

Miami Dade College
MET 1010L
Introduction to Weather Laboratory

Course Description: An elective laboratory to accompany MET 1010. An investigation through experimentation of fundamental meteorological problems. Map analysis, temperature and humidity experiments. Pre/corequisite: MET 1010. Laboratory fee. (2hr. lab)

Course Competencies:

- Competency 1:** The student will demonstrate an ability to make measurements of weather variables in the laboratory by:
- a. using various instruments to make measurements of weather variables such as: temperature, humidity, atmospheric pressure, wind speed and direction;
 - b. organizing and recording instrument readings onto a data sheet for each experiment in the lab;
 - c. estimating and recording the possible measuring errors with selected measurements in the lab.
- Competency 2:** The Student will demonstrate knowledge of the rudiments of laboratory report writing by submitting completed written reports which reflect:
- a. an organized presentation of materials;
 - b. calculations correctly done;
 - c. graphs correctly plotted;
 - d. calculations which indicate how measuring errors can effect the results of an experiment;
 - e. interpretations of results which are consistent with reported observations;
 - f. interpretation of a weather map.
- Competency 3:** The Student will demonstrate an awareness of the importance of observations and measurements as the basis for scientific theory by;
- a. reporting his actual observations even if they conflict with his preconceptions;
 - b. when called for, proposing a formula or simple generalization which applies to the measurements made.

Competency 4: The student will demonstrate an ability to use the scientific method by:

- a. making observations and drawing conclusions reflecting his/hers actual observations even if they conflict with his/hers preconceptions;
- b. hypothesizing by predicting an outcome;
- c. appreciating the experimental nature of science;
- d. discussing the impact of weather on human activities.