Number, Nature, Mind (NNM)

This document is meant as a guiding tool for faculty proposing courses and for committees reviewing course proposals. It offers a blueprint for best practices for creating GE courses and highlights the aspects of the course that will be considered in review. Course developers can use this document as a potential tool for backward design in creating a new course or revising an existing course for the GE. Reviewers will use this document to provide feedback about the perceived degree of development of connections between course content, assignments, and the GE Theme.

A course proposal includes two main elements: the student-facing syllabus and the submission document that is read only by reviewers. The syllabus should clearly describe the connections between the GE Theme, course content, and assignments. The GE goals and expected learning outcomes (ELOs) should be listed, with a brief statement explaining why and how the course provides students with the tools to achieve these outcomes. The course submission document should point to these connections and explain and link the course's specific approach to the GE Theme via its activities and assignments.

Key elements of a NNM GE theme proposal are:

1. A brief, student-friendly explanatory paragraph in the syllabus immediately following the required listing of the GE category goals and ELOs that details the specific framing and operational definition of number, nature, mind within the course.
2. A list of topics, questions, readings, and/or assignments linked to this framing of number, nature, mind.[1]
3. Assignments that assess student attainment of the Theme ELOs that, in the aggregate, have weight that makes them integral to passing the course[2].

Proposals without these elements will be sent back for revision. Revision requests may be broad suggestions for reconsideration, requests for explanation, or specific points of content or format (with these latter often characterized as "contingencies"). Courses that meet the three key elements but do not meet the guidelines laid out in the rubric below might also receive requests for revisions that must be resolved before final approval.

[1] Common practices include listing a focal topic for each week, module, or session of the course. Full citations of readings should be included. Descriptions of assignments can be helpful.

[2] For example, if the final exam is the only assignment where the students demonstrate their mastery of a specific ELO and has a weight of 10% of the overall grade, a student can receive a good grade (possibly A-) without showing mastery of that ELO.

Course Review Rubric: Number, Nature, Mind

Expectations are in bold on the left-hand column. The other cells of each row provide a qualitative assessment of the ways in which the course proposal materials address that expectation. The perceived strength of the alignment between course materials and the expectation increases from left to right.

	Not Met	Emerging		Met
Critical and logical thinking about the topic or idea of *Number, Nature, Mind* is a primary focus of the course.	Not evident in materials provided.	Course materials describe opportunities for critical and logical thinking, but not specifically about *Number, Nature, Mind*.	Course materials engage with *Number, Nature, Mind* in limited, narrow, or introductory ways.	Course materials address *Number, Nature, Mind* using varied content and highlighting open areas of inquiry, diverse interpretations, and cutting-edge perspectives.
"Advanced Study" of *Number, Nature, Mind*.	Not evident in materials provided.	Course materials describe advanced, in-depth study, but ideas connected to *Number, Nature, Mind* are not the primary emphasis of the course or of the advanced elements within it.	Course materials address *Number, Nature, Mind* in an introductory way, relying mostly on sources that are syntheses or reviews of original writings, research, or creative work.	Course materials describe opportunities for students to engage with *Number, Nature, Mind* through critique and review original writing, creative works, research findings, or other primary materials in addition to secondary materials.
Identify, describe, and synthesize approaches or experiences as they apply to *Number, Nature, Mind*.	Not evident in materials provided.	Course materials describe opportunities for students to identify and describe their experiences with concepts relevant to *Number, Nature, Mind.*	Course materials describe opportunities for students to synthesize disciplinary or other approaches to concepts related to *Number, Nature, Mind* but these are not connected to student's own experiences.	Course materials describe opportunities for students to identify and describe their experiences and academic approaches for understanding concepts relevant to *Number, Nature, Mind* and provide opportunities for synthesis and comparison across approaches, and experiences.

	Not Met	Emerging		Met
Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work related to *Number, Nature, Mind*.	Not evident in materials provided.	Course materials describe opportunities for reflection, self-assessment, and creative work, but these do not focus on *Number, Nature, Mind*.	Course materials describe opportunities for reflection, self-assessment, and creative work on *Number, Nature, Mind,* but these are only minimally part of the graded structure of the course.	Course materials describe multiple opportunities for reflection, self-assessment, and/or creative work on concepts related to *Number, Nature, Mind* that are integral to the course and its assessment strategies.
Student reflections build on their understandings of concepts embodied in *Number, Nature, Mind* by revisiting these in new and challenging contexts.	Not evident in materials provided.	Course materials describe opportunities for engaging with prior understanding of concepts embedded in *Number, Nature, Mind* but do not connect these to new contexts.	Course materials describe opportunities for engaging with prior experiences or understandings of either *Number* or *Nature* or *Mind* but not the intersection of all three.	Course materials describe opportunities for engaging with prior experiences or understandings of concepts of *Number, Nature, Mind* and ways that these prior understandings can be revisited or extended into new contexts.
Analyze and describe how mathematics functions as an idealized system that enables logical proof and/or as a tool for describing and understanding the natural world.	Not evident in materials provided.	Course materials describe opportunities to understand how mathematics functions as a logical system.	Course materials describe opportunities to identify instances and use cases for mathematics to describe or document the natural world.	Course materials describe opportunities to examine, interrogate and interpret the ways in which mathematics have or could be used to describe or document the natural world.