<table>
<thead>
<tr>
<th>Course Number</th>
<th>HSS 320</th>
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<tbody>
<tr>
<td>Course Name</td>
<td>Genesis of Math and Science</td>
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<tr>
<td>Credit Value</td>
<td>4 Theory</td>
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**Catalog Course Description**

This seminar, taught according to the conversational method, will examine landmark works and ideas from the history of mathematics and the natural sciences. These disciplines represent a dialogue with a rich tradition. Sir Isaac Newton once wrote that, “If I have seen a little further it is by standing on the shoulders of Giants.” In this class, we will be engaging in conversation with giants from the field of mathematics and the sciences by reading various texts and by asking basic questions that arise from those texts. We will be asking the most basic questions, the kind whose answers are mostly taken for granted in traditional mathematics and sciences classes.

Prerequisite: ENG 112. (4, 4T+0S)

**Student Learning Outcomes/Objectives/Competencies of the Course**

1. Students will explore, through conversation and reflection, landmark works and ideas of the natural sciences and mathematics;
2. Students will confront these classics with a view to how the basic questions have informed the field of mathematics and natural sciences.
3. Through the conversational process, students will challenge their own views and those of others on topics initiated by class texts in discourse.
4. Students will practice critical thinking skills through thoughtful completion of reading responses and completion of a paper which unifies materials from the disciplines presented.

**College-Wide Student Learning Outcomes**

The College Wide outcome assessed for the Bachelor of Integrated Studies program in this course is:

**02. Critical Thinking**

This assessment fits within the Integrated Studies B.A. Assessment as follows:

I. Program Outcomes/Objectives
   a. 1. Critical Thinking: Students will demonstrate the ability to critically analyze complex information.

II. Measure and Findings
   a. Each year at least one dialogue class will complete a rubric on Critical Thinking for a random selection of ten students. The rubric will measure in-class performance in conversation. (Spring 2015—HSS 421)