

# History and Philosophy of Science Certificate

Professor Alberto A. Martínez, Director

The History and Philosophy of Science (HAPS) Certificate provides undergraduate students an opportunity to gain a coherent, cross-disciplinary command of the methods and findings that the liberal arts contribute to our understanding of the sciences. Students analyze the dynamic development, concepts, and roles in society of various sciences, as well as the personal, dramatic struggles of famous scientists. Students must complete two courses in history of science, two specific courses in philosophy of science, as well as two electives from a list of pre-approved courses in several departments. Thus, our program requires 18 semester hours of coursework, of which at least 12 semester hours must be upper-division and at least 9 semester hours must be completed in residence at UT Austin. Each semester, the list of approved courses that meet the requirements will be available in the undergraduate advising offices of the Department of History and the Department of Philosophy.

Students must fulfill the following requirements, which *do not* need to be taken in any particular sequence:

Course Number and Title	18 Hours Total	Completed
<p><b>Choose two</b> of these History courses:</p> <p>HIS 322D <i>Scientific Revolution of the 17<sup>th</sup> Century</i>                      HIS 322M <i>History of Modern Science</i>                      HIS 322G <i>History of Modern Life Sciences</i>                      HIS 322R <i>Biology, Behavior, and Injustice</i>                      HIS 329P <i>History of the Atomic Bomb</i>                      HIS 350L 32-<i>The Galileo Affair</i>                      HIS 350L 64-<i>Einstein in an Age of Conflicts</i></p>	<p>3</p> <p>3</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p><b>Symbolic logic is required:</b></p> <p>PHL 313 <i>Introductory Symbolic Logic</i>  <i>Note: The following courses may also fulfill this requirement:</i></p> <ul style="list-style-type: none"> <li>• PHL 313K <i>Logic, Sets, and Functions</i></li> <li>• PHL 313Q <i>Logic and Scientific Reasoning</i></li> <li>• PHL 363 <i>Scientific Method</i></li> <li>• C S 311 <i>Discrete Mathematics for Computer Science</i></li> <li>• C S 311H <i>Discrete Mathematics for Computer Science: Honors</i></li> <li>• M 325K <i>Discrete Mathematics</i></li> </ul>	<p>3</p>	<p><input type="checkbox"/></p>
<p><b>Choose one</b> of these Philosophy of Science courses:</p> <p>PHL 316K <i>Science and Philosophy</i>                      PHL 322 <i>Science and the Modern World</i>                      PHL 363L <i>Topics in Philosophy of Science (any topic, see below)</i></p>	<p>3</p>	<p><input type="checkbox"/></p>
<p><b>Choose two</b> courses from the list of <b>Electives</b>, below, without repeating previous selections. Write them here:</p> <p>_____</p> <p>_____</p>		
<p><input type="checkbox"/> At least 9 hours in residence</p>	<p><input type="checkbox"/> At least 12 hours upper-division</p>	<p><input type="checkbox"/> All coursework must be for a letter grade</p>

**Notes:**

- Some majors require a minor or certificate to earn the degree. Check with your major's academic advisor to determine if the History and Philosophy of Science certificate would fulfill your requirements.
- History majors in the 2016-18 and later *Undergraduate Catalogs* may not earn this certificate.

## Approved elective courses for History and Philosophy of Science Certificate

ANT 324L	<i>Science, Magic, &amp; Religion*</i>	HIS 350R	<i>18-Women in Sickness &amp; Health*</i>
AST 350L	<i>History and Philosophy of Astronomy</i>	HIS 350R	<i>7-Envir History of North America*</i>
BIO 301C	<i>History of Biology*</i>	HIS 362G	<i>Darwin on the Origin of the Species*</i>
C C 306M	<i>Intro Medical/ Scientific Terms</i>	HIS 362G	<i>Women in Science*</i>
C C 348	<i>14-Ancient Greek Medicine*</i>	HIS 365G	<i>5-Science, Ethics, &amp; Society*</i>
C C 348	<i>20-Roman Philosophy and Science*</i>	HIS 366N	<i>16-Biology, Behavior, and Injustice*</i>
CTI 372	<i>Darwin and the Politics of Evolution</i>	HIS 366N	<i>Global History of Disease*</i>
GSD 361F	<i>Squaring the Vienna Circle</i>	PHL 316K	<i>Science and Philosophy***</i>
HIS 317L	<i>14-Building America*</i>	PHL 322	<i>Science and the Modern World</i>
HIS 317L	<i>History of Science in the US*</i>	PHL 325C	<i>Environmental Ethics</i>
HIS 317N	<i>Discovery History*</i>	PHL 325M	<i>Medicine, Ethics, and Society</i>
HIS 322C	<i>Cultural Hist. of World Sci. to 1650</i>	PHL 327	<i>Philosophy of Race and Gender</i>
HIS 322G	<i>History of the Modern Life Sciences</i>	PHL 329U	<i>Perspectives on Science and Math**</i>
HIS 322R	<i>Biology, Behavior, and Injustice</i>	PHL 344M	<i>Philosophy of Mathematics</i>
HIS 322S	<i>Hist. of Genetics/Eugenics</i>	PHL 363	<i>Scientific Method***</i>
HIS 329P	<i>History of the Atomic Bomb</i>	PHL 363L	<i>Topics in Philosophy of Science (all topics)****</i>
HIS 329U	<i>Perspectives on Science and Math**</i>	PHL 365	<i>2-Intro to Cognitive Science*</i>
HIS 350L	<i>32-The Galileo Affair*</i>	PHL 365	<i>Health and Justice*</i>
HIS 350L	<i>63-Electrification*</i>	PHL 375M	<i>British Empiricism*</i>
HIS 350L	<i>64-Einstein in an Age of Conflicts*</i>	PHL 375M	<i>Philosophy of Math and Physics*</i>
HIS 350L	<i>Race, Science, and Racism*</i>	PHY 341	<i>5-Pseudoscience*</i>
HIS 350L	<i>Global Environmental History*</i>	PHY 341	<i>History of Physics*</i>
HIS 350L	<i>Medicine in African History*</i>	UGS 303	<i>Science and Art: Then and Now*</i>
HIS 350L	<i>Environmental History*</i>		

### Notes:

\* Only the specific titles of HIS 317L, HIS 317N, HIS 350L, HIS 350R, HIS 362G, HIS 366N, PHL 365, PHL 375M, ANT 324L, BIO 301C, C C 348, PHY 341, and UGS 303 will count for HAPS certificate.

\*\* HIS 329U / PHL 329U: Only one of these courses will count and they are often restricted to UTeach Natural Sciences students.

\*\*\* PHL 316K and PHL 363: Only one of these courses will count. If a course is officially cross-listed with an approved course, then it would count toward certificate (*HIS 366N-topic 16 = CTI 370-topic 2*).

\*\*\*\* PHL 363L may be repeated if topic varies.

Additional courses may be added in future catalogs.