

# Pathways Concepts and Learning Outcomes

The Pathways curriculum includes seven core learning concepts and two integrative learning concepts. The concepts reflect broad knowledge areas for study and are supported by student learning outcomes. These outcomes describe the observable behaviors that students will demonstrate as they pursue breadth and/or depth related to particular outcomes.

## Concept 1: Discourse

Exchange of ideas in writing or speaking, adapted to specific contexts and developed through discovery, analysis, creation, presentation, and evaluation. A student who is competent in discourse demonstrates the ability to reason, write, and speak effectively for academic, professional, and public purposes. Students will demonstrate increasing proficiency over the years. All student learning outcomes would be met in all courses, but expectations for proficiency would be heightened for advanced/applied courses.

9 credits

6 foundational  
3 advanced/applied

### Learning Outcomes

1. Discover and comprehend information from a variety of written, oral, and visual sources.
2. Analyze and evaluate the content and intent of information from diverse sources.
3. Develop effective content that is appropriate to a specific context, audience, and/or purpose.
4. Exchange ideas effectively with an audience.
5. Assess the product/presentation, including feedback from readers or listeners.

## Concept 2: Critical Thinking in the Humanities

Involves interpretation and analysis of texts and other created artifacts to understand ideas, values, and identities in various spatial, cultural, and temporal contexts.

### Learning Outcomes

1. Identify fundamental concepts of the humanities.
2. Analyze texts and other created artifacts using theories and methods of the humanities.
3. Interpret texts and other created artifacts within multiple historical, intellectual, and cultural contexts.
4. Synthesize multiple complex sources and create a coherent narrative or argument.

6 credits

## Concept 3: Reasoning in the Social Sciences

Utilization of quantitative and qualitative methods to explain the behavior and actions of individuals, groups, and institutions within larger social, economic, political, and geographic contexts.

### Learning Outcomes

1. Identify fundamental concepts of the social sciences.
2. Analyze human behavior, social institutions and/or patterns of culture using theories and methods of the social sciences.
3. Identify interconnections among and differences between social institutions, groups, and individuals.
4. Analyze the ways in which values and beliefs relate to human behavior and social relationships.

6 credits

## Concept 4: Reasoning in the Natural Sciences

Involves the acquisition of the detailed knowledge of one or more of the natural sciences, hands-on experience with how science is conducted, what science can and cannot tell us about the universe, and the relationship between sciences and society.

### Credit Hours

6 credits

(with 2 additional lab credits for students in some majors)

### Learning Outcomes

1. Explain the foundational knowledge of a particular scientific discipline.
2. Apply principles and techniques of scientific inquiry.
3. Evaluate the credibility and the use/misuse of scientific information.
4. Analyze the reciprocal impact of science and society.

# Pathways Concepts and Learning Outcomes

## Concept 5: Quantitative and Computational Thinking

Creative engagement with the world by the manipulation of precisely defined symbolic representations. Quantitative thinking is the formulation of questions that can be addressed using mathematical principles, leading to answers that include reliable and usable measures of accuracy. Computational thinking is the ability to conceive meaningful, information-based representations of the world that can be effectively manipulated using a computer. Courses or course sequences addressing this concept must meet a majority of the student learning outcomes. Only the combination and integration of quantitative and computational courses will serve to meet this learning concept.

9 credits

6 foundational + 3 advanced/applied  
OR 3 foundational + 6 advanced/applied

### Learning Outcomes

1. Explain the application of computational or quantitative thinking across multiple knowledge domains.
2. Apply the foundational principles of computational or quantitative thinking to frame a question and devise a solution in a particular field of study.
3. Identify the impacts of computing and information technology on humanity.
4. Construct a model based on computational methods to analyze complex or large-scale phenomenon.
5. Draw valid quantitative inferences about situations characterized by inherent uncertainty.
6. Evaluate conclusions drawn from or decisions based on quantitative data.

## Concept 6: Critique and Practice in Design and the Arts

Involves a hands-on, minds-on approach by which students acquire the intellectual tools for a richer understanding and knowledge of the process, meaning, and value of the fine, applied, and performing arts and creative design.

6 credits

3 design + 3 arts  
OR 6 integrated design and arts

### Learning Outcomes

1. Identify and apply formal elements of design or the arts.
2. Explain the historical context of design or the arts. Apply interpretive strategies or methodologies in design or the arts.
3. Employ skills, tools, and methods of working in design or the arts.
4. Produce a fully developed work through iterative processes of design or the arts.

## Concept 7: Critical Analysis of Identity and Equity in the United States

Explores the ways social identities related to race, ethnicity, gender, gender identity, gender expression, class, disability status, sexual orientation, religion, veteran status, economic status, age, and other socially salient categories and statuses, influence the human condition and experience, with focus on the United States in particular or in comparative perspective.

Recognizes that people in society have had different experiences and opportunities related to social categories, and challenges students to consider their ethical responsibilities to others in that context and in the context of Ut Prosim, to enhance their capacities to be engaged citizens and visionary leaders in an increasingly diverse society. Students will gain self-awareness of how they are situated relative to those around them based on social identities and foundational knowledge of the interactive dynamics of social identities, power and inequity.

3 credits

may be double-counted with  
another core concept

### Learning Outcomes

1. Analyze how social identities, statuses, space, place, traditions, and histories of inequity and power shape human experience in the United States (particularly or in comparative perspective).
2. Analyze social equity and diversity in the United States (particularly or in comparative perspective) through multiple perspectives on power and identity.
3. Demonstrate how creative works analyze and/or reimagine diversity in human experiences in the United States (particularly or in comparative perspective).
4. Demonstrate how aesthetic and cultural expressions mediate identities, statuses, space, place, formal traditions, and/or historical contexts in the United States (particularly or in comparative perspective).
5. Analyze the interactive relationships between place, space, identity formation, and sense of community in the United States (particularly or in comparative perspective).