AY13 EDUCATIONAL SKILL REQUIREMENTS
Meteorology Operational Sciences (PhD)
Subspecialty Code 6403D
Curriculum 372

1. Curriculum Number: 372

2. Curriculum taught at NAVPGSCOL

3. Students are fully funded.

4. Curriculum Length: 36 Months

5. APC Required: Not applicable. PhD selection occurs per Doctoral Studies Program Selection Board or Permanent Military Professor Selection Board.

6. Community Managers have agreed to allow billets to be coded for Oceanography Operational Sciences (6402) and officers to be educated for this curriculum.

<table>
<thead>
<tr>
<th>Designator</th>
<th>OCM Name</th>
<th>Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>123X (PMP)</td>
<td>CDR Brett Hinson</td>
<td>9 Nov 2012</td>
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<tr>
<td>180X (METOC)</td>
<td>CDR Shane Stoughton</td>
<td>25 Sep 2012</td>
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7. The officer must understand the fundamental concepts and be familiar with the basic functional areas of:

1. Integration of Oceanic & Atmospheric Parameters: The officer must be able to oversee basic and transitional research programs designed to observe, assimilate, analyze, and predict oceanic and littoral atmospheric conditions using direct and remote sensing observation techniques, statistical analysis, and numerical models. The officer may be required to manage operational programs or teach masters level courses that develop understanding of polar, mid-latitude and tropical atmospheric dynamics, including the impact of these region's conditions on military operations and systems.

2. Numerical Prediction Systems: The officer must be able to guide and participate in research programs in numerical prediction systems as it applies to the physics and dynamics of the atmosphere. This understanding should include a detailed 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.
3. Ocean Problem Solving: The officer must develop critical thinking skills and conduct independent analyses to solve environmentally challenging problems in the field of Physical Oceanography as it applies to Naval/Joint operations, using modern scientific research techniques, field experience, tools, and equipment.

4. Decision Superiority: The officer must have a thorough understanding of open-ocean and near-shore oceanographic 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.

5. Other NPS Requirements: The officer must successfully complete all NPS requirements for the Doctorate Degree in Meteorology.

APPROVED: [Sponsor’s Name/Signature] 4 Oct 13 [Date]

APPROVED: [NAVPGSCOL /Signature] 14 Nov 13 [Date]

APPROVED: [Director Information, Analysis and Development Division] 20 Dec 13 [Date]

Enclosure (5)