INTERNATIONAL LAW

The Basis of Military Law

- 91 Explain the history of law codes as it pertains to the navy.
- 92 Describe the relationship between the U.S. Constitution and Military Law.
- 93 Describe the aspects of Navy Regulations.
- 94 Explain the purpose of the Uniform Code of Military Justice (UCMJ).

Discipline and Punishment

- 95 Describe the procedures for applying discipline and punishment in the Navy.
- 96 Describe the process of apprehension, arrest, restriction, and confinement used in the Navy.

Non-judicial Punishment and Courts-Martial

- 97 Describe features of non-judicial punishment.
- 98 Cite the three types of military courts-martial.
- 99 Describe the relationship between civil jurisdiction and military justice.
- 100 Explain the purpose for letters of censure.
- 101 Describe the methods used for disciplinary separations from the service.

Fundamentals of International Law

- 102 Identify the United States' role in international relationships.
- 103 Explain the purpose for International Law and diplomacy.
- 104 Identify specific characteristics sovereign nations have in common.
- 105 Define liggerency, insurgency and counterinsurgency and their effects on International Law.
- 106 Describe how international problems are solved through the effective use of international law.

International Law of the Sea

- 107 Explain the customs and treaties from 1604 to the present that relate the International Law of the Sea.
- 108 Identify the three main ideas that have formed customary International Law of the Sea.
- 109 Describe the four possible adverse impacts of international legal rules affecting the deployment and navigation of naval vessels.
- 110 Explain the law of the high seas.
- 111 Explain the international law on the continental shelf and seabeds of the world.

The Law of War at Sea

- 112 Explain the purpose for International Rules of the Road.
- 113 Describe the international law as it relates to warships.
- 114 Explain the general rules of war on land and at sea.
- 115 Describe war at sea and the effects war has on international law.
- 116 Describe those methods used to enforce laws of war.

Collective Security

- 117 Describe the events that lead to the formation of the International organization.
- 118 Describe the basic purpose of the United Nations.
- 119 Describe the purpose of international regional and collective arrangements as recognized by the Security Council of the United Nations.
- 120 Describe the collective security trends and their effects on U.S. foreign policies.

28.02600 JROTC NAVY VI

NAVAL SCIENCE: Naval Orientation and Skills

Course Description: The purpose of this course is to further the foundation in citizenship and leadership established in Naval Science One and to provide classroom and practical application in Naval Organization and ship. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officer Training Corps. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

SHIPBOARD ORGANIZATION AND WATCHSTANDING

Shipboard Organization

- 35 Describe the administrative organization of a typical Navy fighting ship, to include the responsibilities of key personnel.
- 36 Describe the responsibilities of department heads and division officers aboard Navy vessels.
- 37 Describe the publications that establish the functional shipboard organization.

Watches

- 38 Describe the watch structure used in the U.S. Navy.
- 39 Cite the duties and responsibilities of shipboard watch-standers.
- 40 Describe the duties performed by crewmen during in-port and underway watches.
- 41 Describe the duties of Navy personnel performing watches ashore.

General Bills

- 42 Describe the specific duties associated with each assigned watch.

SEAMANSHIP

Marlinspike Seamanship

- 43 Describe the duties and responsibilities of deck department personnel.
- 44 Describe the types and makeup of ropes used in the Navy.
- 45 Describe the proper procedure for handling, stowing, and caring for fiber rope.
- 46 Demonstrate how to tie knots, bends, and hitches.
- 47 Explain the importance of securing at sea.

Ground Tackle and Deck Equipment

- 48 Explain the terms associated with and the use of ground tackle, anchors, and chains.
- 49 Describe the operation of an anchor windlass.
- 50 Explain the terms associated with and the use of deck and pier fittings used in mooring.
- 51 Describe the equipment and basic procedures used in towing.
- 52 Describe the equipment used and explain the terms associated with cargo handling.

Small Boat Seamanship

- 53 Describe the purpose of small boat seamanship.
- 54 Identify nomenclature that applies to small boat parts and structure.

- 55 Identify types of small craft as they apply to the NJROTC program.
- 56 Describe the procedures for small boat handling.
- 57 Describe boat etiquette as practiced by the United States Navy.

RULES OF THE NAUTICAL ROAD

- 58 Describe the two main sets of nautical rules.
- 59 Describe the rules for shipboard lights in inland and international waters.
- 60 Describe those sound signals used on large vessels.
- 61 Describe the inland and international rules for steering and sailing vessels.
- 62 Specify three principal characteristics of navigational lights.
- 63 Describe the eight types of buoys used along waterways.
- 64 Describe how day beacons and ranges are used as navigational aids.

INTRODUCTION TO NAVIGATION AND TIME

Introduction to Navigation

- 65 Describe the terrestrial sphere as it relates to navigation.
- 66 Describe the relationship of meridians as it pertains to measurement.
- 67 Explain how latitude and longitude are used to locate places on a map.
- 68 Explain the use of navigational charts.
- 69 Describe how mercator projection is used by navigators.
- 70 Explain the purpose for the basic types of charts listed in the text.

Time and Navigation

- 71 Describe the basic timekeeping instruments used in the U.S. Navy.
- 72 Describe the purpose of the ship's bell system on board a Navy vessel.
- 73 Describe how time is measured by the sun with the use of special instruments.
- 74 Describe the importance of Greenwich time for navigational purposes.

INTRODUCTION TO MANEUVERING BOARD

- 75 Describe the purpose and use of the maneuvering board.
- 76 Explain the relationship between relative motion and reference point.
- 77 Describe the major steps for plotting directions with the use of a maneuvering board.
- 78 Demonstrate the major concepts of maneuvering a vessel.
- 79 Describe the wind's effect on maneuvering a vessel.

NAVAL SHIPS: MISSIONS, CONSTRUCTION, AND DAMAGE CONTROL

- 80 Naval Ships and Their Missions
- 81 Identify U.S. Navy vessels by name, designation, and hull number.
- 82 Describe the Navy's major combatant ships and their missions.
- 83 Describe the Navy's major auxiliary ships and their missions.

Ship Construction

- 84 Describe the eight major factors used in the construction of any U.S. Navy ship.
- 85 Describe those terms that describe a ship's structure.
- 86 Describe the decks of a U.S. Navy vessel by their names.
- 87 Cite the three types of propulsion plants used in Navy vessels.
- 88 List the classifications and designations of U.S. Navy ships.

Damage Control and Firefighting

- 89 Describe the functions and responsibilities of key personnel assigned to the damage control organization.
- 90 Explain the material conditions of readiness.
- 91 Describe the methods and materials used by repair parties to make emergency repairs.
- 92 Describe the systems used to communicate throughout the damage control organization.
- 93 List the three physical requirements for a fire to occur and the four classes of fires.
- 94 Describe the procedures for fighting fires.

NAVAL GUNNERY AND WEAPONS

- 95 Describe the evolution of naval weapons from 1453 to the present.
- 96 Discuss basic weapons terminology as it applies to the Navy.
- 97 Describe the Navy weapons organization.
- 98 Discuss the range of weapons used by the Navy.
- 99 Describe the major considerations used to select ships weapons systems.
- 100 Describe the shipboard weapons control systems used by the Navy.
Naval Weapons
- 101 Describe the major characteristics and nomenclature of naval guns.
- 102 Describe the principal components of gun ammunition.
- 103 Describe the techniques used by the Navy to provide gunfire support.

NAVAL AIRCRAFT AND GUIDED MISSILES

- 104 Describe the types of naval aircraft.
- 105 Explain the military aircraft designation system.
- 106 Explain the evolution of naval aircraft weapons systems.
- 107 Describe naval aircraft guns.
- 108 Describe the general types of guided missiles.
- 109 Describe the four basic component parts of guided missile systems.
- 110 Describe the types and usage of guided missiles used in the Navy.
- 111 Describe the Navy's submarine-launched ballistic missile program.
- 112 Describe the Navy air-to-air missiles used in front line defense of naval task force.
- 113 Describe the second line of fleet defense with the use of the Navy's surface-to air missiles.
- 114 Describe the Navy's current under sea warfare weapons.
- 115 Describe the physics affecting missile and aircraft flight.
- 116 Explain the two basic types of guided missile trajectories.

Mine Warfare

- 117 Describe the principles used in mine warfare from the American Revolution to the present.
- 118 Describe the four systems of mine classification.
- 119 Describe the three major types of mine countermeasures, to include ship treatment against magnetic and acoustic mines, minesweeping, and mine hunting.
- 120 Describe the major attributes of mine warfare.
- 121 Describe the key elements of mine warfare strategy.

Chemical, Biological, and Nuclear Weapons

- 122 Define conventional weapons.
- 123 Describe some examples of the use of chemical and biological warfare in earlier times.
- 124 Explain chemical warfare and describe the common types of CW agents found in the weapons stockpiles of most major nations today.

- 125 Explain biological warfare.
- 126 Explain nuclear warfare and describe the possible effects of a nuclear warhead explosion.
- 127 Explain the three types of nuclear bursts to which a ship may be exposed.
- 128 Explain the physiological effects of radiation exposure on personnel.
- 129 Explain CBR damage control procedures, including pre-attack countermeasures and post-attack shipboard decontamination.

28.02700 JROTC NAVY VII

NAVAL SCIENCE: Naval Leadership and Skills

Course Description: The purpose of this course is to take a more in-depth look at what leadership is and to learn how to maximize leadership abilities. More importantly, this course will assist the student in adding the polish necessary to be a truly effective leader in the NJROTC unit, school, community, and, in life. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officer Training Corps. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

FUNDAMENTALS OF LEADERSHIP

Leadership Group Dynamics

- 35 Describe what are persons in a group influenced by.
- 36 Cite the membership condition that characterized true functioning groups.
- 37 Cite what are some of the effects of a group on individuals within the group.
- 38 Explain what must a leader do to guard against losing group members and effectiveness of the group.
- 39 Describe what are the main factors that influence the internal dynamics of a group.
- 40 Identify what formal and informal factors regarding communications must an effective leader keep in mind.
- 41 Discuss what are group standards.
- 42 Discuss what is group solidarity and how it is achieved.
- 43 Describe what characterizes an organization with high esprit de corps.
- 44 Describe what are the external group dynamics factors that can influence a group.
- 45 Discuss the four things a leader can do to motivate his or her group toward the achievement of their mission or goals.
- 46 Describe what is a long recommended technique for giving praise and reprimands.

Thoughts on Man's Purpose in Life

- 47 Explain and discuss the human capacity for effort.
- 48 Discuss what is necessary to solve many of today's problems.
- 49 Discuss the five basic goals for education that apply to everyone.
- 50 Explain why reading is important.
- 51 Discuss why we should seek to understand the past.
- 52 Discuss why religion is one area that merits a more sympathetic understanding by modern intellectuals.
- 53 Cite the evidence for one to conclude that morals and ethics are becoming less prevalent in people's lives.

A Theory of Human Motivation

- 54 Explain what is meant by Maslow's statement the "The basic human needs are organized into a hierarchy or relative prepotency."
- 55 Cite why safety needs usually are not motivators in our society.

- 56 Describe to what feelings does satisfaction of a person's self-esteem needs lead.
- 57 Cite what are the highest needs that emerge after satisfaction of physiological, safety, love, and esteem needs.
- 58 Explain the most common exception to the hierarchy of needs as postulated by Maslow.
- 59 Explain why it is necessary that all lower needs be 100% satisfied in order for higher needs to become motivators.
- 60 Explain what it means to say that most behavior is multi-motivated.

Leadership is Flesh and Blood

- 61 Discuss the four intangibles upon which leadership should be based.
- 62 Discuss where does moral strength begins.
- 63 Discuss what must a leader do to be sure of getting the real facts about a problem.
- 64 Define the meaning of "knowing one's people."
- 65 Discuss what has significantly changed about leadership today as opposed to the past.
- 66 Explain to what kind of leader subordinates will best respond and give their all.

Look, Listen, and Lead

- 67 Describe which arts are used in practicing effective leadership.
- 68 Explain why it is important to communicate well.
- 69 Explain what is the essence of good leadership.
- 70 Describe the three characteristics of effective leadership.
- 71 Discuss what is involved in sharing and teamwork.
- 72 Describe the basic rules that effective leaders follow.
- 73 Cite the beneficial effects obtained when a person makes a real contribution to the unit mission.

Positive Leadership Techniques

- 74 Discuss a major problem often faced by a leader.
- 75 State the seven categories into which the techniques of leadership can be grouped.
- 76 Describe the four leadership techniques involved in giving commands.
- 77 Describe the ten leadership techniques involved in giving orders.
- 78 Describe the eleven leadership techniques involved in getting cooperation.
- 79 Describe the ten leadership techniques involved in establishing discipline.
- 80 Describe the nine leadership techniques involved in improving feelings of security.
- 81 Describe the seven leadership techniques involved in giving recognition.
- 82 Describe the six leadership techniques involved in improving organization and administration.

THE RESPONSIBILITIES AND QUALITIES OF LEADERSHIP

Leading by Example

- 83 State the difference between a leader and a manager.
- 84 Describe what is a leader's "service reputation."
- 85 Discuss how an officer's humanity is perceived.
- 86 Describe what ability an individual must have in order to be effective and successful in the Navy.

- 87 Discuss the element of surprise.
- 88 Explain how an officer can lose the respect of his or her troops.
- 89 Discuss how behavior is a basic element of “setting the example.”

The Chain of Command

- 90 Discuss why the chain of command is so important.
- 91 Discuss the benefits of following the chain of command.
- 92 Describe when the chain of command should be bypassed.
- 93 Describe what actions are taken when it has been necessary to bypass the chain of command.
- 94 Discuss what junior must do when a senior’s perceptions are believed to be in error.
- 95 Cite the possible detrimental results that may occur when the chain of command is bypassed.
- 96 Describe the typical effective span of control.
- 97 Discuss the negative concept of using the chain of command as a crutch for not taking the initiative and responsibility for starting the job.

Standing by Seniors and Associates

- 98 Describe a fundamental assumption every leader must make.
- 99 Discuss decisions that are made contrary to one’s beliefs.
- 100 Describe what one does when faced with difficult decisions.
- 101 Discuss the tenacity of an officer who adheres to his value system.
- 102 Discuss how one goes about building the strength of a unit.
- 103 Describe the proper action to be taken if one has a problem with a senior.

Carrying Out Orders

- 104 Discuss authority versus responsibility.
- 105 Discuss how officers can decide how quickly to begin to implement a command.
- 106 Describe the posture a leader takes when carrying out an order.

Criticism and the Naval Officer

- 107 Discuss the concept of seeking and taking responsibility as a key of successful leadership.
- 108 Cite the mechanism by which leaders exercise their responsibility to help subordinates past rough spots.
- 109 Discuss setting standards as an integral part of a leader’s job.
- 110 Discuss how often a senior should review subordinates’ performance with them.
- 111 Discuss the phrase “May I make a suggestion, Sir?” as a good method to be used by juniors who wish to make their views on an issue known to their senior.
- 112 Discuss a characteristic displayed by good followers and leaders in the naval service when giving advice.
- 113 Cite the rule that should always be followed regarding the delivery of criticism.
- 114 Describe what characteristic criticism must have to be useful.
- 115 Discuss what attitude junior officers should take toward suggestions given by subordinate enlisted personnel.

Moral Responsibility and the Naval Officer

- 116 Describe the four cardinal virtues of moral responsibility and leadership.
- 117 Discuss what is meant by the term “responsibility.”
- 118 Discuss the concept of possessing moral courage as the paramount goal of a junior officer.
- 119 Discuss what happens when a leader turns a blind eye to a situation or exhibits behavior that he or she knows to be wrong.

Responsibility and the Naval Officer

- 120 Discuss how a leader shows that he or she is responsible.
- 121 Discuss the leader’s responsibilities when given an unpleasant assignment.
- 122 Explain how a leader develops a sense of responsibility among subordinates.
- 123 Explain the relationship between delegating and assigning responsibility for a task or mission.
- 124 Discuss when a senior will regard a failure of a junior as unavoidable.

Authority and the Naval Officer

- 125 Discuss one of the most important qualities of leadership.
- 126 Discuss upon which things does a leader’s legitimate authority over subordinates rest.
- 127 Explain how a military leaders’ authority can be strengthened.
- 128 Explain one of the keys to effective leadership as regards to authority.
- 129 Describe the difference between positive and negative exercise of authority.

28.02800 JROTC Navy VIII

NAVAL SCIENCE: Effective Communications

Course Description: The purpose of this course is to teach the students the techniques of effective communication, which is one of the most important skills that a good leader must develop in order to be successful. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. The performance standards in this course are based on the performance standards identified in the curriculum for the United States Navy Junior Reserve Officers Training Corps. Successful completion of at least three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in a military service.

ACHIEVING EFFECTIVE COMMUNICATIONS

The Basics of Effective Communications

- 35 Discuss the importance of communication to the accomplishment of a units' mission.
- 36 Discuss the security a message has further down the chain of command.
- 37 Explain the basics involved in effective communications.
- 38 Explain what occurs when power is effectively used.
- 39 Explain the five techniques for tailoring communication to people's level of understanding.
- 40 Describe what an officer must do prior to communicating with the crew.

Producing Effective Oral and Written Communications

- 41 Discuss what a leader must do before he or she can issue a crisp and clear oral or written message.
- 42 Discuss the ways seniors and subordinates may react to a communication.

Getting the Message Across

- 43 Discuss the concept that a successful communicator understands that different people respond differently to messages.
- 44 Discuss the concept that setting the example is the basic way to communicate with others.
- 45 Explain the two assumptions that can cause difficulty in communications.
- 46 Explain Descartes' rules of logic of speaking.
- 47 Discuss what a leader should do when delivering an order.
- 48 Explain what voice and inflection convey.
- 49 Discuss the importance about the manner in which the reader is addressed in written communications.

Communications: A Two-Way Exchange of Information

- 50 Identify the primary consideration in the communication process.
- 51 Cite the five principles that help increase the accuracy of a message.
- 52 Discuss the dual responsibility in effective communication.

Setting the Example: One Form of Communicating

- 53 Discuss the concept of setting the example as one of the foremost responsibilities of a leader.
- 54 Identify what great leaders like Winston Churchill, Franklin Roosevelt, General MacArthur and Admirals Nimitz and Halsey have in common.
- 55 Discuss the simple formula for successful communication.
- 56 Describe the stereotypes that individuals carry with them.
- 57 Discuss how a leader sets the moral tone for subordinates.

Communications as a Component of Planning

- 58 Discuss what a leader does to ensure development of useful plans.
- 59 Discuss the three aspects of communication that are sufficient to convey an order.
- 60 Explain why a follow-up system on plans and objectives are important.
- 61 Cite the five criteria for effective listening techniques.
- 62 Discuss how to go about seeking acknowledgement of a message when the delivery and comprehension of the message are important.

Written Communications

- 63 Discuss when it is better to communicate in writing as opposed to verbally.
- 64 Describe a key advantage of written orders.
- 65 Identify the characteristics that are normally associated with the use of written orders in the Navy.
- 66 Discuss when a written order should be used, and when it should not be used.

Oral Communications

- 67 Discuss what is meant by a verbal order.
- 68 Identify the three criteria that good orders meet.
- 69 Identify four situations particularly suited for using oral orders.

Avoiding Communication Pitfalls

- 70 Discuss when it is most likely that orders will be misunderstood.
- 71 Discuss the importance of providing background information for the proper execution of an order.
- 72 Discuss how a leader can avoid having his orders distorted as they pass through the chain of command.
- 73 Discuss why administrative failures can occur when strict compliance is expected from discretionary orders.

Communication Presentations

- 74 Develop and present a written communiqué.
- 75 Develop and present an oral communiqué.