

GE Scientific Literacy

I. Regulations

Davis Division Regulation 522 sets forth the Baccalaureate Degree Requirement in General Education. Scientific Literacy, a component of Core Literacies (522.C), requires 3 units of coursework (522.C.4).

Regulation 523 sets forth the Criteria for General Education Certification of courses, stating: “A course in Scientific Literacy instructs students in the fundamental ways scientists use experimentation and analysis to approach problems and generate new knowledge, and the ways scientific findings relate to other disciplines and to public policy.” (523.C.8)

II. Interpretation

The objective of Scientific Literacy is to educate students in the ways in which practitioners in the natural sciences approach problems, pose questions, gather and analyze data, make conclusions based on data analysis, and then generate new hypotheses for testing.

Courses that meet the scientific literacy must include discussion and analysis of experimental and/or observational approaches to natural phenomena, and show students how the results of scientific studies relate to other disciplines and to public policy. These courses need not have a laboratory or field component.

Minimum Elements Checklist

Courses in Scientific Literacy must:

ME1) Demonstrate that a substantial portion of the course covers the scientific method: posing questions, gathering data, making conclusions and generating new hypothesis when appropriate.

ME2) Demonstrate that the course covers how scientific findings relate to other disciplines and public policy.

ME3) Provide specific demonstration and explanation of the evaluation criteria referring to the scientific literacy.

ME4) Demonstrate the achieving the minimum set of learning objectives of the literacy is an integral part of the class.

III. ICMS Submission requirements

The Committee on Courses of Instruction (COCI) evaluates whether the course proposal satisfies the minimum elements checklist above. COCI uses the information provided in the answers to the General Education literacy justification questions and the Expanded Course Description. Departments requesting that a course be approved for this GE literacy must answer the literacy questions in the Integrated Curriculum Management System (ICMS), as listed below.

For this literacy, COCI evaluates the minimum elements as follows:

- ME1: ICMS literacy question 1 and the Expanded Course Description
- ME2: ICMS literacy question 2
- ME3: ICMS literacy question 3
- ME4: Expanded Course Description

1. How will the course instruct students in the ways natural scientists use experimentation and analysis to approach problems and generate new knowledge?
2. How will the course instruct students about the ways findings from research in the natural sciences relate to other disciplines and to public policy?
3. How will the instructors assess student competency in this GE literacy?

Departments may leave the “ICMS Justification” field blank, or use it to provide any additional information about the GE literacy for this course that may be helpful as COCI reviews the request.