

# UNDERGRADUATE STUDIES

UNIVERSITY OF SOUTH FLORIDA - 2002/2003 UNDERGRADUATE CATALOG

**Location/Phone:** SVC 2002; (813) 974-4051  
**Office Hours:** 8 a.m. – 5 p.m., Monday through Friday  
**Web Address:** <http://www.ugs.usf.edu/ugs.htm>

The Dean of Undergraduate Studies has overall responsibility to enhance the quality of the learning experience in undergraduate programs across all colleges and campuses of the University. The Dean supervises several units and undergraduate academic programs that are not the purview of a single school or college including the offices of Evaluation and Testing, Air Force ROTC Program, Army ROTC Program, and Navy ROTC Program and acts on recommendations from the Undergraduate Council, the Academic Regulations Committee, the Council on Academic Advising, and the Faculty Committee on Student Admissions. As the Director of Community College Relations, the Dean develops articulation agreements with community colleges, area school boards, and area high schools.

The Dean's Office is the University Student Ombudsman for undergraduate academic matters. The function of the Student Ombudsman is to handle student appeals concerning access to courses and credit granted toward the student's degree. Students who wish to make an appeal should contact the Office of the Dean of Undergraduate Studies at SVC 2002, 974-4051 for further information.

The Dean is committed to providing vision and leadership in undergraduate education and to serving the needs of all undergraduate students including those with non-traditional and diverse backgrounds.

## Evaluation and Testing

**Location/Phone:** SVC 2054; (813) 974-2742  
**Office Hours:** 8 a.m. – 5 p.m., Monday through Friday  
**Web Address:** <http://usfweb.usf.edu/ugrads/eandt/evaltest.htm>

The Office of Evaluation and Testing serves four principal functions:

1. Admissions, Academic and Placement Testing: Tests required for admission to colleges, graduate and professional schools as well as many other special tests are administered by this office. Examples are the SAT, ACT, CPT, CLAST, GRE, MCAT, and LSAT.
2. Scanning and Scoring Services: Analysis and advisory services aid in construction and validation of tests used in classes; survey design and data analysis are also available for research purposes as well as test scoring and analysis by machine. In addition, this office coordinates the student assessment of instruction process.
3. Credit-By-Examination: The College-Level Examination Program (CLEP) is administered through this office. Information on other programs such as the Advanced Placement Test (APT) is available.
4. College Level Academic Skills Test (CLAST): This office, in addition to administering the CLAST, implements many of the rules and policies of the College Level Academic Skills Program (CLASP).

## Bachelor of Science in Information Technology

The Mission of the Information Technology Program is to provide high quality educational opportunities for students interested in pursuing careers in the broad range of fields that support our computer/information-based society and economy. Additionally to utilize the resources of the program to provide service to society; and to emphasize to students the need for lifelong learning, ethical conduct and an understanding of the diverse social context in which Information Technology is practiced. The program is offered through the Lakeland Campus.

Specifically the program aspires to:

1. Lead to the advancement of Information Technology through nationally recognized education at the undergraduate level,

as well as technology transfer to regional industries and businesses;

2. Prepare students for full and ethical participation in a diverse society and encourage lifelong learning;
3. Educate undergraduates in the best practices of the field as well as integrate the latest research and practices into the curriculum;
4. Emphasize the development of problem solving and communication skills as an integral component of the educational process and the later practice of the discipline;
5. Provide quality learning experiences through highly interactive techniques of course delivery that will include the use of electronic support equipment as well as newly developing distance learning technologies.

## Objectives

The Information Technology program graduates will:

1. Have the requisite education and skills to be immediately employable as professionals in our computer/information-based society
2. Be prepared to enter into graduate studies in a number of related graduate programs
3. Be ethical and responsible members of their profession and society as a whole
4. Be well founded in the variety of sub-disciplines that comprise Information Technology which include basic principles of computation, mathematics, science and engineering.

The Information Technology (IT) program is designed to bridge the gap between computer science and management information systems. The emphasis of the program is on knowledge-based computer and information technology, traditional computer science concepts, as well as more practical topics including programming, applications, and networking, systems administration and the management of a variety of computing environments (in an era of rapidly changing technology). IT students will take coursework in computer organization, human-computer interface, data structures, operating systems, networking, databases, and software engineering. Electives can include such application areas as: advanced database, advanced networking, web page design and administration, and e-commerce as well as a variety of other related areas. Through a broad based set of electives, IT students will be able to tailor their program to satisfy individual preferences and strengths.

Students completing the IT program will qualify for a broad range of positions in computer-intensive businesses and industry such as: programmer analyst, systems analyst, database administrator, network administrator, computer resource manager, systems development manager, and information technology management, to name a few.

In addition to the University's graduation requirements, the program has the following policies:

1. Mandatory academic advising of each student each term,
2. Exit interviews as a graduation requirement for all students, and
3. Only grades of C and above in IT courses can be used to fulfill graduation requirements.

**Four-Year Curriculum in Information Technology**  
**Prerequisites (State Mandated Common Prerequisites) for Students Transferring from a Community College:** If a student wishes to transfer without an A.A. degree and has fewer than 60 semester hours of acceptable credit, the student must meet the university's entering freshman requirements including ACT or SAT test scores, GPA, and course requirements.

Students should complete the following **prerequisite courses** listed below at the lower level prior to entering the University. If these courses are not taken at the community college, they must be completed before the degree is granted. Unless stated otherwise, a grade of "C" is the minimum acceptable grade.

Some courses required for the major may also meet General Education Requirements thereby transferring maximum hours to the university.

PSY XXXX	Psychology course	(3)
STA 2023	Intro to Statistics	(3)
ECO 2013	Macroeconomics	(3)
CGS XXXX	Database course	(3)
COP 2XXX	Programming course (e.g., Pascal, C, Java)	(3)
COP 2XXX	Object-Oriented programming course (e.g., C++)	(3)
MAC XXXX	Pre-Calculus	(3)
PHY XXXX	Physics course	(3)
M** XXXX	Discrete Mathematics	(3)

Please be aware of the immunization, foreign language, continuous enrollment policies of the university, and qualitative standards required.

The schedule that follows indicates how a diligent student, who can devote full time to coursework, can satisfy requirements in four academic years. Students without a solid foundation, or those who cannot devote full time to academics, should plan for a slower pace.

*Courses indicated with XXXX had not yet been assigned a number when the catalog went to print.*

**Semester I**

CGS 2100	Computers in Bus.	3
ENC 1101	Composition I	3
MAC 1147	Coll. Alg. and Trig.	3
Gen. Ed.		6
Total		15

**Semester II**

COP 2510	Prog. Concepts	3
ENC 1102	Composition II	3
MAD 3100	Discrete Math	3
ECO 2013	Eco. Prin. (Macro)	3
PSY 2012	Intro. Contemp. Psych.	3
Total		15

**Semester II**

Natural Science		3
COP XXXX	OO Programming (e.g., C++)	3
Electives		9
Total		15

**Semester IV**

STA 2023	Intro. Statistics	3
PHY 2020	Conceptual Physics	3
Fine Arts		3
Electives		6
Total		15

**Semester V**

COP XXXX	IT Prog. Design	3
CDA XXXX	IT Comp. Org.	3
ENC 3211	Communication for Egrs.	3
INR 3033	Intl. Issues	3
CEN XXXX	IT Human-Comp. Interface	3
Total		15

**Semester VI**

CIS XXXX	IT Data Structs. and Algor.	3
COP XXXX	IT Operating Systems	3
ENC 4260	Adv. Tech Writing	3
IT Appr. Electives		6
Total		15

**Semester VII**

CIS XXXX	IT Database Sys.	3
CEN XXXX	IT Software Eng.	3
CEN XXXX	IT Networks	3

IT Appr. Electives	6
Total	15

**Semester VIII**

CIS 4XXX	IT Seminar	3
CIS 4XXX	IT Senior Project	3
CIS 4XXX	Ethics Elective	3
CIS XXXX	IT Appr. Electives	6
Total		15

**Information Studies Faculty**

*Interim Director:* A. Karshmer; *Faculty:* F. Fleshute, W. Harding, F. Young.

**Aerospace Studies  
Air Force ROTC**

**Location/Phone:** BEH 360; (813) 974-3367

**Office Hours:** 8 a.m. – 5 p.m., Monday through Friday

**Web Address:** <http://web.usf.edu/~airforce/>

The Air Force Reserve Officers Training Corps (AFROTC) curriculum includes 12-16 course hours of instruction by active duty Air Force officers over a one- to four-year period. A student who completes the AFROTC program will receive an Air Force commission as a second lieutenant and is guaranteed a position in the active duty Air Force at a starting pay of approximately \$36,000 per year.

AFROTC is offered as a one-, two-, three-, or four-year program. The three- and four-year programs normally require a student to successfully complete all degree requirements for award of a bachelor's degree, 14 or 16 course hours of AFROTC classes respectively, and a four-week field training encampment between his/her sophomore and junior years. The two-year program gives students who do not enroll in AFROTC during their freshman and sophomore years the opportunity of taking AFROTC. Students should apply for the two-year program by December of the sophomore year. The one-year program is provided to students entering their senior year - per the needs of the Air Force. The student attends a five-week field training encampment in the summer prior to program entry. Upon entering the program, the students then complete all undergraduate degree requirements, and 12 credit hours of AFROTC courses.

ROTC students take a 1.8 hour non-credit leadership laboratory in addition to the academic classes. Students wear the Air Force uniform during these periods and are taught customs and courtesies of the Air Force. Leadership Laboratory is open to students who are members of the Reserve Officer Training Corps or are eligible to pursue a commission as determined by the Professor of Aerospace Studies.

AFROTC 4, 3, 2, and 1-year scholarships are available for eligible applicants. These scholarships pay all tuition, fees, books, and a \$250-\$400 per month tax-free stipend. Non-scholarship sophomores are eligible for the General Military Course Incentive, receive up to \$1,500 in tuition. Non-scholarship students in the final two years of the program are eligible for the Professional Officer Course Incentive (POCI) and a monthly \$350-\$400 tax-free stipend. Qualified POCI students receive up to \$3,850 a year which covers tuition, fees, and books. Those interested in more information about scholarship criteria should contact the AFROTC Department.

Students interested in enrolling in the programs can begin registration procedures through the ROTC office in BEH 360 or by registering for the appropriate "AFR" course through university registration. Veterans, active duty personnel, and graduate students are encouraged to inquire about special accelerated programs designed for them. The AFROTC phone number is (813) 974-3367.

**Minor in Aerospace Studies**

In order for the student to minor in Aerospace Studies a minimum GPA of 2.0 is required in all courses used to satisfy the minor. A minimum of 12 semester hours of the 16 semester

hours required must be earned at USF. Grades less than "C" (GPA of 2.0) or "S" grades will not be accepted. Students will not be able to use credit through exam or independent study for application to the minor. This program will provide the student an understanding of management and leadership concepts as they relate to military officers. In addition, students will analyze the evolution of American defense policy and strategy. Special emphasis is placed on developing the student's communication skills.

Specific Course Requirements for the Minor:

a. Total credit hours required:	16
b. Required courses:	
AFR 3220 Air Force Leadership and Management I	3
AFR 3231 Air Force Leadership and Management II	3
AFR 4201 National Security Forces in Contemporary American Society I	3
AFR 4211 National Security Forces in Contemporary American Society II	3
c. Other specifications: combination of 4 credit hours from any of the military elective courses below:	
AFR 1101 The Air Force Today: Organization and Doctrine	1
AFR 1120 The Air Force Today: Structure and Roles	1
AFR 2130 U.S. Air Power: Ascension to Prominence	1
AFR 2140 U.S. Air Power: Key to Deterrence	1
AFR 2940 Basic Aerospace Internship	
Optional Courses:	
MIS 1000 Organization of the Army & ROTC	1
MIS 1400 Fundamentals of Leadership Development	1
MIS 2601 Military Training Manual and Instructional Techniques	1
MIS 2610 Leadership Assessment	1
MIS 3302 Small unit Operations	3
MIS 3404 Leadership Fundamentals	3
MIS 4410 Army as a Profession	2
MIS 4421 Seminar in Military Leadership and Management	3

**Aerospace Studies Faculty**

Professor: Lt Col Robert J. Butler; Assistant Professors: Capt Bob Ingraham, Capt Honoré Spencer, Capt Michael Wilson.

**Military Science  
Army Reserve Officer's Training Corps (ROTC)**

**Location/Phone:** BEH 336/ (813) 974-406  
**Office Hours:** 8 a.m. - 5 p.m., Monday through Friday  
**Web Address:** <http://www.ugs.usf.edu/arotc/arotc.htm>  
**Email Address:** [armyrotc@admin.usf.edu](mailto:armyrotc@admin.usf.edu)

The Department of Military Science for Army Reserve Officers Training Corps (ROTC) was established to select and prepare students to serve as officers in the Regular and Reserve components of the United States Army. The curriculum is designed to develop students' leadership potential and improve students' planning, organizational, and managerial skills.

Army ROTC training is divided into two phases: the first two years constitute the Basic Course; the last two the Advanced Course. The Department offers both a four- and a two-year program, each leading to a commission as a **Second Lieutenant** in the United States Army. The four-year program requires completion of the Basic Course, a five-week field training course, and the Advanced Course. Students with prior active military service or previous training at military schools may exempt some or all of the Basic Course. Students with questions concerning the various options should contact the Professor of Military Science for more information. Enrollment is open to qualified students at all levels, including graduate students. Offerings are published each semester.

Army ROTC training provides scholarships, pay, free uniforms and textbooks. Scholarships are awarded on a competitive basis in all academic majors. The scholarship pays full tuition, books, lab **and mandatory** fees, and certain other academic expenses. All Advanced Course and scholarship students receive a monthly subsistence payment that ranges from \$250.00 as a freshman to \$350.00 as a senior. This is in addition to the pay of approximately \$700.00 while attending the five-week field training course at the **National Advanced Leadership Training Course at Fort Lewis, Washington.**

**Additional skills training:** Airborne School, Air Assault School, and the Northern Warfare School are available to both Basic and Advanced Course students during semester breaks. Additional skills training is also available during the academic year to include first aid, rappelling, orienteering, etc.

**Basic Course:** The Basic Course consists of four semesters of classroom instruction of one hour each week **and a leadership lab.** Students incur no military commitment by participating in the Basic Course. **In lieu of attending the basic course classroom instruction, a student may attend the four-week Leadership Training Course at Fort Knox, Kentucky during the summer of the student's sophomore year.**

**Advanced Course:** The Advanced Course consists of four semesters of classroom instruction of three hours each week, **leadership lab, physical fitness and** field training exercises, and a five-week training phase at **National Advanced Leadership Course.** The Advanced Course is designed to prepare the student who desires to be a Professional Army Officer for duty, either Active Army, Reserve or National Guard. **Additional follow-on training is available to selected cadets at both US based and overseas active Army units.**

**Job Opportunities:** The newly commissioned officer can be guaranteed Reserve or National Guard duty, or compete for an Active Duty commission. Prior to commissioning the student may request to serve in a number of career fields to include aviation, engineering, medical, law, law enforcement, logistics, and personnel administration.

**Requirements for an ROTC Commission:** Students who desire to earn a commission as a **Second Lieutenant** in the United States Army must meet the following requirements: four semesters of the ROTC Advanced Course, successful completion of the Professional Military Education Courses (written communication skills, computer literacy, and military history), attendance at **National Advanced Leadership Course**, maintain and graduate with a minimum of a 2.0 GPA, successful completion of the Army Physical Readiness Test, compliance with the Army height and weight standards, and other requirements of the United States Army.

**Minor in Military Science**

The minor in Military Science entails a 18-hour program organized and coordinated through the Department of Military Science. A minimum of 14 of the 18 hours must be earned at USF and the student must maintain a 2.0 GPA in the minor. A minimum grade of "C" or better must be maintained in each course. "S" grades will not be accepted. This program is designed to provide the student with an in-depth understanding of Army leadership doctrine and the fundamental principles by which Army leaders act to accomplish their mission. This minor lays out a leadership framework that allows students to apply leadership concepts learned in the classroom. Additional emphasis is placed on character development, oral and written communication, physical and mental fitness, and military small unit operations.

**Required courses:** (Total of 14 Credit Hours)

MIS 3302	Small Unit Operations	(3)
MIS 3404	Small Unit Leadership	(3)
MIS 4410	Army as a Profession	(3)
MIS 4421	Seminar in Military Leadership and Management	(3)
MIS 2600*	Army Physical Readiness	(1)

\*repeated for two semesters; may be repeated up to four semesters, however only two credits will count toward minor

**Other specifications:** combination of 4 credit hours from any of the military elective courses below:

MIS 1000C	Fundamental Military Concepts and Leadership	(2)
MIS 1400C	Fundamentals of Leadership Development	(2)
MIS 2601C	Military Tactics and Leadership	(2)
MIS 2610C	Advanced Military Leadership	(2)
MIS 2630	Basic Leader Training Course	(4)
MIS 4930	Advance Directed Study and Research	(1-3)
AFR 1101	The Air Force Today: Organization and Doctrine	(1)
AFR 1120	The Air Force Today: Structure and Roles	(1)
AFR 2130	U.S. Air Power: Ascension to Prominence	(1)
AFR 2140	U.S. Air Power: Key to Deterrence	(1)
AFR 3220	Air Force Leadership and Management I	(3)
AFR 3231	Air Force Leadership and Management II	(3)
AFR 4201	National Security Forces in Contemporary American Society I	(3)
AFR 4211	National Security Forces in Contemporary American Society II	(3)

### Military Science Faculty

*Professor:* Lieutenant Colonel Joseph M.J. Kools; *Assistant Professors:* Colonel Richard Lexvold, Major Lawrence Braue, Captain Samuel Ochs; *Instructors:* Master Sergeant Joseph Gramigna, Sergeant First Class Arthur Greene, Sergeant Leon Porter.

### Naval Science Navy ROTC

**Location/Phone:** BEH 301

**Office Hours:** 8 a.m. – 5 p.m., Monday through Friday

**Web Address:** <http://www.ugs.usf.edu/nrotc/nrotc.htm>

**Email Address:** [navyrotc@admin.usf.edu](mailto:navyrotc@admin.usf.edu)

The Naval Science Program at the University of South Florida is administered by the Naval Reserve Officers Training Corps (NROTC) Unit. This program affords selected men and women the opportunity to receive instruction in Navy specified courses which, in conjunction with the baccalaureate degree, will qualify them for a commission in the United States Navy or Marine Corps. Students enrolled in the university who are physically and mentally qualified are eligible to apply for the NROTC program. As naval officers, USF NROTC graduates become eligible for varied careers, serving in aviation squadrons, on surface ships, on submarines in the nuclear power programs, at naval installations all over the world, or in the numerous sub-specialties as an officer of the Marines Corps. With the consent of the professor of naval science, any student, although not enrolled in the NROTC program, is eligible for enrollment in naval science courses. The USF NROTC Unit offers participation through four programs: (1) the Navy-Marine Corps Scholarship Program, (2) the Navy-Marine Corps College Program, (3) the Two-Year NROTC College Program, and (4) the Two-Year NROTC Scholarship Program.

**The Navy-Marine Four-Year Scholarship Program**—The NROTC Scholarship Program is open to young men and women of all races, creeds, and national origin who are United States citizens. Students are selected on their own merit to become officers in the United States Navy and Marine Corps. Scholarship students are appointed Midshipmen, U.S. Navy Reserve. The Navy pays for tuition, fees, textbooks, uniforms, and a monthly subsistence allowance of \$150.00 for four years. Scholarship students are normally selected through national competition during their senior year in high school. Each year, ten professor of naval science scholarships are available through a competitive selection process to Black and Hispanic students with academic potential who have yet to demonstrate their performance in a college environment or who have completed at least one, but not more than two semesters of course work at the university with a cumulative GPA of 3.0 or better and with no

grade below “C”. Although it is not a requirement, a student in the NROTC Scholarship Program is encouraged to pursue a major in engineering, mathematics, chemistry, or physics to meet the technological requirements of the Navy. Other fields of study for a major leading to a baccalaureate degree are permitted, with the approval of the professor of naval science. Regardless of the major, every scholarship student must complete one year of physics and one year of calculus.

Students must include certain Navy specified courses in their program and complete a program of courses as prescribed by the professor of naval science. Upon graduation, and successful completion of the naval science curriculum, the midshipman will receive a reserve commission as Ensign in the U.S. Naval Reserve or Second Lieutenant in the U.S. Marine Corps Reserve and serve on active duty for a minimum of four years.

**The Navy-Marine Corps College Program**—The NROTC College Program is designed to train and educate well-qualified young men and women for commissioning. Selected students are appointed as midshipmen in the Naval Reserve prior to commencement of the advanced course in the junior year. The Navy pays for uniforms and naval science textbooks all during the four-year period, and during the junior and senior years, pays the midshipman a \$150.00-per-month subsistence allowance. Each student is selected for enrollment in the program on the basis of past academic performance, potential, personal interviews, and a physical examination. A college program midshipman only acquires a military service obligation after entering the advanced courses at the beginning of the junior year.

Although there are no restrictions on the major college program students may pursue, it is highly recommended that they pursue a course of study similar to that of scholarship students. Students must also include in their program certain Navy specified courses and a program of courses in naval science. Students, upon graduation and successful completion of the naval science curriculum, receive a Reserve commission as an Ensign in the U.S. Naval Reserve or a Second Lieutenant in the U.S. Marine Corps Reserve and serve on active duty for a minimum of three years.

**Two-Year NROTC College Program (Non-Scholarship)**—The USF NROTC offers a two-year non-scholarship program which is designed specifically for students commencing their third year of college, who were not enrolled in the NROTC program during their freshman and sophomore years. Applications must be submitted during the sophomore year by the first of March to permit processing, personal interviews, and a physical examination. Qualifications for acceptance to this program include demonstrated ability to complete college level science and math courses. Upon acceptance into this program, the student attends a six-week intensive course at the Naval Science Institute in Newport, Rhode Island, in the summer prior to commencing the junior year of study. Students in a five-year engineering curriculum may attend the institution between their third and fourth years. The six-week summer course qualifies the student for enrollment in the NROTC program at the junior level. During the student’s attendance at the Naval Science Institute, the Navy provides room and board, books, uniforms, and transportation from home and return, as well as pays the student approximately \$365.00 month. Upon successful completion of the course, the Navy pays for uniforms, naval science textbooks, and \$150.00 subsistence allowance.

**Two-Year NROTC Scholarship Program**—The two-year scholarship program is administered in the same manner as the two-year non-scholarship program, except that a student who has excelled in a math, physical science, or engineering major and who has demonstrated above average performance in integral calculus may be selected for a two-year full tuition scholarship, to be awarded upon successful completion of the six-week period of training at the Naval Science Institute. In addition to the

full-tuition scholarship, the student will receive \$150.00 subsistence per month, books, and lab fees.

**Summer Training**—The NROTC Scholarship Program student is required to complete training of approximately four weeks during each of the three summer recesses. The second summer training will be performed aboard operational ships of the U.S. Fleet. During the first summer period, each scholarship student will receive instruction in aviation training, marine combat training, surface warfare indoctrination, and submarine indoctrination either in Norfolk, Virginia or San Diego, California. During the third summer, candidates for U.S. Navy commissions will perform training aboard operational ships as junior officer. The student who qualifies for nuclear propulsion training may elect to cruise on nuclear powered ships or submarines. Some midshipmen cruise with allied navies through the Midshipman Foreign Exchange Program. Transportation costs to and from the training sites, subsistence, quarters, and pay of approximately \$365 per month will be paid to every participating student. The candidates for U.S. Marine Corps commissions will perform training at the U.S. Marine Corps Base, Quantico, Virginia. The Marine Option NROTC Summer Training Program, "Bulldog," is designed to prepare midshipmen for appointment to commissioned grade by providing basic military instruction and physical training. An evaluation of midshipmen is made to ensure that they possess the leadership, academic, and physical qualifications required for appointment to commissioned grade in the Marine Corps Reserve. Female midshipmen participate in all NROTC curriculum requirements and activities, including cruises aboard selected ships. A woman who has qualified for Marine Option Summer Training at Quantico attends the Woman Officer Candidate Course at Officer Candidates School in Quantico, Virginia.

Specified University Courses: In addition to satisfying requirements for a baccalaureate degree, the student must satisfactorily complete the following four-year curriculum guide, including required naval science courses and specified university courses.

**Freshman Year Sem. Hrs.**

NSC 1110 Introduction to Naval Organization (Note 1)	3
NSC 1140 Seapower and Maritime Affairs (Note 1)	3
NSC 1101 Naval Science Lab	0

**Sophomore Year**

NSC 2121 Naval Ships System I (Note 1)	3
NSC 4231 Principles of Naval Management I	3
NSC 2213 Naval Operations (Note 1)	3
NSC 2221 Evolution of Warfare (Note 2)	3
MAC 3311, 3312 Calculus I, II (Note 3)	8

**Junior Year**

NSC 3214, 3213 Navigation I, II (Note 4)	3
Amer. Military History/International Relations (Note 5)	3
Computer Science Elective (Note 5)	3
PHY 3048, 3049 Physics I, II (Note 3)	10

**Senior Year**

NSC 3122 Naval Ships Systems II (Note 4)	3
NSC 4232 Principles of Naval Management II (Note 4)	3
NSC 4224 Amphibious Warfare (Note 2)	3

**NOTES:**

- (1) Undergraduate naval sciences required to be completed for a scholarship student before Fall Semester junior year.
- (2) Required of Marine Option midshipmen only
- (3) One year each of calculus and analytic geometry and calculus based physics is required for every Navy, option scholarship

student. Recommended but optional for College Program and Marine Options.

(4) Upper division Naval Sciences required of Navy Options are not required of Marine Options.

(5) The following courses may be used to meet the American Military History/National Security Policy and Computer Science requirements:

- \*AMH 3540 American Military History
- INR 3002 International Relations
- INR 4102 American Foreign Policy
- \*COP 1215 and 1215L Fundamentals of Programming
- CGS 1160 Microcomputer Applications
- CGS 2120 Introduction to Computing with Programming

\*Indicates recommended courses

**Furnished Items**—All uniforms, textbooks, and equipment needed by the student for naval science courses are furnished by the Navy.

**Use of Navy Science courses as University Electives**—Academic departments within the university may, according to their own policies, accept naval science courses as electives to fulfill requirements in their academic program.

**Naval Science Minor**—Upon successful completion of the four-year Naval Science Program, a student may be awarded a minor in naval science. Specific requirements should be arranged with the student's academic department.

**Naval Science Laboratory**—The naval science curriculum includes a weekly two-hour laboratory covering professional and military subject matter. Attendance is mandatory for all midshipmen.

**Naval Science Faculty**

*Professor:* Captain Richard L. Dick

**STUDENT LEADERSHIP MINOR**

The minor in Leadership Studies consists of a minimum of 18 credit hours with a "B" average (3.0). All students shall complete the first courses in the sequence and select four additional courses from the list of approved courses for the program. The series of courses is designed to help students develop personal and organizational leadership skills. The program is interdisciplinary in nature and should be of significant benefit to students in all areas of study.

The seven courses are designed to give students a practical and theoretical grasp of leadership. The basic assumption is that leadership can be learned and, therefore, taught. This program has a unique approach to leadership education that combines practical theories of leadership and learning to provide opportunities for students to study the nature of authority, leadership, social and role dynamics, political processes and the values that orient their careers. Students learn personal, diagnostic, operational, and tactical skills. In these classes, students are challenged to investigate self, context, and strategy.

**Required Courses (6 hours):**

SLS 2261 Leadership Fundamentals	(3)
SLS 3140 Survey of Leadership Readings	(3)

**Elective Courses (12 hours):**

SLS 3948 Community Leadership Practicum	(3)
SLS 4010 Theories of Leadership	(3)
SLS 4015 Images of Leadership in Print and Film	(3)
SLS 4120 Leadership in Complex Organizations	(3)
SLS 4129 Ethics and Power in Leadership	(3)