# The Shimer School Core Curriculum 

## Basic Core Studies

| Humanities 111 | Social Sciences 141 | Natural Sciences 131 | gic and Mathematics 121 |
| :---: | :---: | :---: | :---: |
| Fundamental Concepts of | Society, Culture, and | Premodern Science and | Classical Foundations of |
| Art and Music | Personality | the Chemical Revolution | Logic and Mathematics |
| 3 credits | 3 credits | 3 credits | 3 credits |
| Humanities 112 | Social Sciences 142 | Natural Sciences 132 | Logic and Mathematics 122 |
| Literature in the Ancient | The Western | Evolution, | Modern Foundations of Logic |
| World | Political Tradition | Classification, and | and Mathematics |
| 3 credits | 3 credits | Animal Behavior 3 credits | 3 credits |
| Humanities 113 | Social Sciences 143 | Natural Sciences 133 |  |
| Literature in the Modern | Political | Classical Physics, |  |
| World | Development of the | Motion, and Light |  |
| 3 credits | United States 3 credits | 3 credits |  |
| Mathematics Competency Examination |  |  |  |
| Basic Studies Comprehensive Examination |  |  |  |
| Advanced Area Cor | Studies |  |  |


| Humanities 211 | Social Sciences 241 <br> Modern Theories of Society, <br> Religious Reasoning <br> 3 credits |
| :--- | :--- |
| Politics, and Economics <br> Humanities 212 | 3 credits <br> Social Sciences 242 |
| Philosophical Reasoning | Social Construction and Social <br> Reality |
| credits | 3 credits |
| Humanities 213 | Social Sciences 243 |
| Critical Assessment in the | Method and Critique in the Social |
| Humanities | Sciences |
| 3 credits | 3 credits |

Area Studies Comprehensive Examination

## Advanced Integrative Core Studies

Integrated Studies 451
Ancient Mesopotamia to Classical Athens 3 credits

Integrated Studies 453
Renaissance, Reformation, and Enlightenment 3 credits

Integrated Studies 452
Classical Rome to Middle Ages
3 credits

Integrated Studies 454
Romanticism to the World Today
3 credits
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Senior Thesis
Thesis Prep 494
Natural Sciences 231
Atoms and Electricity
3 credits
Natural Sciences 232
Twentieth Century Revolutions in Physics
3 credits
Natural Sciences 233
Modern Biology and Genetics
3 credits

Thesis 496

## Summary of Trimester Curriculum

## Lower-Level Sequences (33 credits)

Humanities 111: Fundamental Concepts of Art and Music-This course consists of an investigation of the elements and forms of the musical and visual arts. This course is primarily dedicated to the tasks of active listening and viewing. No previous training in music or facility at drawing or painting is presumed. Working with fundamental concepts in music and painting, students develop a rich vocabulary with which to discuss, describe, and experience music and the visual arts.

Humanities 112: Literature in the Ancient World-This course introduces students to imaginative literature. The course features poetry, epic, drama, and fiction from ancient to medieval times and explores a variety of approaches to narrative and the use of language to create an imagined reality. Selected works of literary criticism are also included.

Humanities 113: Literature in the Modern World-This course continues the work of introducing students to imaginative literature, drawing on poetry, drama, and novels from modern to contemporary times. (Designated Writing Course.)

Logic and Mathematics 121: Classical Foundations of Logic and Mathematics-This course examines the foundations of mathematics and logic from ancient Greece to early modern Europe. It familiarizes students with various methods and systems for reasoning logically, geometrically and arithmetically. It also poses fundamental questions concerning the bases of human thought and knowledge.

Logic and Mathematics 122: Modern Foundations of Logic and Mathematics—This course reviews landmark works in mathematics and logic from early modern Europe to the contemporary world. Students will also study the use of mathematics in reasoning about the physical world. In carrying forward the epistemological and methodological questions raised in IS 1, this course will deepen students’ appreciation of both the power and limitations of mathematical systems. (Prerequisite: Logic and Mathematics 121.)

Natural Sciences 131: Premodern Science and the Chemical Revolution-This course addresses the question, "What is the world made of?" The course begins with the study of the responses of Ancient Greek philosophers to that question, through the birth of modern chemistry with Lavoisier. The course focuses upon several key concepts, such as weight, structure, and complexity, in an attempt to understand the material basis of the world. Finally, students read both sides of two major controversies, the nature of heat and the cause of combustion (phlogiston versus oxygen theory) and weigh the evidence for both sides.

Natural Sciences 132: Evolution, Classification, and Animal Behavior-This course explores theories of phylogeny and the development of organic diversity. The concept of evolution provides groundwork for this inquiry into biological organization. The relationships between evolution, the environment, and animal behavior are foci for investigation and discussion.

Natural Sciences 133: Classical Physics, Motion, and Light—This course explores classical physics: continuous mechanics and the nature of light. Students examine the development of the theories of falling bodies, gravitation, and optical phenomena. The investigation of physical theories includes exploration of such crucial scientific questions as these: What phenomena need to be explained? How are they explained? What constitutes a satisfactory explanation? (Prerequisites: Natural Sciences 131, Logic and Mathematics 121, and the Mathematics Examination)

Social Sciences 141: Society, Culture, and Personality-This course introduces students to major disciplines within the social sciences - anthropology, psychology, and sociology - through the study of influential original texts in those fields. This course focuses on the nature of individual persons and the interrelationship and interaction between those individuals and their cultural and social world. It aims to give a better understanding of how individuals live, develop, and are affected by their culture.

Social Sciences 142: The Western Political Tradition-This course traces the development of the Western political tradition through the study of influential original texts in Western political thought. Course readings address questions about the nature of laws and the authority of the state. Students study the meanings of many of the most significant terms in politics, including freedom, liberty, equality, power, and responsibility.

Social Sciences 143: Political Development of the United States-This course traces the historical development of political thought in the United States, providing a framework for understanding how that thinking has evolved and how it has informed subsequent events. Readings will convey various perspectives on the development of the country, from the period of its founding through selected major events from the twentieth century. (Prerequisite: Social Sciences 142)

Humanities 211: Religious Reasoning-This course introduces students to the intellectual heritage of the world's great religions. Drawing on a range of scriptural, interpretive, argumentative, and autobiographical works, this course introduces students to debates both within and across major religious traditions. (Prerequisite: at least two of Humanities 111, 112, 113.)

Humanities 212: Philosophical Reasoning-This course introduces students to a variety of traditions of systematic reasoned argument. Drawing on texts from antiquity through modernity, this course provides a sampling of philosophical approaches and styles. (Prerequisite: at least two of Humanities 111, 112, 113.)

Humanities 213: Critical Assessment in the Humanities-Humanities 213 concludes the Humanities sequence by introducing students to the wide array of critical and reflective approaches on the disciplines studied in previous courses (fine arts, literature, religious reasoning, philosophy), as well as a range of explicitly experimental works. (Prerequisite: Humanities 111, 112, 113, and, Humanities 211 or 212.)

Natural Sciences 231: Atoms and Electricity-This course serves as both a discussion and a lab course, exploring the interface between chemistry and physics that arose in the 19th century from atomic theory and electromagnetism. It presents both the basics of electrochemistry and electromagnetic phenomena and proceeds through the two great syntheses of classical physical sciences, Mendeleev's periodic table, which gave a framework for chemistry, and Maxwell's theory of electromagnetic waves. It concludes with Curie's unnerving revelation that the "un-cuttable" atom might be divisible into smaller piece. (Prerequisites: Natural Sciences 131 and 133.)

Natural Sciences 232: Twentieth Century Revolutions in Physics—This course focuses on the dramatic developments since the end of the nineteenth century, when physics moved from a macroscopic to a microscopic focus. This development revealed the perplexities involved in relating the microscopic world uncovered by science to everyday human experience. The course focuses on understanding the microscopic and statistical aspects of the workings of the world and then relating them to our own experiences of that world. (Prerequisites: Natural Sciences 132, 133, and 231.)

Natural Sciences 233: Modern Biology and Genetics-This course focuses on developments in biology since the end the neo-Darwinian synthesis. Consideration is given to the level of genetic units within the organism, the level of species, and the environmental level. (Prerequisite: Natural Sciences 232.)

Social Sciences 241: Modern Theories of Society, Politics, and Economics-This course furthers investigation of many of the key questions addressed in the first three courses in the Social Sciences sequence. The course features works from the early 19th through the mid-20th century that examine and critique the Western political tradition while offering various ways of comprehending the social, psychological, economic, and political structure of the modern world. (Prerequisites: Social Sciences 141, 142, 143.)

Social Sciences 242: Social Construction and Social Reality-This course features the examination of 20th-century theories about politics and society. Central to the course is the question as to whether an actual social reality can be posited, or whether and to what extent that which we call "social reality" is the product of constructed under-standings of the social world that reflect jointly-shared assumptions. (Prerequisite: Social Sciences 241.)

Social Sciences 243: Method and Critique in the Social Sciences-This course introduces conceptual frameworks and methodologies used in the social sciences and examines how they have been applied in modern social and political life. Special attention is given to the integration of theory and practice. The course directly examines issues such as the meaning of scientific validity, the status of claims about objectivity in the social sciences, and ethical issues in scientific research. (Prerequisite: Social Sciences 241.)

Integrative Studies 451: Ancient Mesopotamia to Classical Athens-This course presents major landmarks of thought and expression from Sumerian Mesopotamia to the Classical period in Greece. This course introduces many of the various themes that the entire upper level sequence will explore, among which are confrontations with death; the formation of religious and political identities; relationships between sexes, generations and status groups; the causes and outcomes of war; and the uses of narrative. Similarly, the course also compels students to explore these complex themes across a variety of genres, including epic and lyric poetry, dramas, histories and philosophical dialogues and treatises. (Prerequisites: Successful completion of eight trimesters and of the Basic Studies Comprehensive Examination.)

Integrative Studies 452: Classical Rome to Middle Ages-This course continues to explore the multiple and interwoven themes topics introduced in IS 3. It starts with works created roughly from the rise of the Roman Empire and ends with the late medieval period in Europe, northern Africa and western Asia. Beyond imperial Rome, the development of both Christian and Islamic thought and practice are major topics covered by the materials in this course. (Prerequisite: Integrative Studies 411.)

Integrative Studies 453: Renaissance, Reformation, and Enlightenment-This course opens in the late medieval period and closes toward the end of the Enlightenment in Europe. It introduces significant new historical topics including the "Copernican Revolution," Christian Reformation, and new philosophical challenges to religious faith altogether. The course also focuses on women's social, political and economic identities in the development of early modern Europe. (Prerequisite: Integrative Studies 421.)

Integrative Studies 454: Romanticism to the World Today - The final course of the upper level IS sequence opens with the transition from the Enlightenment to Romanticism in Europe. From this starting point it opens up on a wide variety of works and historical topics. Overall, the course is designed to continue exploring the broad themes developed through the entire upper level sequence while engaging critically with the very notion of "Western Civilization." Students explore dramatically new scientific
conceptions of humanity's place in the universe as well as challenges to the coherence of civilization itself in major events and periods of the 20th century. And they encounter voices and perspectives relatively under-represented in the material and written record of "the West," which bid them question how best to construe and react to its putative "tradition." (Prerequisite: Integrative Studies 431.)

Integrative Studies 494: Thesis Prep-This course helps students to get started on their senior thesis. It consists of a number of writing workshops, culminating in the completion of a substantial portion of a draft of 10 to 20 pages. (Prerequisite: Enrollment in a course in the Integrative Studies sequence.)

Integrative Studies 496: Thesis-This course picks up on the work of Thesis Prep. Working independently in consultation with their thesis readers, students complete a full and polished senior thesis. (Prerequisite: Thesis Prep 422; both courses must be taken concurrently if student fails Thesis Prep on the first attempt.)

