

HMC Core Learning Goals – Jan 2016

The following are student learning outcomes that describe our current core courses, meant to be descriptive, not prescriptive. They are a snapshot of our current Core and may evolve over time.

Each Core Course provides the opportunity for students to demonstrate at least one of the following abilities:

Critical Thinking/Reasoning

Recognize, understand, and construct appropriate patterns, structures, and models to solve problems in novel contexts. (Fluency)

Analyze or construct arguments, considering underlying assumptions and potential counterarguments where appropriate (Critical Thinking)

Reach sound conclusions based on logical analysis of evidence (Sound Reasoning)

Formulate new questions for active inquiry, and demonstrate the competence and confidence to build on one's knowledge base. (Active Engagement)

Identify, evaluate, analyze, synthesize, and document appropriate sources. (Information Literacy)

Disciplinary Thinking

Articulate the beauty, power, and promise of our core disciplines. (Disciplinary Appreciation)

Consider problems from the perspective of each discipline, applying concepts and techniques from that discipline. (Disciplinary Thinking)

Apply the scientific method, including hypothesis formation, data collection, analysis, and interpretation. (Scientific Method)

Interdisciplinary Thinking

Integrate strategies from multiple disciplines to solve problems. (Interdisciplinary Thinking)

Appreciate key ideas in the discipline from a variety of perspectives, including historical perspectives and the contribution of diverse cultures. (History and Culture)

Societal Impact/Application

Link theory to applications of technical work in society (Applications)

Explore the relationship of technical work to society and contemporary cultures (Societal Impact)

Collaboration and Communication

Communicate clearly and persuasively for the intended audience, in oral and/or written form. (Oral and/or Written Communication)

Collaborate effectively as part of a team. (Teamwork)