MILITARY SCIENCE

Course Search
Not all courses are offered every semester. Refer to the schedule of courses for each term’s specific offerings.
More Info

Courses

AFR 1101 The Air Force Today 1 Credit
Introduces the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include mission and organization of the Air Force, officer selection, and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems and an introduction to communication skills.
Coreq: AFR 1101L

AFR 1101L General Military Course (GMC) Leadership Laboratory 1 Credit
Air Force customs, courtesies, drills and ceremonies; issuing military commands; instructing, directing and evaluating the preceding skills; studying the environment of an Air Force officer; and learning about areas of opportunity available to commissioned officers. (S-U)
Coreq: AFR 1101

AFR 1120 The Air Force Today 1 Credit
Introduces the United States Air Force and Air Force Reserve Officer Training Corps. Topics include introduction to flight, oral and written communication techniques and an overview of military services.
Coreq: AFR 1120L

AFR 1120L General Military Course (GMC) Leadership Laboratory 1 Credit
Air Force customs, courtesies, drills and ceremonies; issuing military commands; instructing, directing and evaluating the preceding skills; studying the environment of an Air Force officer; and learning about areas of opportunity available to commissioned officers. (S-U)
Coreq: AFR 1120

AFR 2130 The Evolution of USAF Air and Space Power 1 Credit
Examines USAF air and space power from a historical perspective. Covers the earliest aircraft, both World Wars, the Korean and Vietnam conflicts, air and space employment during the Cold War.
Coreq: AFR 2130L

AFR 2130L General Military Course (GMC) Leadership Laboratory 1 Credit
Air Force customs, courtesies, drills and ceremonies; issuing military commands; instructing, directing and evaluating the preceding skills; studying the environment of an Air Force officer; and learning about areas of opportunity available to commissioned officers. (S-U)
Coreq: AFR 2130

AFR 2140 The Evolution of USAF Air and Space Power 1 Credit
Continuation of AFR 2130 and the exploration of Air Force history, beginning with the Vietnam era and culminating with the application of air and space power in recent conflicts.
Coreq: AFR 2140L

AFR 2140L General Military Course (GMC) Leadership Laboratory 1 Credit
Air Force customs, courtesies, drills and ceremonies; issuing military commands; instructing, directing and evaluating the preceding skills; studying the environment of an Air Force officer; and learning about areas of opportunity available to commissioned officers. (S-U)
Coreq: AFR 2140

AFR 3220 Air Force Leadership and Management 3 Credits
Leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics and communication skills required of an Air Force junior officer. Case studies examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts studied.
Coreq: AFR 3220L

AFR 3220L Professional Officer Course (POC) Leadership Laboratory 1 Credit
Advanced leadership experiences planning and controlling military activities of the cadet corps, the preparation and presentation of briefings and other communications, and the interviews, guidance and information to increase cadet understanding, motivation and performance. (S-U)
Coreq: AFR 3220

AFR 3231 Air Force Leadership and Management 3 Credits
Studies leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics and communication skills required of an Air Force junior officer. Case studies examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts studied.
Coreq: AFR 3231L

AFR 3231L Professional Officer Course (POC) Leadership Laboratory 2 Credit
Advanced leadership experiences planning and controlling military activities of the cadet corps, the preparation and presentation of briefings and other communications, and the interviews, guidance and information to increase cadet understanding, motivation and performance. (S-U)
Coreq: AFR 3231

AFR 4201 Preparation for Active Duty 1 3 Credits
Examines the national security process, regional studies, advanced leadership ethics and Air Force doctrine. Topics focus on the military as a profession, officer selection, military justice and civilian control of the military. Within this structure, continued emphasis is given to refining communication skills.
Coreq: AFR 4201L

AFR 4201L Professional Officer Course (POC) Leadership Laboratory 3 Credit
Advanced leadership experiences planning and controlling military activities of the cadet corps, the preparation and presentation of briefings and other communications, and the interviews, guidance and information to increase cadet understanding, motivation and performance. (S-U)
Coreq: AFR 4201

AFR 4211 Preparation for Active Duty 2 3 Credits
Examines advanced leadership ethics, officer selection, preparation for active duty and current issues affecting military professionalism. Continued emphasis is given to refining communication skills.
Coreq: AFR 4211L
Laboratory consists of a two-hour block of instruction that directly supports freshmnan classroom instruction. Participation in at least one weekend field training session, one community service project and two army physical fitness tests are required.

Coreq: MSL 1001

MSL 1002 Basic Leadership 2 Credits

Study and application of the Army ROTC Leadership Development Program (LDP). Instruction includes theory and application of leadership principles, competencies and dimensions. Individual leadership is developed through hands-on instruction in basic, individual military skills. Introduces students to leadership attributes and the application of those attributes in and out of the classroom. Students must register for and attend a two-hour weekly leadership laboratory (MSL 1002L).

MSL 1002L Freshman Leadership Laboratory 0 Credits

Laboratory consists of a two-hour block of instruction that directly supports freshmnan classroom instruction. Participation in at least one weekend field training session, one community service project and two army physical fitness tests are required.

Coreq: MSL 1001

MSL 2102L Sophomore Leadership Laboratory 0 Credits

Laboratory consists of a two-hour block of instruction that directly supports sophomore classroom instruction. Participation in at least one weekend field training session, one community service project and two army physical fitness tests are required.

Coreq: MSL 3202

MSL 3201 Leadership and Problem Solving 3 Credits

Instruction for the advanced ROTC cadet in infantry squad tactics and operations to broaden general military skills and enhance performance at ROTC Advanced Camp. Topics include the ROTC Leadership Development Program (LDP), land navigation and map reading, basic rifle marksmanship techniques, effective written and oral communication skills, troop leading procedures and infantry squad offensive and defensive operations. Cadets must attend a two-hour weekly leadership laboratory and participate in a physical fitness program given at times other than normal class sessions.

MSL 3202 Leadership and Ethics 3 Credits

Improves cadet proficiency in those military subjects necessary to meet minimum standards of technical competence and self-confidence required of a junior officer in the U.S. Army. Prepares cadets for participation at ROTC advanced camp. Major emphasis during course is physical training and field training exercises. Student must attend a weekly two-hour leadership laboratory and participate in physical fitness sessions given at times other than normal class sessions.

MSL 4301 Leadership and Management 3 Credits

Designed to prepare cadets for duty as commissioned officers. Instruction centers on proficiency/familiarization with the military justice system, military administration, the officer professional management system, international laws of war and principles of management/leadership. Students also participate in a physical fitness program.

MSL 4302 Officership 3 Credits

MSL 4905 Independent Study 1-3 Credits

Readings and discussion in advanced topics of military science. Prereq: department permission

MSL 4941 Advanced Leader Training 4 Credits

National advanced leader’s course is the Army’s 5-week leader internship conducted at Fort Lewis, Washington, from June through August. The camp places each cadet and officer candidate in a variety of leadership positions, many of which simulate stressful combat situations. Cadets are evaluated by platoon tactical officers and NCOs. Training is organized into separate committees in a tiered structure, including basic military skills, leadership development, tactical training, basic rifle marksmanship and situational training exercises. Evaluation is continual.

NSC 1110 Naval Science Laboratory 0 Credits

Drill, basic commands, courtesies and honors, orientation and information.

NSC 1110 Introduction to Naval Science 2 Credits

Introduction to the naval profession and to concepts of seapower. Instruction emphasizes the mission, organization and warfare components of the Navy and Marine Corps. Included is an overview of officer and enlisted ranks and rates, training and education and career patterns. Also covers naval courtesy and customs, military justice, leadership and nomenclature, and exposes the student to the professional competencies required to become a naval officer.
NSC 1140 Seapower and Maritime Affairs 3 Credits
U.S. naval history from the Phoenicians to the present with emphasis on major developments. Included is an in-depth discussion of the geopolitical theory of Mahan. Discusses present-day concerns in seapower and maritime affairs, including the economic and political issues of merchant marine commerce, the Navy's involvement in liberation and terrorist movements overseas and the massive changes in the U.S. Navy due to the breakup of the Soviet Union. (WR)

NSC 2102 Naval Science Laboratory 0 Credits
Drill, basic commands, courtesies and honors, orientation and information.

NSC 2121 Naval Ships Systems 1: Engineering 3 Credits
Basic power systems used in naval propulsion systems, a basic understanding of the thermodynamic process, a working knowledge of major auxiliary ship systems and basic consideration for ship design and stability. Basic electrical theory and damage control are also included.

NSC 2122 Naval Ships Systems 2: Weapons 3 Credits
Introduction to the theory, characteristics and principles of operation of naval weapons systems. Includes coverage of types of weapons and fire control systems, capabilities and limitations, theory of target acquisition, identification and tracking, trajectory principles and basics of naval ordnance.

NSC 3103L Naval Science Laboratory 0 Credits
Practical exercises dealing with the specifics of naval organizations and leadership.

NSC 314C Navigation and Naval Operations 1 3 Credits
A comprehensive study of the theory, principles and procedures of ship navigation and movements. Piloting and dead reckoning as well as principles of celestial and electronic navigation. In-depth exposure to the navigational rules-of-the-road and the international regulations for preventing collisions at sea and their application to effective safe navigation. Also includes practical lab work in charting and publication usage.

NSC 3215C Navigation and Naval Operations 2 3 Credits
A continuation of navigation and naval operations. Relative motion theory and the use of a maneuvering board. An understanding of the force, techniques and concepts associated with ship handling, including shipboard watch organization, communication systems and environmental considerations. The role of leadership ethics is discussed while developing an understanding of the process of command and control, dealing specifically with information exchange, conflict resolution and crisis decision making.

Prereq: NSC 3214C

NSC 3221 Evolution of Warfare 3 Credits
The forms of warfare employed by great people in history, within the context of historical flow or continuity in the evolution of warfare. Course develops a basic sense of strategy, demonstrates alternative military actions and explores the impact of historical precedent on military thought and actions as practiced by the great leaders and military organizations. (S) (WR; 4000-word writing credit)

General Education - Social Science WR4

NSC 3225C Fundamentals of Maneuver Warfare 3 Credits
Analyzes the United States Marine Corps as the overarching case study for the advent of maneuver warfare. The value is not simply to learn what has happened in the past, but to use these lessons as the basis for making practical judgments about the present and future.

Prereq: NSC 1110 or instructor permission

NSC 4104L Naval Science Laboratory 0 Credits
Practical exercises dealing with naval organizations and leadership.

NSC 4224 Amphibious Warfare 3 Credits
Historical survey of the projection of seapower ashore. The course defines the concept, explores its doctrinal origins and traces its evolution as an element of naval policy during the 20th century. The case study method is used alongside the theme of general historical continuity to develop an understanding of the relatively new and still maturing concept of amphibious warfare. (H) (WR; 6000-word writing credit)

General Education - Humanities WR6

NSC 4230 Leadership and Management 2 Credits
The principles of naval administration, stressing the experimental approach to learning the principles of leadership and management. The student develops skills in the areas of communication, counseling, control, direction, leadership and management functions and responsibilities through active, guided participation in naval-based case studies, experimental exercises and situational problems. Total quality leadership and professional responsibilities are included.

NSC 4233 Leadership and Ethics 3 Credits
Equips the NROTC student with the skills and abilities required for competence as a commissioned officer. This final capstone course in the NROTC curriculum builds upon and focuses the managerial, professional and ethical competencies developed during previous summer cruise training and naval science courses. Ethical philosophies and real-world situations are studied through lectures, exercises and case studies. Naval personnel management, the administration of discipline and human resource management are additional areas of focus.

NSC 4905C Independent Study 1-3 Credits
Readings, assignments, student presentations and discussions on naval science.

Prereq: department permission