Nature of Science, Technology and Mathematics

I. Description of Purpose and Content
Courses satisfying this requirement engage students in the methods of inquiry used in science, engineering, and/or mathematics. Through understanding the processes involved in the production of scientific, technical, and/or mathematical knowledge, students will acquire the scientific, technical, and/or mathematical literacy necessary for them to be more knowledgeable, effective, and responsible citizens of the modern world.

II. Learning Outcomes
Through successful completion of this core requirement, students will:

- Understand the methods of inquiry used in science, engineering, and/or mathematics, and important elements of the knowledge thereby obtained.
- Be able to apply scientific, engineering, and/or mathematical methods of inquiry and knowledge to the solution of significant problems.
- Recognize and appreciate scientific, engineering, and/or mathematical methods of inquiry and knowledge for addressing issues of social importance.

III. Defining Characteristics
Any course satisfying this requirement must include:

- A sustained thematic focus on the methods of inquiry used in, and knowledge acquired in science, engineering, and/or mathematics.
- Assignments that include careful exploration of one or more areas of scientific, engineering, and/or mathematical inquiry, including knowledge thereby produced.
- Activities that require reflective engagement in the methods of inquiry used in science, engineering, and/or mathematics by providing students with opportunities to collect, analyze, and/or evaluate data or arguments, and to develop appropriate conclusions.
- At least one assignment requiring the application of scientific, engineering, and/or mathematical approaches to one or more practical problems.
- At least one assignment that explicitly encourages appreciation of the significant interactions between society, the natural world, and science, engineering, and/or mathematics.