

Updated FY2017 - FY2019 Educational Skill Requirements  
Operations Research - Logistics Analysis (ORLA)  
(Formerly Joint Operational Logistics (JOL))  
Subspecialty 3212  
Curriculum 361

1. Curriculum Number: 361
2. Curriculum taught at Naval Postgraduate School.
3. Curriculum Length in Months: 24
4. Academic Profile Code Required: 325
5. The officer must understand the fundamental concepts and be familiar with the basic functional areas of Operations Research within the Department of the Navy (DON) and the Department of Defense (DOD) including:
  - a. BASICS (ESR #1): The graduate will possess the mathematical and computer programming skills to support quantitative analysis.
  - b. MODELING UNCERTAINTY (ESR #2): The graduate will be well versed in probability and statistics and their application to Operations Research (OR) problems.
  - c. OPTIMIZATION (ESR #3): The graduate will be able to formulate and solve a wide variety of optimization problems and also be conversant with the major uses of such models in DOD and the private sector.
  - d. STOCHASTIC MODELING (ESR #4): The graduate will be able to formulate and solve problems involving stochastic processes (processes with uncertainty over time) and be familiar with the major applications of such models.
  - e. SIMULATION (ESR #5): The graduate will be able to construct and utilize Discrete Event and Monte Carlo simulations of combat and other processes, particularly logistics themed, that evolve in time, and will be able to deal with statistical issues associated with the need for replication.
  - f. ANALYSIS OF MILITARY OPERATIONS (ESR #6): The graduate will be familiar with US, Allied and potential enemy capabilities, and will be able to model and analyze joint military operations using OR techniques. The graduate will also

be able to develop and evaluate new tactical and logistics concepts for the range of operations from humanitarian assistance/disaster relief to combat.

g. LOGISTICS ANALYSIS (ESR #7): The graduate will understand naval supply systems and joint operational logistics, and will be able to use quantitative analysis techniques in all aspects of logistics support.

h. SYSTEMS ANALYSIS (ESR #8): The graduate will understand the principles and applications of systems analysis as a basis for making key decisions on force requirements, weapon systems, and other defense problems.

i. PRACTICE (ESR #9): The graduate will have gained experience with all aspects of an analytical study, to include completing a formal thesis as a demonstration of their independent analytical capability and proficiency in presenting results both via briefings and in writing.

6. Major Area Sponsor and Subject Matter Experts

a. Major Area Sponsor: OPNAV N8.

b. Subject Matter Expert: NAVSUP Performance and Analysis Division Director (N52).

c. Action Officer SME: NAVSUP/BUPERS-316.

APPROVED:

[Redacted Signature]

Major Area Sponsor

10/26/16  
[DATE]

APPROVED:

[Redacted Signature]

President, NPS

12-15-2016  
[DATE]

APPROVED:

[Redacted Signature]

Director, OPNAV N12

1/27/2017  
[DATE]