

2011-2013 EDUCATIONAL SKILL REQUIREMENTS

Undersea Warfare
Subspecialty 6301
Curriculum 525

1. Curriculum Number: 525
2. Curriculum taught at Naval Postgraduate School
3. Students are Fully Funded or Partially Funded: Fully
4. Curriculum Length in Months: 24 months
5. APC Required: 323

NUMBERED ESRs

1. **Mathematics**: The officer will master the mathematical principles and techniques necessary to complete graduate level course work and research related to undersea warfare.
2. **Physics**: The officer will understand physical principles applicable to acoustic, non-acoustic USW systems.
3. **Acoustics**: The officer will understand acoustical phenomena affecting the design, performance, and operation of acoustic USW systems.
4. **Oceanography**: The officer will understand atmospheric and oceanographic processes influencing the performance and tactical use of USW systems.
5. **Signal Processing**: The officer will understand principles of signal processing as they apply to USW systems.
6. **Operations Research**: The officer will understand the principles of USW search, detection, and localization. The officer will understand principles of tactical decision aids and data analysis in the evaluation of USW systems.
7. **Unmanned Systems**: The officer will understand the fundamental technologies and capabilities of unmanned underwater systems and tactical robotics.
8. **Joint Professional Military Education**: Graduates will complete the Navy Joint Professional Military Education Phase I

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requirements. Additionally, they will understand the history of USW and its implications to today's Navy.

9. **Programming, Modeling and Simulation**: The officer will be able to assess models and perform simulations or program solutions related to essential science, engineering, and operational problems.

10. **Problem Solving and Practical Applicability**: The officer will demonstrate the ability to conduct independent analysis in Undersea Warfare and proficiency in written and oral presentations.

APPROVED: 
RADM Barry Bruner (N87)

5 Jan 2012
Date

APPROVED: 
President, Naval Postgraduate School

18 JAN 2012
Date

APPROVED: _____
N15

Date