

OC4325 METOC for Warfighter Decision Making

1. Prerequisites

OC/MR 3140 Probability and Statistics for Air-Ocean Sciences is a prerequisite.

2. Course Description

This course introduces decision science in the context of utilizing deterministic vs. stochastic meteorological and oceanographic fore-casts to improve strategic, operational, and tactical planning. Various aspects of generating, communicating, and applying stochastic forecasts for optimal decision making under uncertainty are explored. Prerequisites: MR/OC3140 or similar course on statistics. MR/OC4323 and MR4324 are recommended but not required.

3. Course Syllabus

Chapter 1 – Basic Probability and Statistics

Chapter 2 – Basics of Decision Science

Chapter 3 – Decision Tree Fundamentals

Chapter 4 – Sensitivity

Chapter 5 – Subjective Probability

Chapter 6 – Value of Information

Chapter 7 – Utility and Risk

Chapter 8 – Probabilistic Forecast Information

4. Course Grade

Lab 25%

Mid-Term 30%

Final 45%

Office Hours:

Educating students is my highest priority.

You may come to my office any time from 7:30 am to 6:00 pm.