UMBC UGC New Course Request: **HCST 400**

**Date Submitted:**

**Proposed Effective Date:** Spring 2020

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<thead>
<tr>
<th>Dept Chair or UPD</th>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
<th>Dept</th>
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<tbody>
<tr>
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**COURSE INFORMATION:**

<table>
<thead>
<tr>
<th>Course Number(s)</th>
<th>HCST 400</th>
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<tbody>
<tr>
<td>Formal Title</td>
<td>Independent Study in the Human Context of Science and Technology</td>
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<tr>
<td>Transcript Title (≤30c)</td>
<td>Independent Study in HCST</td>
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<tr>
<td>Recommended Course Preparation</td>
<td>At least one HCST elective.</td>
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<tr>
<td>Prerequisite NOTE: Unless otherwise indicated, a prerequisite is assumed to be passed with a &quot;D&quot; or better.</td>
<td>HCST 100</td>
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<tr>
<td># of Credits Must adhere to the UMBC Credit Hour Policy</td>
<td>3</td>
</tr>
<tr>
<td>Repeatable for additional credit?</td>
<td>Yes ☐ No ☐</td>
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<tr>
<td>Max. Total Credits 3 This should be equal to the number of credits for courses that cannot be repeated for credit. For courses that may be repeated for credit, enter the maximum total number of credits a student can receive from this course. E.g., enter 6 credits for a 3 credit course that may be taken a second time for credit, but not for a third time. Please note that this does NOT refer to how many times a class may be reslaken for a higher grade.</td>
<td></td>
</tr>
<tr>
<td>Grading Method(s)</td>
<td>Reg (A-F) ☐ Audit ☐ Pass-Fail ☐</td>
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**PROPOSED CATALOG DESCRIPTION** (Approximately 75 words in length. Please use full sentences.):
Independent study on an approved topic related to the Human Context of Science and Technology.
Requires approval of HCST Program Director.

**RATIONAL FOR NEW COURSE:**

a) Why is there a need for this course at this time?
The HCST Certificate Program doesn’t currently have a way for students and instructors to offer independent studies as part of the curriculum, which is important to allow HCST students to study topics in greater depth than allowed in either HCST 100 or HCST electives or to cover interdisciplinary topics related to the Human Context of Science and Technology not regularly taught at UMBC.
b) How often is the course likely to be taught?
Offered every semester; taught as needed.
c) How does this course fit into your department's curriculum?
It counts towards the Electives required for the HCST Certificate.
d) What primary student population will the course serve?
Undergraduate HCST students.
e) Why is the course offered at the level (ie. 100, 200, 300, or 400 level) chosen?
The course is an upper-level course intended for juniors and seniors who have already taken HCST 100.
f) Explain the appropriateness of the recommended course preparation(s) and prerequisite(s).
HCST 100 is required of all students completing the HCST certificate, and students should have the foundational background provided by HCST 100 before embarking on advanced independent study. Since the Independent Study is a 400-level course, it would also be helpful if they have also taken at least one HCST elective, though that is not essential.

g) Explain the reasoning behind the P/F or regular grading method.
Given that the class is an independent study and can be used to cover HCST Certificate requirements, P/F and Audit options are not appropriate.

h) Provide a justification for the repeatability of the course.
Since Independent Studies should not constitute more than 3 credits of the HCST Certificate, it does not make sense to allow students to repeat the course.

ATTACH COURSE SYLLABUS (mandatory):

No syllabus exists for this course, as its nature and structure changes with each project. An example of a proposed plan of study, including reading list and requirements, that would be appropriate is provided below.

Sample Syllabus/Plan of Study for HCST 400:

Topic: Science and Democracy

Project Description: This independent study will focus on relation between science and democracy, focusing on both the role of democracy in science and the role of science in democratic society.

Reading List:

- Heather Douglas, *Science, Policy, and the Value-Free Ideal*
- Mark B. Brown, *Science in Democracy: Expertise, Institutions, and Representation*
- Philip Kitcher, *Science, Truth, and Democracy*
- Kim Stanley Robinson, *Fifty Degrees Below*
- Paul Feyerabend, *The Tyranny of Science*
- Bruno Latour, *Politics of Nature: How to Bring the Sciences into Democracy*
- Thomas McGarity & Wendy Wagner, *Bending Science: How Special Interests Corrupt Public Health Research*
- Naomi Oreskes and Erik Conway, *Merchants of Doubt*

Student Learning Outcomes/Objectives:

- Student will hone their ability to read, analyze, and write about complex texts.
- Student will demonstrate knowledge of the major questions about the role of democracy in science and the role of science in democratic society.

Course Requirements: The student will meet weekly with the instructor and produce a final paper of 10-15 pages.