

Approved Mathematics, Science, and Social Studies Courses for Elementary Education

The following mathematics courses are approved to fulfill the **24-credit mathematics concentration**, as well as the **additional mathematics** course requirement for elementary education teachers.

Approved Mathematics Courses for all Elementary Education Students

Department	Number	Course Name	Credits
MATH	1011Q	Introductory College Algebra and Mathematical Modeling	3
MATH	1020Q	Problem Solving	3
MATH	1030Q	Elementary Discrete Mathematics	3
MATH	1060Q	Pre-Calculus	3
MATH	1070Q	Mathematics for Business and Economics	3
MATH	1071Q	Calculus for Business and Economics	3
MATH	1131Q	Calculus 1	4
MATH	1132Q	Calculus 2	4
MATH	2010Q*	Fundamentals of Algebra and Geometry	3
MATH	2011Q**	Fundamentals of Algebra and Geometry	3
STAT	1000Q	Introduction to Statistics I	4
STAT	1100Q	Elementary Concepts of Statistics	4
STAT	2215Q	Intro to Statistics II	3

NOTE: Please check University of Connecticut [Undergraduate Catalog](#) for course description and required prerequisites for the courses listed above.

* **MATH 2010Q** is required for elementary education students. Prerequisite is PSYC 1100 and one MATH Q course (a statistics course will not count as the prerequisite math course).

****MATH 2011Q** is highly recommended for elementary education students.

ELED Students with 24-credit MATH Concentration – take any of the math in the table above OR the courses below.

Department	Number	Course Name	Credits
ACCT	2001	Principles of Financial Accounting	3
ARE	1333Q	Inro to Data and Visualization	3
CSE	1010	Intro to Computing for Engineers	3
ENGR	1166	Foundations of Engineering	3
PHYS	1010Q	Elements of Physics, CA3-LAB; TOI3, TOI6	4
PHYS	1020Q	Introductory Astronomy, CA3; TOI6	3
PHYS	1025Q	Introductory Astronomy; CA3LAB; TOI6L	4
PHYS	1040QE	Cosmic Origins of Life, CA3; TOI6	3
PHYS	1075Q	Physics of Music, CA3LAB; TOI1, TOI6L	4
PHYS	1201Q	General Physics I, CA3LAB; TOI6L	4
PHYS	1202Q	General Physics II, CA3LAB; TOI6L	4

The following courses are approved to fulfill the **24-credit science concentration**, as well as the **additional science** course requirement for elementary education teachers.

Approved Science Courses

Department	Number	Course Name	Credits
ANSC	1645	The Science of Food, CA3; TOI6	3
BIOL	1102	Foundations of Biology, CA3-LAB; TOI6L	4

Department	Number	Course Name	Credits
BIOL	1103	The Biology of Human Health and Disease, CA3-LAB; TOI6L	4
BIOL	1110	Introduction to Botany, CA3-LAB; TOI6L	4
EEB	2100E	Global Change Ecology CA3, TOI4, TOI6	3
EEB	2202	Evolution and Human Diversity, CA3, CA4-INT; TOI6	3
EEB	2208E	Introduction to Conservation Biology, CA3, TOI4, TOI6	3
EEB	2222E	Plants in a Changing World, CA3; TOI4, TOI6	3
ENVE	1000E	Environmental Sustainability, CA2; TOI4, TOI5	3
ERTH	1000E	The Human Epoch: Living in the Anthropocene, CA3; TOI4, TOI6	3
ERTH	1010	Dinosaurs, Extinctions, and Environmental Catastrophes, CA3; TOI6	3
ERTH	1050	Earth's Dynamic Environment (with Lab), CA3LAB; TOI6L	4
ERTH	1051	Earth's Dynamic Environment, CA3; TOI6	3
ERTH	1052	Earth's Dynamic Environment, CA3LAB; TOI6L	1
ERTH	1070E	Natural Disasters and Environmental Change, CA3; TOI4, TOI6	3
ERTH	2310E	National Parks Unearthed, TOI4	3
EVST	1000E	Introduction to Environmental Studies CA2; TOI4, TOI5	3
GSCU / GEOG	1000E	Introduction to Geography CA2; TOI4, TOI5	3
GEOG	1010	See GSCU 1500	3
GSCU / GEOG	1070E	Natural Disasters and Environmental Change, CA3; TOI4, TOI6	3
GSCU / GEOG	1300E	Climate, Weather, and the Environment, CA3; TOI4, TOI6L	3
GEOG	1302E	See GSCU 1502E	4
GSCU	1500	New Digital Worlds of Geographic Information Science, CA3; TOI6	3
GSCU	1502E	GIS Modeling of Environmental Change, CA3LAB; TOI4	4
GSCU / GEOG	2300E	Introduction to Physical Geography, TOI4, TOI6	3
GSCU / GEOG	2310E	National Parks Unearthed, TOI4	3
GSCU / GEOG	2320E	Climate Change: Current Geographic Issues, CA2; TOI4, TOI5	3
GEOG	2350E	See GSCU 2850E	3
GEOG	2400E	See GSCU 2800E	3
GSCU	2800E	Intro to Sustainable Cities, CA2; TOI3, TOI4	3
GSCU	2850E	Geography of Energy for Sustainability, TOI4, TOI5	3
GSCU / GEOG	3350E	Global Change, Local Action: A Geography of Environmentalism, TOI4	2
GSCU	3300	Climate and Weather	3
GEOG	3400	See GSCU 3300	3
GEOG	3410E	See GSCU 3810E	3
GSCU	3810E	Human Modifications of Natural Environments, TOI4, TOI6	3
MARN	1001E	The Sea Around Us, CA3; TOI4, TOI6	3
MARN	1002E	Introduction to Oceanography, CA3; TOI4, TOI6	3
MARN	1003E	Introduction to Oceanography, CA3-LAB; TOI4, TOI6L	4
NRE	1000E	Environmental Science CA 3, TOI4, TOI6	3
NRE	1235E	Environmental Conservatism, TOI3, TOI4	3
NRE	2215E	Intro. To Water Resources, TOI4	3
NRE	2345	Introduction to Fisheries and Wildlife	3
NRE	2600E	Global Sustainable Natural Resources, CA4-INT; TOI4, TOI5	3
NRE	3145	Meteorology	3
NUSC	1030	Interdisciplinary Approach to Obesity Prevention (Honors course), CA3; TOI6	3
NUSC	1165	Fundamentals of Nutrition, CA3; TOI6	3
NUSC	1645	The Science of Food, CA3; TOI6	3
PHAR	1000	Drugs: Actions and Impact on Health and Society, CA3	3
PHAR	1001E	Toxic Chemicals and Health, CA3; TOI4, TOI6	3
PHYS	1010Q	Elements of Physics, CA3-LAB; TOI6	4
PHYS	1020Q	Introductory Astronomy, CA3; TOI6	3
PHYS	1025Q	Introductory Astronomy, CA3-LAB; TOI6L	4
PHYS	1030Q	Physics of the Environment, CA3; TOI6	3

PHYS	1040QE	Cosmic Origins of Life, CA3; TOI6	3
PLSC	1110	Fundamentals of Horticulture	3
PLSC	1125E	Insects, Food and Culture, CA 4-INT; TOI2, TOI4	3
PLSC	1150	Agricultural Technology and Society, CA3; TOI2, TOI5	3
SLHS	1150	Intro. to Communication Disorders CA2, CA 4; TOI2, TOI3	3

The following History/Geography courses are recommended for the History/Geography single subject, as well as for other elementary educators seeking additional courses or content that could support their elementary social studies teaching.

NOTE:

- Additional history department courses can also count toward the subject area.
- Cannot count more than two 1000-level History or Geography courses towards a history/geography single subject major.
- Courses that are cross-listed as History or Geography may also count (e.g., AFRA 3206).

History and Geography Courses with Content More Likely to Support Elementary Teaching (other history/geography courses can also count towards single subject matter)

<u>Department</u>	<u>Number</u>	<u>Course Name</u>	<u>Credits</u>
HIST	1501/1501W	United States History to 1877, CA1; TOI3, TOI5	3
HIST	2100	The Historian's Craft	3
HIST	2206	History of Science CA1; TOI2, TOI5	3
HIST	2210E	History of the Ocean, CA1; TOI2, TOI4	3
HIST	2222E	Global Environmental History, CA1, CA4-INT; TOI3, TOI4	3
HIST	2530	Asian-American Experience since 1850, CA1; TOI2, TOI3	3
HIST	2570	American Indian History, CA4; TOI2	3
HIST	3201	The History of Human Rights	3
HIST	3206	Black Experience in the Americas, CA1, CA4-INT; TOI2, TOI3	3
HIST	3502/3502W	Colonial America: Native Americans, Slaves, & Settlers, 1492-1760	3
HIST	3504	The American Revolution	3
HIST	3510	Civil War America	3
HIST	3520	Social and Cultural History of Connecticut and New England	3
HIST	3540E/3540WE	American Environmental History, CA1, CA4; TOI2, TOI4	3
HIST	3542E	New England Environmental History, TOI2, TOI4	3
HIST	3554	Immigrants & the Shaping of American History, CA1, CA4; TOI2, TOI5	3
HIST	3559	History of Childhood in the United States	3
HIST	3560	Constructions of Race, Gender, and Sexuality in U.S. History	3
HIST	3561	History of Women and Gender in U.S. to 1850, CA1, CA4; TOI3, TOI5	3
HIST	3563	African American History to 1865, CA1, CA4; TOI3, TOI5	3
GSCU / GEOG	1070E	Natural Disasters and Environmental Change, CA3; TOI4, TOI6	3
GSCU / GEOG	1300E	Climate, Weather, and the Environment, CA3; TOI4, TOI6	3
GSCU / GEOG	1700	World Regional Geography, CA2, CA4-INT; TOI2, TOI3	3
GEOG	2100	See GSCU 2250	3
GSCU / GEOG	2200	Introduction to Human Geography, CA2, CA 4-INT; TOI2, TOI3	3
GSCU	2250	Economic Geography, CA2	3
GSCU / GEOG	2300E	Introduction to Physical Geography, CA3; TOI4, TOI6	3
GSCU / GEOG	2320E	Climate Change: Current Geographic Issues, CA2; TOI4, TOI6	3
GEOG	3300	See GSCU 3300	3
GEOG	3400	See GSCU 3300	3

If you have any questions, please contact Dr. Ann Traynor, ann.traynor@uconn.edu.

July 2026