

F13-15 EDUCATIONAL SKILL REQUIREMENTS
METOC Operational Sciences
Subspecialty Code 6401P
Curriculum 373

1. Curriculum Number: 373
2. Curriculum taught at NAVPGSCOL.
3. Students are fully funded.
4. Curriculum Length: 27 Months
5. APC Required: 323
6. Community Managers have agreed to allow billets to be coded for METOC Operational Sciences (6401) and officers to be educated for this curriculum.

Designator	OCM Name	Approval Date
180x	LCDR Shane Stoughton	25 Sep 2012

7. The officer must understand the fundamental concepts and be familiar with the basic functional areas of:
 - a. Integration of Oceanic & Atmospheric Parameters: The officer must be able to observe, assimilate, analyze, and predict oceanic and littoral water conditions, and atmospheric conditions using direct and remote sensing observation techniques, statistical analysis, and numerical models. The officer will have a sound understanding of polar, mid-latitude and tropical atmospheric and oceanographic dynamics, including the impact of these region's conditions on military operations and systems.
 - b. Numerical Prediction Systems: The officer will have a thorough understanding of numerical prediction systems as it applies to the physics and dynamics of the ocean and the atmosphere. This understanding should include a broad understanding of the modeling systems to include strengths, weaknesses, and vulnerabilities; the state of current models and techniques; and appropriate applications of deterministic and stochastic techniques.
 - c. Ocean/Atmosphere Problem Solving: The officer must develop critical thinking skills and conduct independent analyses to solve environmentally challenging problems in

the fields of Physical Oceanography and/or Meteorology as they apply to Naval/Joint operations, using modern scientific research techniques, field experience, tools, and equipment.

d. Decision Superiority: The officer must have a thorough understanding of open-ocean and near-shore oceanographic and atmospheric dynamics and properties. The officer must have the ability to apply this knowledge to warfighter decisions using sound decision theory, taking into account available courses of action, assessments of vulnerability, uncertainty, and risk.

e. Other NAVPGSCOL Requirements: The officer must successfully complete all NAVPGSCOL requirements for the Master's Degree in Meteorology and Physical Oceanography.

APPROVED: _____ [Sponsor's Name/Signature] _____ [Date]

APPROVED: _____ [NAVPGSCOL /Signature] _____ [Date]