

**Government and Public Administration Cluster  
Naval Science III: Naval Orientation and Skills  
Course Number 28.02600**

**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 provide classroom and practical application in Naval and Ship Organization. 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.

**Course Standard 1**

**GPA-NSIINOS-1**

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

**Standard: Demonstrate employability skills required by business and industry.**

The following elements should be integrated throughout the content of this course.

**1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.**

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé

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Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

### 1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

### 1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

### 1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	

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Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

### 1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

### 1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

### Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

## Leadership

### Course Standard 2

#### GPA-NSIIINOS-2

**Students will compare and contrast the different philosophies and challenges of leadership.**

- 2.1 Describe the basis for effective leadership.
- 2.2 Explain the differences in philosophies of leadership.
- 2.3 Explain the importance of obedience.
- 2.4 Describe obedience in the military services.
- 2.5 Describe the legal and moral obligations of military leaders.
- 2.6 Summarize the challenge of leadership.

## Course Standard 3

### GPA-NSIIINOS-3

**Students will investigate the qualities of an effective leader.**

- 3.1 Differentiate between moral responsibility and legally enforceable laws.
- 3.2 Define loyalty.
- 3.3 Describe devotion to duty.
- 3.4 Describe professional knowledge and experience.
- 3.5 Explain the importance of self-confidence.
- 3.6 Describe the value of initiative and ingenuity in the military service.
- 3.7 Compare courage to moral courage.
- 3.8 Explain the importance of a leader's ability to organize and to make decisions.
- 3.9 Describe the importance of leading by personal example.
- 3.10 Explain why mutual trust and confidence are important aspects of effective leadership.

## Course Standard 4

### GPA-NSIIINOS-4

**Students will assess the challenge of leadership, as it relates to the performance evaluation of subordinates.**

- 4.1 Define performance, ability, aptitude, and achievement.
- 4.2 Describe evaluation in the NJROTC.
- 4.3 Explain goal setting as it relates to self-evaluation.
- 4.4 Explain progress assessment as it relates to self-evaluation.
- 4.5 Describe the process of self-evaluation.

## Course Standard 5

### GPA-NSIIINOS-5

**Student will explore the various methods of giving instructor and how they relate to the challenge of leadership.**

- 5.1 Define learning theory.
- 5.2 List the major factors that influence learning.
- 5.3 Describe the conditions that tend to hinder learning.
- 5.4 Explain how to prepare a lesson plan, the site where instruction will occur, and yourself as the instructor.
- 5.5 List the commonly used techniques for delivery of instruction.
- 5.6 Describe the advantages and disadvantages of the lecture technique for presenting information.
- 5.7 Describe the main steps of the lecture procedures for delivering instruction.
- 5.8 Describe the advantages and disadvantages of the lecture with audiovisuals technique for presenting information.
- 5.9 Describe the main steps of the lecture with audiovisuals procedure for delivering instruction.
- 5.10 Describe the advantages and disadvantages of the demonstration technique for presenting information.
- 5.11 Describe the main steps of the demonstration procedure for delivering instruction.
- 5.12 Describe the advantages and disadvantages of the role-playing instructional technique.
- 5.13 Describe the advantages and disadvantages of the case study instructional technique.
- 5.14 Describe the advantages and disadvantages of the discussion instructional technique.
- 5.15 Describe the advantages and disadvantages of the cooperative learning instructional technique.

## Ship Construction and Damage Control

## Course Standard 6

### GPA-NSIIINOS-6

**Students will demonstrate knowledge of Navy ships, their construction, characteristics and naming.**

- 6.1 Describe the eight major factors used in the construction of any U.S. Navy ship.
- 6.2 Identify nautical terms used in the U.S. Navy.

- 6.3 Define terms that characterize a ship's structure.
- 6.4 Describe the decks and spaces of a U.S. Navy vessel.
- 6.5 Describe the superstructure of a U.S. Navy vessel.
- 6.6 Describe the watertight integrity of a Navy ship.
- 6.7 Explain the design and planning stages in ship construction for U.S. Navy ships.
- 6.8 Describe the launching of a U.S. vessel.
- 6.9 Describe the commissioning of a U.S. vessel.
- 6.10 Cite the three types of propulsion plants used in Navy vessels.
- 6.11 List the classifications and designations of U.S. Navy ships.

## Course Standard 7

### GPA-NSIINOS-7

**Students will expand their understanding and knowledge of damage control and firefighting onboard a vessel.**

- 7.1 Describe the services provided by damage control.
- 7.2 Describe the functions and responsibilities of key personnel assigned to the damage control organization.
- 7.3 Describe the responsibilities of repair parties.
- 7.4 Explain the material condition of readiness.
- 7.5 Describe the methods and materials used by repair parties to make emergency repairs.
- 7.6 Describe the systems used to communicate throughout the damage control organization.
- 7.7 Describe the three physical requirements for a fire to occur and the four classes of fires.
- 7.8 Describe the procedures for fighting fires.

### Deck Seamanship

## Course Standard 8

### GPA-NSIINOS-8

**Students will demonstrate of basic care, makeup and use of fiber lines and wire ropes as it relates to basic seamanship.**

- 8.1 Cite the duties and responsibilities of deck personnel department.
- 8.2 Define marlinspike seamanship.
- 8.3 Describe the types and makeup of ropes and lines used in the Navy.
- 8.4 Describe the proper procedure for handling fiber rope.
- 8.5 Describe how to tie knots, bends, and hitches.
- 8.6 Cite the importance of securing at sea.

## Course Standard 9

### GPA-NSIINOS-9

**Students will exhibit an understanding of ground tackle and deck equipment used in basic seamanship.**

- 9.1 Explain the terms associated with and the use of ground tackle.
- 9.2 Explain the terms associated with and the use of anchors.
- 9.3 Explain the terms associated with and the use of anchor chains and related equipment.
- 9.4 Describe the operation of an anchor windlass.
- 9.5 Explain the terms associated with and the procedures used in anchoring.
- 9.6 Explain the terms associated with and the use of deck and pier fittings used in mooring.
- 9.7 Explain the terms associated with and the procedures used for mooring lines to a pier.
- 9.8 Describe the equipment and the basic procedures used in towing.
- 9.9 Describe the equipment used and explain the terms associated with cargo handling.
- 9.10 Explain the procedures used during underway replenishment.

## Course Standard 10

### GPA-NSIIINOS-10

**Students will exhibit an understanding of the various types of equipment and terminology used in small boat seamanship.**

- 10.1 State the purpose of small boat seamanship.
- 10.2 Identify nomenclature that applies to small boat parts and structure.
- 10.3 Describe the upperworks of a small boat.
- 10.4 Identify types of small craft as they apply to the NJROTC program.
- 10.5 Describe the duties of a coxswain.
- 10.6 Describe the procedures for small boat handling.
- 10.7 Given a set of maneuvering problems related to small craft, use recognized concept to maneuver a boat in the classroom.
- 10.8 Describe boat etiquette as practiced by the United States Navy.

### Navigation

## Course Standard 11

### GPA-NSIIINOS-11

**Students will demonstrate a basic understanding of navigation and the significant instruments used in this science.**

- 11.1 Define navigation.
- 11.2 Describe the terrestrial sphere as it relates to navigation.
- 11.3 Cite the significance of the great circle.
- 11.4 Define circular measurement.
- 11.5 Describe the relationship of meridians as they pertain to measurement.
- 11.6 Explain how latitude and longitude are used to locate places on a map.
- 11.7 Describe how nautical measurement are made at sea.
- 11.8 Describe true and relative bearing.
- 11.9 Explain the use of navigational charts.
- 11.10 Describe how Mercator projection is used by navigators.
- 11.11 Explain the purpose for the basic types of nautical charts.
- 11.12 Describe how courses, bearings and lines of position are plotted on a nautical chart.

## Course Standard 12

### GPA-NSIIINOS-12

**Student will demonstrate a basic understanding of marine navigation and the significant instruments used in this science.**

- 12.1 Describe the navigational systems used for marine navigation.
- 12.2 Describe the navigational equipment and other means used to pilot a ship.
- 12.3 Describe the process of plotting a fix as it relates to marine navigation.
- 12.4 Describe the navigational equipment and other means used in piloting a ship.
- 12.5 Describe the principal of celestial navigation.

## Course Standard 13

### GPA-NSIIINOS-13

**Student will demonstrate a basic understanding of navigation as it relates to use of Aids to Navigation.**

- 13.1 Specify three principal characteristics of navigational lights.
- 13.2 Explain the purpose of lighthouses and light towers.
- 13.3 Describe the types of buoys used along waterways.
- 13.4 Describe how day beacons and ranges are used as navigational aids.
- 13.5 Define the U.S. Intracoastal Waterway.
- 13.6 Describe the publication Nautical Chart Symbols, Abbreviations, and Terms, Chart No. 1.

## Course Standard 14

### GPA-NSIINOS-14

**Students will demonstrate an understanding become familiar with the tools and terminology of navigation and time and do basic navigational plotting.**

- 14.1 Describe the basic timekeeping instruments used in the U.S. Navy.
- 14.2 Explain how time is indicated in the military services.
- 14.3 Describe the purpose of the ship's bell system on board a Navy vessel.
- 14.4 Describe the arc theory in relation to measuring time.
- 14.5 Describe the various kinds of time.
- 14.6 Describe the aspects of the date/time group.

### Rules of the Nautical Road and Maneuvering Board

## Course Standard 15

### GPA-NSIINOS-15

**Students will demonstrate knowledge of basic theory of the nautical rules of the road.**

- 15.1 Describe the two main sets of nautical rules.
- 15.2 Explain the importance and purpose of nautical rules.
- 15.3 Describe the rules for shipboard lights and day shapes in inland and international waters.
- 15.4 Describe whistle, fog and distress signals used on marine vessels.
- 15.5 Describe the inland and international rules for steering and sailing vessels to avoid risk of collisions.

## Course Standard 16

### GPA-NSIINOS-16

**Students will demonstrate knowledge and be skilled in the many uses of the maneuvering board.**

- 16.1 Describe the purpose and use of the maneuvering board.
- 16.2 Explain the relationship between relative motion and reference point.
- 16.3 Describe the major steps for plotting directions with the use of a maneuvering board.
- 16.4 Given a set of problems related to the Closest Point of Approach (CPA), apply the major concepts to maneuver a ship.
- 16.5 Describe the wind effect on maneuvering a ship.