## ATMOSPHERIC AND OCEANIC SCIENCES, PH.D.

## LEARNING OUTCOMES

- Have an in-depth knowledge of the fields that are relevant to their research areas by taking appropriate courses not only in atmospheric and oceanic sciences, but also in related disciplines including mathematics, statistics, physics, and engineering.
- 2. Ask the right scientific questions: What are the important scientific problems in this field? Can a problem be solved by the available resources in a reasonable time? How to design a scientific approach to tackle the problem?
- Read original papers of their research field to understand how previous investigators approach the problem and how they can improve on previous results.
- 4. Articulate research problems, potentials, and limits with respect to theory, knowledge, or practice within the field of study.
- 5. Formulate ideas, concepts, designs, and/or techniques beyond the current boundaries of knowledge within the field of study.
- 6. Fosters ethical and professional conduct.