**ROTC**

**Reserve Officers' Training Corps (ROTC)**

**Cross-Enrollment Agreements for ROTC**

Stanford has cross-enrollment agreements for the Reserve Officers’ Training Corps (ROTC) with the Navy and Marine Corps ROTC program at the University of California at Berkeley, the Army ROTC program at Santa Clara University, and the Air Force ROTC program at San Jose State University. These agreements allow Stanford students to engage in military training while working on their degrees from Stanford. Courses taken in ROTC programs are offered by and through UC Berkeley, Santa Clara, and San Jose State. Most courses count for academic or activity credit and count toward the 12-unit requirement for full-time registration status and satisfactory academic progress requirements for Stanford undergraduates.

Normally, students who participate in ROTC training complete a four-year course of instruction at the respective institution that consists of two years of basic courses during the freshmen and sophomore years, and an advanced course of instruction during the junior and senior years. Students who accept ROTC scholarships are generally subject to a service obligation, depending on the regulations of the particular service.

Stanford students who are enrolled in ROTC programs under the cross-enrollment agreements are eligible to compete for various scholarships that provide up to full tuition and a monthly stipend. Students normally compete for national scholarships as high school seniors, although current Stanford students may be eligible to enroll in ROTC on a non-scholarship basis. Non-scholarship ROTC students are eligible to compete for scholarships, and individual services may offer additional scholarship programs to current qualifying undergraduate and graduate students. Interested students should contact the appropriate military branch at the host institution to obtain information on these programs and to initiate application procedures.

Students who satisfactorily complete an ROTC program and are awarded a Stanford degree qualify for a commission as a Second Lieutenant in the U.S. Army, an Ensign in the U.S. Navy, a Second Lieutenant in the U.S. Marines, or a Second Lieutenant in the U.S. Air Force.

For additional questions concerning the ROTC programs, Stanford students should consult with one of the host units.

**Academic Credit**

All three service programs have a mandatory lab course each quarter which carries 1 unit of activity credit for satisfactory completion of work. Although there is no limitation on the number of activity classes in which a student may enroll, no more than 8 units of these activity classes (and/or other university activity classes) may be applied toward undergraduate graduation requirements (see the Undergraduate Degrees [http://exploredegrees.stanford.edu/archive/2016-17/undergraduatedegreesandprograms/#credittext] section of this bulletin).

Upper level ROTC academic courses carry two units of credit for satisfactory completion of work and are graded on a credit/no credit basis. No more than 36 units without a letter grade may be applied toward undergraduate graduation requirements (see the Undergraduate Degrees [http://exploredegrees.stanford.edu/archive/2016-17/undergraduatedegreesandprograms/#credittext] section of this bulletin).

**Air Force ROTC**

*Commanding Officer:* Lieutenant Colonel Michael E. Pecher

Air Force ROTC courses are offered at San Jose State University. See also the SJSU website [http://www.sjsu.edu/afrotc].

Courses in the freshman year focus on the foundation of the United States Air Force and introduce students to the Air Force and AFROTC. Topics include the characteristics, missions, and organization of the Air Force, the qualities of an officer and professionalism, career opportunities, military customs and courtesies, and communication skills.

Courses in the sophomore year focus on the evolution of the United States air and space power. Students study air and space power through historical analysis and examine the capabilities, function, and doctrinal employment of aerospace forces. The course emphasizes oral and written communication skills.

Courses in the junior year focus on Air Force leadership studies. Topics include leadership, management fundamentals, professional knowledge, Air Force personnel system, ethics, and communications. Students apply knowledge and skills required of junior Air Force officers through case studies, practical exercises, and seminar discussion.

Senior year courses cover two subjects, national security affairs and preparation for active duty. Students learn about national security process, international and regional relations, advanced leadership ethics, Air Force doctrine with focus on the military as a profession, military justice, civilian control of the military, and current issues affecting the military. Preparation for active duty focuses on the role of the Air Force officer in contemporary society emphasizing skills to facilitate a smooth transition from civilian to military life.

The leadership laboratory is required for all students every quarter. Students participate in hands-on exercises to learn drill and ceremony; Air Force customs and courtesies; leadership and follower skills; and they hear from guest speakers on a variety of Air Force topics.

**Army ROTC**

*Commanding Officer:* Lieutenant Colonel John Tiedeman

Some Army ROTC courses are offered at Santa Clara University and some are offered on Stanford's campus. See also the Army ROTC web site [http://www.scu.edu/rotc].

Freshman year courses introduce students to leadership and personal development and provide foundations for leadership. Course topics include personal challenges and competencies for effective leadership, goal setting, time management, physical fitness, and stress management related to leadership and officer formation. Students develop a personal fitness program under the guidance of an Army master fitness trainer. In addition, they learn leadership fundamentals such as setting direction, problem solving, listening, presenting briefs, providing feedback, and effective writing skills in the context of practical and interactive exercises.

Army courses taught in the sophomore year look at leadership through a variety of lenses using case study and interactive exercises. Topics include creative and innovative leadership strategies and styles, challenges of leading in contemporary operational environments along with crosscultural challenges, and team leading procedures.

In the junior year, students learn adaptive team leadership and situational leadership. They develop skills including decision making, persuading, and motivating team members when under fire in small-unit tactical operations scenarios.

Courses for seniors provide capstone leadership instruction and experiences in a practical and current event driven context. Students plan, execute, and assess complex operations, function as a member of staff, and provide leadership performance feedback to subordinates. They use case studies, scenarios, and exercises to prepare for their first
unit assignment and the transition to commissioned officer in a modern world.

All students are also required to take a military history course focused on leadership. This course may be taken any year. The leadership laboratory is required for all students every quarter. In addition, students complete a four-day weekend field training exercise away from the University in the Autumn and Spring quarters, and a formal military dinner during an evening in the Winter Quarter.

**Naval ROTC**

**Commanding Officer:** Captain William Koyama

Naval ROTC courses are offered at the University of California at Berkeley. See also the Naval ROTC web site.

Courses in the freshman year introduce students to the Navy and Marine Corps and to the NROTC program. They also study sea power from a historical and United States centered perspective.

In the sophomore year, students take their first leadership class with a focus on management and their first navigation class with a focus on the fundamentals of nautical navigation. Courses include case studies, student presentations, and practical exercises.

Juniors study introductory naval engineering with a focus on ship systems and modern weapons systems. Example topics include gas turbine propulsion systems, nuclear reactors, and radar and sonar theory.

During their senior year, students study advanced leadership topics within an ethics framework and advanced navigation and naval operations.

Students pursuing a commission in the Marine Corps do not take the two engineering courses or the two navigation courses. Marine option students take two Marine Corps specific courses that examine the history of littoral warfare and the evolution of warfare.

All students are required to take the weekly professional development laboratory course (drill) at UC Berkeley every quarter.

**ROTC - Air Force Courses**

**ROTC 1. Air Force ROTC Lab. 1 Unit.**

Practical leadership exercises including physical fitness training. May be repeated for credit.

**ROTC 11. The Foundation of the United States Air Force. 1 Unit.**

Introduces students to the Air Force and AFROTC with an overview of basic characteristics, missions, and organization of the Air Force; additional topics include officership and professionalism, career opportunities, military customs and courtesies, and an introduction to communications skills. May be repeat for credit.

**ROTC 21. The Evolution of USAF Air and Space Power. 2 Units.**

Examines general aspects of air and space power through historical study and analysis and provides the student with a knowledge level understanding of the capabilities, function and doctrinal employment of aerospace forces; emphasizes development of oral and written communication skills. May be repeat for credit.

**ROTC 131. Air Force Leadership Studies. 2 Units.**

Study of leadership, management fundamentals, professional knowledge, Air Force personnel system, ethics, and communication skills; develops application level knowledge of skills required of junior Air Force officer through case studies, practical exercises, and seminar discussion. May be repeat for credit.

**ROTC 141. National Security Affairs. 2 Units.**

Examines the national security process, international and regional relations, advanced leadership ethics, and Air Force doctrine with focus on the military as a profession, officership, military justice, civilian control of the military and current issues affecting military professionalism.

**ROTC 142. PREPARATION FOR ACTIVE DUTY. 2 Units.**

An examination of the role of the Air Force officer in contemporary society with emphasis on knowledge, comprehension, and application of skills needed to facilitate a smooth transition from civilian to military life. May be repeated for credit.

**ROTC - Army Courses**

**ROTCARMY 1. ARMY ROTC LAB. 1 Unit.**

Leadership laboratories, held weekly for three hours, are required of all students. Performance during lab periods is reflected in the student’s course grade. Labs include activities such as rappelling, terrain navigation, marksmanship, drill and ceremonies, and tactical field training exercises.

**ROTCARMY 11. Leadership and Personal Development. 1 Unit.**

Introduces students to the personal challenges and competencies that are critical for effective leadership. Students learn how the personal development of life skills such as goal setting, time management, physical fitness, and stress management relate to leadership and officership. Students develop their own personal fitness program under the guidance of an Army master fitness trainer.

**ROTCARMY 12. Foundations in Leadership I. 1 Unit.**

An overview of leadership fundamentals such as setting direction, problem solving, listening, presenting briefs, providing feedback and using effective writing skills. Students begin to explore leadership dimensions and values.

**ROTCARMY 13. Foundations in Leadership II. 1 Unit.**

An overview of the leadership framework with practical applications in fundamentals such as problem solving, listening, presenting briefs, and using effective writing skills. Students explore dimensions of leadership, values, attributes, skills, and actions in the context of practical, hands-on, and interactive exercises.

**ROTCARMY 21. Innovative Leadership. 2 Units.**

Explores the dimensions of creative leadership strategies and styles by studying historical cases and engaging in interactive exercises. Students practice aspects of personal motivation and team building within the context of planning, executing and assessing team exercises. Focus will be on the continued development of the knowledge of leadership values and attributes through an understanding of organizational customs and courtesies. Leadership case studies provide tangible context for learning Individual Creeds and Organizational Ethos.

**ROTCARMY 22. Leadership in Changing Environments I. 2 Units.**

Examines the challenges of leadership in complex contemporary operational environments. Dimensions of the cross-cultural challenges of leadership in a constantly changing world and their application to leadership tasks and situations. Case studies stressing importance of teamwork and tactics in real-world settings.

**ROTCARMY 23. Leadership in Changing Environments II. 2 Units.**

Examines the decision-making process and plans/orders that enable small units to complete assigned tasks. Planning techniques used to develop orders and briefing plans and decisions.

**ROTCARMY 131. Adaptive Team Leadership. 2 Units.**

Challenges students to study, practice, and evaluate adaptive leadership skills as they are presented with the demands of the ROTC Leader Development Assessment Course. Challenging scenarios related to small unit tactical operations are used to develop self-awareness and critical thinking skills. Students receive systematic and specific feedback on their leadership abilities.
ROTCARMY 132. Situational Leadership I. 2 Units.
Study of intense situational leadership challenges to build student awareness and skills in leading small units. Skills in decision-making, persuading, and motivating team members when "under fire" are explored, evaluated, and developed.

ROTCARMY 133. Situational Leadership II. 2 Units.
Practical applications of intense situational leadership challenges that will provide awareness and specific feedback on leadership abilities. Student skills are evaluated using practical applications in decision making, persuading, and motivating team members when under fire. Aspects of military operations are reviewed as a means of preparing for the ROTC Leader Development Assessment Course (LDAC).

ROTCARMY 141. Developing Adaptive Leaders. 2 Units.
Students develop proficiency in planning, executing, and assessing complex operations; in functioning as a member of a staff; and in providing leadership performance feedback to subordinates. Students are given situational opportunities to assess risk, make ethical decisions, and provide coaching to fellow ROTC students. Students are challenged to instruct younger students. Students identify responsibilities of key staff roles and use situational opportunities to develop subordinates.

ROTCARMY 142. Leadership in a Complex World I. 2 Units.
Explores the dynamics of leadership in the complexity of current military operations. Students examine customs and courtesies, military law, principles of war and rules of engagement in the face of international terrorism. Aspects of interacting with nongovernmental organizations, civilians on the battlefield, and host nation support are examined and evaluated.

ROTCARMY 143. Leadership in a Complex World II. 2 Units.
Significant emphasis is placed on preparing students for their first unit of assignment and transition to lieutenant. Case studies, scenarios, and exercises are used to prepare students to face the complex ethical and practical demands of leading as commissioned officers in the U.S. Army.

ROTCARMY 176. Military History. 2 Units.
A survey of the military and diplomatic aspects of American involvement in conflicts from the Anglo-Indian Wars to the present.

ROTC - Navy Courses

ROTCNAVY 1. Naval ROTC Lab. 1 Unit.
Emphasis is placed on professional training not of an academic nature. The laboratory is intended for topics such as drill and ceremonies, physical fitness and swimming testing, cruise preparation, cruise evaluation, sail training, safety awareness, preparation for commissioning, personal finances, insurance, and applied exercises in naval ship systems, navigation, naval operations, naval administration, and military justice. Other topics and special briefings will be conducted as determined by the Chief of Naval Education and Training or the Professor of Naval Science.

ROTCNAVY 11. Introduction to Naval Science. 1 Unit.
This curriculum provides guidelines for introducing students to the organization of the Department of Defense and the naval service, the long-held customs and traditions of the service, basic leadership, ethics and character development, the duties of a junior officer, and basic information concerning shipboard procedures and safety. It is the intent of this course to stimulate the students' interest for study and investigation in future courses. Three hours of lecture per week. Course is offered in the Autumn Quarter.

ROTCNAVY 12. Sea Power. 2 Units.
Traces the U.S. historical evolution of sea power, its concepts, theories and applications. Emphasizes the impact of world situation, U.S. national interest, changing technology, and naval leadership on the evolving concept of sea power. Relates historical developments to current trends. Examines briefly the U.S. Merchant Marine's and the former Soviet Navy's impact on sea power policy formulation. Two hours of lecture per week. Course is offered in the Winter/Spring Quarter.

ROTCNAVY 20. Evolution of Warfare. 2 Units.
Progressive analysis of the evolution of warfare from the ancient world to the present. Emphasis placed on causes of continuity and/or change of methods, as well as the influence of economic, moral, political, and technological factors on strategic thought. Three hours of lecture per week. Course is offered in the Winter/Spring Quarter.

ROTCNAVY 21. Leadership and Management. 2 Units.
This course will cover basic management, decision making, and moral leadership. The student will learn to establish meaningful goals, prioritize among competing demands, and plan and forecast in a task-centered organization. The course includes exposure to measures of organizational effectiveness, methods to overcome resistance to change, effective communications, and techniques to aid in counseling, team building, and resolution of disciplinary and personnel matters. Three hours of lecture/discussion/seminar per week. Course is offered in the Autumn quarter.

ROTCNAVY 22. Naval Ship Systems - Engineering. 2 Units.
Principles of design and operation of ships. Emphasis on description and analysis of major types of propulsion plants, both conventional and nuclear. Principles of thermodynamic cycles, electrical theory, power generation and distribution, auxiliary machinery systems. Ship construction, strength and stability in intact and damaged conditions. Factors and design criteria for seaworthiness, structural integrity, and operational employment. Three hours of lecture per week. Prerequisites: MATH 41. Course is offered in the Winter/Spring Quarter.

ROTCNAVY 131. Navigation. 2 Units.
Theory, principles, and procedures of terrestrial and celestial navigation and piloting techniques. A study of coordinating systems, including the celestial coordinate system, nautical charts and publications, position fixing, dead reckoning, nautical astronomy, the theory and methods of celestial navigation, and the theory and prediction of tides and current. Three hours of lecture and one hour of laboratory per week. Course is offered in the Autumn Quarter.

ROTCNAVY 132. Naval Operations & Seamanship. 2 Units.
Introduction to the various aspects of ship operations at sea. Principles of terrestrial navigation including the rules of the road for prevention of collisions at sea, vector analysis of relative motion, ship behavior and characteristics in maneuvering, precise ship positioning, use of aids to navigation, meteorology, and electronic navigation. Three hours of lecture and one hour of laboratory per week. Prerequisites: ROTCNAVY 131 or consent of instructor. Course is offered in the Winter/Spring Quarter.

ROTCNAVY 141. Naval Ship Systems - Weapons. 2 Units.
An introduction to the physical theory of acoustic and electromagnetic wave generation and propagation; the design and use of electronic, electromechanical, and pneumatic systems; and the combination of these systems to perform detection and analysis of objects sharing and traversing common environments. Three hours of lecture per week. Course is offered in the Autumn Quarter.

ROTCNAVY 142. Leadership and Ethics. 2 Units.
This course is the capstone leadership course. It is intended to provide the ethical foundation and tools required for success as a leader of a diverse work force, often under circumstances of substantial stress. The course is divided between the art of leadership and the technical aspects of integrating personnel development with the management of resources, although the emphasis is on leadership. It is designed to be given as a seminar or lecture/discussion in which principles, concepts, and concrete subjects are presented, discussed, and debated. Three hours of lecture/discussion/seminar per week. Prerequisites: Consent of instructor. Course is offered in the Winter/Spring Quarter.

ROTCNAVY 154. Littoral Warfare. 2 Units.
An analysis of the theory, origins, historical evolution, and impact of man's attempts to project sea power ashore. A case study approach is used to study major developments in amphibious warfare. Three hours of lecture per week. Course is offered in the Winter/Spring Quarter.