



# JUNIPERO SERRA HIGH SCHOOL NAVAL JUNIOR ROTC

5156 Santo Road  
San Diego, California 92124-2098  
(858) 496-8350



Cal Kelso, LT, USN Navy (Ret)  
Senior Naval Science Instructor  
ckelso@sandi.net

Jeff Feehley, AMC, US Navy (Ret)  
Naval Science Instructor  
jfeeley@sandi.net

---

## 2019 - 2020 Naval Science Course Syllabus

### NJROTC Points of Contact

Teachers:

Senior Naval Science Instructor: LT Cal Kelso, [ckelso@sandi.net](mailto:ckelso@sandi.net) Office: 858-496-8342 ext. 2415  
Naval Science Instructor: Chief Jeff Feehley, [jfeeley@sandi.net](mailto:jfeeley@sandi.net) Office: 858-496-8342 ext. 2417  
(Email is the preferred contact method)

**Office Hours:** 2:30pm – 4:30pm Monday-Friday

### **Testing/Homework**

- Oral and written exam on “Orders to the Sentry” and Navy ranks and general Navy knowledge will be given at least twice per grading period

### **Final Examinations**

Academic and physical fitness finals will be given prior to the end of the 1<sup>st</sup> and 2<sup>nd</sup> semesters and are combined with promotion exams.

### **Grading Policy**

Each cadet is assigned to a JROTC teacher or instructor for grading purposes depending on what Naval Science year the cadet is in. For questions about grade policy please contact the appropriate teacher.

LT Kelso: Naval Science (Core Sections, mostly freshman and sophomores)

Chief Jeff Feehley: Naval Science (Elective Sections, mostly juniors and seniors)

Grading is done using the point system. It is highly recommended for parents and guardians to regularly check the grade status of your cadet and contact the appropriate teacher if there are any questions.

### Grading Scale:

A	90-100
B	80-89
C	70-79
D	60-69
F	59 and Below

Note: The personnel inspection (PI) or the uniform day grade, it is weighted twice as much as any other curriculum activity. For example: PI = 2 weight. Academic, Physical Fitness, Drill, Leadership/Followership = 3 weight. Academic final is weighted 2.

## Citizenship

NJROTC is all about citizenship! In addition to the Serra policy (See student handbook on this topic) NJROTC holds cadets to a higher standard. We not only expect our cadets to conduct themselves in respectful and responsible ways while in NJROTC, they must also do this in other classes and outside of school as well. The instructors consistently communicate with the faculty, administrator, and parents to help ensure this is being practiced.

## Uniform Policy

The prescribed uniform is free of charge, usually the Naval Service Uniform (NSU), is to be worn as determined by the Senior Naval Science Instructor or SNSI. Cadet personnel inspections are every Tuesday, but may change only at the discretion of the S/NSI.

Cadets who are on sports teams that have a game/match on uniform day will be inspected by an S/NSI and be allowed to change into their sports team attire on a case-by-case basis.

On prescribed uniform days, the NSU is to be worn the entire school day, periods 1-6 and is considered an assignment. **All missed uniform days, excused or unexcused, will be marked down in Power School with a zero.** If absent on the inspection day a make-up inspection is required and must be done on the first day upon returning to class. Example... If absent on Tuesday (Inspection day) and if the cadet returns on Wednesday that cadet shall be in the prescribed uniform in order to receive credit. If the cadet is not in the prescribed uniform upon returning from an absence the grade of zero will remain. See SNSI for details on the make-up policy.

## Weekly Routine:

Monday and Friday	Physical Fitness
Tuesday	Personnel or Uniform Inspection (Uniform Day)
Wednesday	Academics Naval Science Academics
Thursday	Close Order Drill (COD)

## Promotions:

Advancement exams are held at the end of each semester. Separate exams are prepared for each enlisted cadet permanent rank. Temporary ranks are giving to deserving cadets who hold a job or a billet, for example, Commanding Officer, Platoon Commander, Mustering Petty Officer, Public Affairs Officer, Squad Leader, to name a few. Promotions may be meritoriously earned by cadets who hold certain billets or job positions. NS-1's may meritoriously promote demonstrating practical NJROTC knowledge, exceptional military bearing, and scoring 90% or above consistently during personnel inspections within the first four months of school. This is a case by case situation as determined by the SNSI/NSI.

## Ceremony Required Attendance (Graded):

During the course of the school year there are three ceremonies that cadets are required to attend. All cadets are required to be in prescribed Naval Service Uniform for these events. The dates and times are subject to change. There is an opportunity to earn a uniform ribbon called the "Tri-Ceremony Award Ribbon", for those who attend all three ceremonies.

1. **Annual Military Inspection (AMI) – Thursday, February 6, 2020 periods 1-4. Parents are highly encouraged to attend. The Area Manager looks favorably upon schools whom have large parental, family, and friends in attendance to this event.**
2. **SDUSD Joint Brigade Pass and Review – Location: Lincoln High School, Saturday, May 16, 2020**
3. **Serra Navy JROTC Awards Ceremony - Serra Theater, Tuesday, May 19, 2020.**

## Resources

Students are encouraged to access the Serra NJROTC website: <https://serranavyjrotc.wordpress.com/>

For updated reference material, calendar, and general help and guidance about the basics of the NJROTC program.

## PHYSICAL EDUCATION, PREP & PARTICIPATION

The ultimate purpose of any physical education program is to help all students gain the skills & knowledge to be physically active for a lifetime. Our program is designed to provide a safe & inclusive learning environment requires students to regularly participate in a physical fitness program and meet California PE Content and Fitnessgram standards stated below:

### □ California High School Content Standards

Overarching Standard 1: *Students demonstrate knowledge of and competency in motor skills, movement patterns and strategies needed to perform a variety of physical activities.*

Overarching Standard 2: *Students achieve a level of physical fitness for health and performance while demonstrating knowledge of fitness concepts, principles and strategies.*

Overarching Standard 3: *Students demonstrate knowledge of psychological and sociological concepts, principles and strategies that apply to the learning and performance of physical activity.*

### Physical Fitness Testing (FITNESSGRAM)

The primary goal of the FITNESSGRAM battery of tests is to assist students in establishing lifelong habits of regular physical activity. The FITNESSGRAM is conducted in November (upper class only) and March. Students will be pre-tested in September/October to establish baseline fitness levels and set personal goals. The FITNESSGRAM tests 6 main fitness areas that represent 5 components of fitness: Aerobic Capacity, Muscular Strength, Muscular Endurance, Flexibility, and Body Composition. In Course 2 students will have a second opportunity to achieve 5 out of 6 Healthy Fitness Zones. Students who do not achieve 5 out of 6 Healthy Fitness Zones must continue taking physical education courses in grades 10, 11, and 12 until an overall passing score is obtained. As FITNESSGRAM is a state-mandated test, student scores will **not** be computed as part of their academic grade.

The 6 FITNESSGRAM required tests areas are:

1. Aerobic Capacity (PACER, One-Mile Run, or Walk Test)
2. Abdominal Strength and Endurance (Curl-Ups)
3. Trunk Extensor Strength and Flexibility (Trunk Lift)
4. Upper Body Strength (Push-Ups, Modified Pull-Ups, Flexed Arm Hang)
5. Flexibility (Back-Saver Sit and Reach, Shoulder Stretch)
6. Body Composition (Body Mass Index [height and weight])

### **The Eight Standard Content Areas will be assessed IAW the Curriculum Map:**

1. **Mechanics of Body Movement**
2. **Gymnastics and Tumbling**

3. **Core Strength Training**
4. **Rhythms/Dance Line Dancing**
5. **Individual/Dual Sports**
6. **Dynamic Health Weight Training/Fitness**
7. **Aquatics/Dry Land/Swimming**
8. **Team Sports**

## **PE Grading**

The academic grade (learning-focused) is based on the degree to which each student meets or exceeds the 3 overarching *California Model Content Standards* and corresponding performance standards.

The citizenship grade (non-academic, behavior / effort-focused) is determined by following class rules, arriving on time, wearing acceptable athletic clothing, exhibiting a willingness to learn and participating in class activities.

This portion of the grade will include the cadet's preparation (i.e., coming to class ready to learn), cooperation, participation in class, attendance, leadership, etc. Since a cadet earns PE and elective credit for this class, there will also be an emphasis on dressing for physical education in appropriate physical education attire and actively participating in the physical fitness exercises.

## **Medical Excuses**

Students will be required to bring a written note from a parent in order to be excused from physical education. A doctor's note must be presented for illness or injury lasting more than three days. Students will be required to suit up and participate to the maximum degree that their illness/medical condition allows. Students will be required to make up all missed work as assigned.

## **Basic Classroom Rules**

All published school rules apply in NJROTC. Unit specific rules are as follows:

- Hats and any headgear shall be removed upon entering the NJROTC classrooms
- No gum chewing
- No food or drink in the classroom except water
- Tardiness and Unverified Absences – Two freebee. After that, it's one citizenship mark downgrade per tardy.

## **Serra Cell Phone Policy**

"Cell phones have become a phenomenal tool in the classroom. However now with i21 technology in every class the need for phones has become obsolete. We understand the importance of your child having a phone during the appropriate times to use them (before, lunch, and after school). The 9th and 10 grade teachers (some) will be piloting a program called Yondr. All the celebrities are using it at their concerts so audiences can enjoy the music and not be distracted by their phones. This same concept has even more importance in the classroom. Yondr is a magnetic pouch that allows your child to have

their phone on them and on but be in your child's pocket or backpack. This way teachers are teaching and students are learning. The main question I'm sure is "What is there is a emergency (dangerous one). Don't worry! Since the cell phones pouches are being used in the classroom they are unlocked in the classroom as well. In addition Serra High has its own "Emergency Alert" system which will get to you much faster than your child calling. Teachers are piloting this in different ways and their pilot procedure is below.

Please allow us the opportunity to pilot this tool in the hope of creating the best learning environments for your child. Please google Yondr to see all the amazing videos, articles, and praise it has received."

### **Serra Navy JROTC Policy-**

Electronic devices, including mobile phones, are not to be used in class without teacher authorization. If cadets want to charge their phones they can choose to do so and use the power outlets within the NJROTC classrooms at their own risk. NJROTC or SHS is not responsible for lost or stolen electronic devices, including phones, or other personal property.



**Serra High School**  
**Citizenship Grading Policy**  
**2019-20**

**Purpose:** At Serra High School we are supporting each child's development in becoming thoughtful and productive citizens who will inherit our global society. With that, we will be explicit and transparent in teaching and modeling for our students how to reach excellence in citizenship. Citizenship grades are the balance of a student's general work habits, attitude, and behavior in class over the grading period, not the result of one day or one action. It is the culmination of a student's willingness and efforts to help or hinder the student's own progress, as well as that of the class and other students. Additionally, they are not an evaluation of the child as a person.

<b>Citizenship Rubric</b>	
Excellent <b>E</b>	<ul style="list-style-type: none"> <li>• Participation is constructive and elevates the academic environment of the class.</li> <li>• All absences are excused. Two or fewer tardies.</li> <li>• Consistently models exceptional behavior and respect for teachers and students.</li> <li>• Independently prepares for and is engaged in class activities.</li> <li>• Uses technology to enhance learning, according to teacher policy and permission.</li> </ul>
Good <b>G</b>	<ul style="list-style-type: none"> <li>• Participation is constructive and supports the academic environment of the class.</li> <li>• All absences are excused. Three or fewer tardies.</li> <li>• Consistently exhibits respectful behavior towards teachers and students.</li> <li>• Prepares for and engages in class activities.</li> <li>• Uses technology appropriately, according to teacher policy and permission.</li> </ul>
Satisfactory <b>S</b>	<ul style="list-style-type: none"> <li>• Participates occasionally; does not distract from the academic environment of the class.</li> <li>• No more than one unexcused absence. Four or fewer tardies.</li> <li>• Demonstrates compliant behavior towards teachers and students.</li> <li>• Prepares for and engages in class activities, with teacher prompting.</li> <li>• Usually uses technology appropriately, according to teacher policy and permission.</li> </ul>
Needs Improvement <b>N</b>	<ul style="list-style-type: none"> <li>• Seldom participate, or distracts from the academic environment of the class.</li> <li>• No more than two unexcused absences. Five or fewer tardies.</li> <li>• Sometimes demonstrates disrespectful behavior towards teachers and/or students.</li> <li>• Often unprepared for and disengaged from class activities.</li> <li>• Uses technology inappropriately, not adhering to teacher policy.</li> </ul>
Unsatisfactory <b>U</b>	<ul style="list-style-type: none"> <li>• Does not participate, or distracts from the academic environment of the class.</li> <li>• Three or more unexcused absences. Six or more tardies.</li> <li>• Frequently demonstrates disrespectful behavior towards teachers and/or students.</li> <li>• Unprepared for and disengaged from class activities.</li> <li>• Use of technology distracts from academic environment.</li> </ul>

## Naval Science I Academic Course Outline

### NS1 Textbooks

The following text books are used in this course

- Introduction to NJROTC (NAVEDTRA 37125-B)
- The Cadet Field Manual (NAVEDTRA 37116-F)

### SEPTEMBER

**Lecture: NJROTC/NNDCC Programs on suicide prevention, anti-hazing, and bystander intervention.**

# **CADET FIELD AND DRILL MANUAL** (To be used as a reference during the entire year)

**Chapter 1: NJROTC Uniform Regulations**

**Chapter 2: NJROTC Rate/Ranks and the U. S. Navy Rates/ranks**

**Chapter 3: Military Customs, Courtesies, Etiquette, and Ceremonies**

**Chapter 4: Personnel Inspection**

**Chapter 5: Requirements for the NJROTC Physical Fitness Ribbon**

## **OCTOBER**

# **NAVAL SCIENCE 1 – INTRODUCTION TO THE NAVY: Chief Jeff Feehley**

## **Unit 1: NJROTC and Your Future**

### **Chapter 1: Introduction to Naval Junior Reserve Officers Training Corps Program**

- History & Background of the NJROTC Program
- The NJROTC's Mission, Goals and Policies
- Navy Core Values
- The Naval Science Curriculum
- NJROTC Unit Activities

### **Chapter 2: Career Planning**

- Selecting and Charting a Good Career Path
- Careers vs. Jobs
- Career Direction-Getting to Know Yourself
- Career Choices
- Developing Good Study Habits

## **NOVEMBER**

## **Unit 2: Leadership Skills**

### **Chapter 1: Follower ship**

- The Importance of Good Follower ship
- The Readiness Factors of Followers
- Building Effective Relationships with Leaders
- Be an Effective Follower

### **Chapter 2: Leadership**

- Four Leadership Styles
- Primary Factors of the Leadership Situation
- Six Traits of an Effective Leader
- Two Orientations of Leadership Behavior
- Personal Qualities of an Effective Leader
- Leadership Opportunities in NJROT

## **DECEMBER**

### **Chapter 3: Motivation**

- The Hierarchy of Human Needs
- Goals & Motivation
- Key Elements of Coaching and Mentoring
- How to Practice Leadership

### **Chapter 4: Relationships**

- Building on Respect
- The Values of Tolerance and Understanding
- Improving Group Effectiveness

- Conflict in Groups

### **Chapter 5: Attitudes and Emotions**

- Interpreting Events and Experiences
- The Importance of a Positive Outlook on Life
- How Perspective Molds your Understanding of Life
- How Perspective Molds your Purposes, Passions, and Practices
- How Your Actions Reveal Your Attitudes
- Positive and Negative Attitudes
- Defense Mechanisms
- Strategies for Expressing Emotions

## **JANUARY**

### **Unit 3: Citizenship and American Government**

#### **Chapter 1: Citizenship and Responsibility**

- Authority and Laws
- The Citizens Role – Rights and Responsibilities
- The Role of Government

#### **Chapter 2: Foundations of US Government**

- The Declaration of Independence
- The United States Constitution
- An Overview of the United States Constitution
- The Bill of Rights
- Other Constitutional Amendments

#### **Chapter 3: National Defense**

- The Defense Structure of the United States
- The US Navy
- The US Army and Air Force

## **FEBRUARY**

### **Unit IV The US Navy**

#### **Chapter 1: Navy Ships**

- The Mission of Navy Ships
- Ship Terminology
- Types of Navy Ships
- Shipboard Customs and Courtesies

#### **Chapter 2: Naval Aviation**

- Background of Naval Aviation
- Naval Aircraft and Missions

## **MARCH**

### **Unit V Wellness, Fitness, and First Aid**

#### **Chapter 1: Choosing the Right Exercise Program for You**

- Introduction
- Components of Fitness
- The Benefits of Exercise
- Types of Exercise
- The FIT Principle
- Phases of Exercise



- A Safe Workout
- Choosing the Right Exercise Program
- Sticking with an Exercise Program
- Assessing Cardiovascular Fitness and Determining Target Heart Rate
- Fitness Throughout Life

**Chapter 2: Evaluating Your Fitness**

- Building Health Skills
- Basic Rules of Exercise
- Taking the Physical Fitness Test
- Improving Your Scores
- More Than Healthy Rewards

**Chapter 3: You Are What You Eat**

- Balancing Calories
- The Importance of a Proper Diet to Your Health
- What Should You Eat?
- Eating in Moderation

**APRIL**

**Chapter 4: Nutrition: Nourishing Your Body**

- Carbohydrates
- Nourishing Your Body's Fuel with Fats
- Nourishing Your Body with Proteins
- Regulating Your Body with Vitamins, Minerals, and Water
- Hunger and Malnutrition

**Chapter 5 Dietary Guidelines**

- Introduction
- The Lifetime Eating Plan

**Chapter 6 Controlling Fat**

- Introduction
- Fat Control
- Carbohydrates: How to Eat Them
- Protein: Don't Worry
- Vitamins, Minerals, and Water: The Regulators
- Planning a Balanced Diet
- Improving Your Diet
- Changing Nutritional Needs
- Managing Your Weight
- Special Diets
- Evaluating Foods

**\*Chapter 7 Taking Care of Yourself**

- Introduction
- Personal Hygiene
- Stay Physically Fit
- Get Enough Sleep
- Learn to Reduce Stress
- Basic Principles of Sanitation
- Keep Your Body and Uniform Clean

**\*Chapter 8: Understanding and Controlling Stress**

- Introduction
- What is Stress?
- Causes of Stress
- Stress Strategies
- Stress and Leadership
- Depression
- Anxiety

**\*Chapter 9: Drug Awareness**

- Introduction
- Drug Use, Misuse, and Abuse
- Why Do People Abuse Drugs
- Alcohol
- Drugs
- Steroids
- Tobacco

**\*Chapter 10: Drug Awareness**

- Introduction
- The Need for First Aid/Your Response
- The First Life-Saving Steps
- Controlling Bleeding
- Treatment for Shock and Immobilizing Fractures
- First Aid for Burns
- First Aid for Poison's, Wounds, and Bruises
- Heat Injuries
- Cold Weather Injuries
- Bites, Stings, and Poisonous Hazards

**MAY**

**Unit VI Geography and Survival Skills**

**Chapter 1: Geography, Map Skills, and Environmental Awareness**

- The Globe: An Overview
- Introduction to Maps
- Introduction to Topographical Maps
- Grid Reference System
- Contours and Landforms
- Determining Distance
- Determining Direction
- Converting the Grid Magnetic Angle
- Determining Location
- Orienteering

**Chapter 2: Fundamentals of Survival**

- Fundamentals of Survival
- How to Survive in Tropical Areas
- How to Survive in Cold Water Areas
- How to Survive in Water

\*Life Skills Training is required for all freshman and those who have not taken the course before. The curriculum promotes health and personal development and is similar to the lessons in the NJROTC "Introduction to the Navy" course.

## **Naval Science 2 Academic Course Outline: LT Kelso**

NAVAL SCIENCE 2- ACADEMIC SCHEDULE FOR SY-2020-21 (class taught in alternating years)

**September**

**NJROTC Leadership pg. 163- 177**

1. NJROTC Leadership (Qualities and Traits)
2. Approaches to Leadership
3. Leadership Skills

## **October/November**

### **Maritime History**

4. The Civil War pg. 41
6. World War I pg. 72
8. World War II: The Atlantic War pg. 86
9. World War II: The Pacific War pg. 97
10. The Cold War Era, 1945-1991 pg. 118
11. The 1990's pg. 141
12. The New Millennium pg. 147

## **December/January**

### **Unit 1 Maritime Geography pg. 185 - 198**

1. Maritime Geography of the Western Seas pg. 188
2. Maritime Geography of the Eastern Seas pg. 198

## **February/March**

### **Unit 2 Oceanography pg. 208-230**

## **April/May/June**

3. Earth's Oceanographic History pg. 208
4. Undersea Landscapes pg. 213
5. Seawater: Its Makeup and Movement pg. 218

### **Unit 5 Physical Science**

18. Motion, Force, and Aerodynamics pg. 347- 352
19. Buoyancy pg. 353- 356
23. Sound and Sonar pg. 377- 380

## **NAVAL SCIENCE 3 Academic Course Outline: LT Kelso**

**Note: This class will be taught in school year 2019-20**

### **September**

#### **NJROTC Leadership pg. 108-132**

1. The Challenge of Leadership
2. Qualities of a Leader
3. Evaluation of Performance
4. How to Give Instruction

## **October/November**

### **Unit 1: Sea Power and National Security pg 13**

## **December/January**

### **Unit 2: Naval Operations and Support Functions pg 41**

## **February/March**

### **Unit 3: Military Law pg 71**

## **April/May/June**

### **Unit 4: International Law and the Sea pg 83**

## **Text: Naval Science 4**

This is a leadership class. During days of PT (physical training), drill and athletics the NS 3 and NS 4 cadets are expected to assist the cadre in facilitating and leading the underclassmen.

On Wednesday, the cadets will participate in a seminar class discussing the topics covered in the Naval Science 3 textbook, Naval Knowledge, Leadership, and Nautical Skills for the NJROTC Student. Cadets will be expected to have read the material **PRIOR** to the class session and be prepared to discuss and apply the information. Grades will be based on the cadet's ability to make a positive contribution to the conversation. Occasional pop quizzes to test prior reading are to be expected.

Finals will be either projects or papers in which the cadet demonstrates their understanding and ability to apply of the information discussed during the semester.

**YOU ARE THE CLASS LEADERS. BE FAIR, BE CONSISTANT, BE PRESENT, BE PROMPT, BE PREPARED. DEMONSTRATE. ASSIST. MOTIVATE. BE A POSITIVE INFLUENCE IN THE LIVES OF THOSE YOU LEAD and you will do well in this class.**

OCTOBER

Leadership – The Challenge of Leadership

NOVEMBER

Organizational Leadership

DECEMBER

Naval Sea Power

JANUARY

Global Awareness

FEBRUARY

Financial Management

MARCH

Navigation

APRIL

Damage Control

May

Resumes

JUNE

Practical Application/Make-Ups