

4. Required Courses and Course Sequence

All Midshipmen are required to enroll in NS202: Naval LAB and Physical Training during each semester. Additionally, Midshipmen are required to enroll in Naval Science courses according to the tables below:

Naval Science Courses

Navy Option

NROTC Class	Semester	Course	Credit Hours
4/C	1	NS11000: Intro to Naval Science	3
	2	NS21300: Seapower and Maritime Affairs	3
3/C	3	NS21400: Leadership and Management	3
	4	NS31000: Navigation	3
2/C	5	NS35000: Naval Engineering	3
	6	NS21200: Naval Weapon Systems	3
1/C	7	NS31100: Naval Operations	3
	8	NS41300: Leadership and Ethics	3

Classes are only offered in the semester that they are listed (Fall/Spring)

Marine Corps Option

NROTC Class	Semester	Course	Credit Hours
4/C	1	NS11000: Intro to Naval Science	3
	2	NS21300: Seapower and Maritime Affairs	3
3/C	3	NS21400: Leadership and Management	3
2 or 3/C	4/6	NS33000: Evolution of Warfare	3
	4/6	NS44000: Fund of Maneuver Warfare	3
1/C	8	NS41300: Leadership and Ethics	3

*NS33000 and NS44000 are offered spring semester only and alternate odd/even years.

NS33000 offered Spring 2018 (even yrs) and NS44000 offered Spring 2017 (odd yrs)

Navy Nurse Option

NROTC Class	Semester	Course	Credit Hours
4/C	1	NS11000: Intro to Naval Science	3
	2	NS21300: Seapower and Maritime Affairs	3
3/C	3	NS21400: Leadership and Management	3
	4		
2/C	5		
	6		
1/C	7	NUR40400: Leadership in Nursing	2
	8	NS41300: Leadership and Ethics	3

Classes are only offered in the semester that they are listed (Fall/Spring)

In addition to Naval Science courses, Midshipmen are expected to advance their knowledge of technical and cultural subjects through enrollment in various courses according to the table below.

Other Required Courses

Subject (Min Sem Hours)	Year Normally Completed	Navy Scholarship	Navy CP	Marine Scholarship	Marine CP	Nurse	OC	MECEP
Calculus (6)	Freshman Or Sophomore	Required					Required	
Physics (6)	Sophomore or Junior	Required					Required	
Algebra/ AdvTrig (6)	Freshman through Junior		Required					
Physical Science (6)	Freshman through Junior		Required					
National Security/ Military History (3)	Freshman through Senior	Required	Required	Required	Required			
<i>Cultural Awareness (3)</i>	Freshman through Senior	Required	Required			Required	Highly Recomm ended	
English (6)	Freshman or Sophomore	Required	Required	Required	Required	Required		

The following list shows courses that are approved for each of the subjects listed above. Other courses may be approved by the PNS on a case-by-case basis (except for courses that fulfill the calculus or physics requirements). Midshipmen who are given college credit for high school calculus or calculus-based physics or who test out of Purdue calculus or calculus-based physics are required to take an additional semester of the subject for which the Midshipman receives credit. All other requirements may be satisfied by course credit granted by Purdue. Check with your Company Officer to ensure that you will satisfy all NROTC requirements.

1. **Calculus:** The calculus sequence will include material through differential and integral calculus of one variable (to be completed by the end of the sophomore year).
First level : MA 16100, 16500.
Second level : MA 16200, 16600.
2. **Physics:** The physics sequence will be calculus-based and cover the traditional topics of mechanics, electricity, magnetism, sound, optics, heat, and other related subject matter (to be completed by the end of the junior year).
First level : PHYS 17200.
Second level : PHYS 24100, 27200.
3. **English:** The English sequence must concentrate on the areas of grammar and composition and require significant student writings.
First level : ENGL 10600, 10800. SCLA101.
Second level : ENGL 26400, 30400, 30600, 0900, 32700, 32800, 39100, 40700, 40900, 42000, 42100, CE 29202/39201 (must take both to complete), NUCL 480.
4. **National Security/Military History:** The National Security/Military History courses shall focus on U.S. military history, world military history, U.S National Security policy, or combinations of these topics.
HIST 15200, 30200, 35100, 38700, 40700, 46500, 58700, POL 13000, 23100, 43500.
5. **Algebra:** The algebra sequence shall be at the level of college algebra or higher (to be completed by the end of the junior year).
First level : MA 15300.
Second level : MA 15800, 15900.

6. **Physical Science:** The physical science sequence can be met by completing a one-year sequence or two courses in an area of physical science.

First level : CHM 11100, 11500, BIOL 11000, 12100,
PHYS 21800, 22000.

Second level : CHM 11200, 11600, BIOL 11100, 13100,
PHYS 21900, 22100.

[Note: PHYS 218 and PHYS 219 must be taken in class at Purdue University. These courses may not be taken via the Internet.]

7. **Cultural Awareness:** The cultural awareness course must have a cultural emphasis on regions of interest to the Navy. This academic requirement is designed to expand our future officer corps' awareness, knowledge, and sensitivity to world cultures and peoples. Foreign language courses that do not provide instruction on culture are insufficient to meet this requirement.

ANTH 20500, 37300, CHNS 28000, ENGL 36600, HIST
24100, 24300, 27200, 34000, 34400, 35900, 54800,
JPNS 28000, PHIL 23000, 23100, POL 13000, 14100,
23500, 34800, SOC 33900, 59100.

Any form of Study Abroad in a region of interest to the Navy will satisfy this requirement.