

General Education: Science, Technology, Engineering and Mathematics (STEM) Courses

2015-2016 Academic Year

Students must take a minimum of 15 credits of Science, Technology, Engineering, and Mathematics (STEM) with the following conditions:

- Students must complete a minimum of 4 credit hours from the Mathematics List.
- Students must complete at least two courses in two different disciplines, for a minimum of 7 credits, from the Science Course List. At least one of these must include or be taken with the accompanying laboratory.
- No more than 4 credit hours may be counted from the Restricted STEM Course list. Courses may not count toward both STEM requirements and HASS requirements.

Some degree programs specify some or all of these STEM credits. Students should check with their academic advisor for specific requirements.

Mathematics List

Students must complete a minimum of 4 credit hours from the Mathematics List.

BUS2300	Quantitative Problem Solving	3
MA1020	Quantitative Literacy	4
MA1030	College Algebra I <i>and</i>	
MA1031	College Algebra II with Trigonometry	6
MA1032	Precalculus	4
MA1135	Calculus for Life Sciences	4
MA1160	Calculus with Technology I	4
MA1161	Calculus Plus with Technology I	5
MA2720	Statistical Methods	4
PSY2720	Statistics for the Behavioral Sciences	4

Science Course List

*Students must complete at least two courses in two different disciplines, for a minimum of 7 credits, from the Science Course List. At least one of these must include or be taken with the accompanying laboratory. Courses or course-groups satisfying the laboratory requirement are designated by *.*

BL1010*	General Biology I	4
BL1040*	Principles of Biology	4
BL2010*	Anatomy & Physiology I (plus BL2011)	4
BL2160*	Botany	4
BL2940	Human Nutrition	3
BL3970	Current Health Issues	3
BL4090	Tropical Island Biology	2
CH1112*	University Chemistry – Studio Lab I	5
CH1150*	University Chemistry I (plus CH1151/1153)	4/5
EH3700*	Lifetime Fitness	3
FW1035*	Wood Anatomy and Properties	4
FW2010*	Vegetation of North America	4
FW3020*	Forest Ecology	3
FW3075	Introduction to Biotechnology	3
FW3320	Fundamentals of Forest Genetics & Genomics	3
FW3330*	Soil Science	4
FW3610*	Ornithology	4
FW3620*	Field Ornithology	1
FW4120	Tree Physiology	3
FW4128	Conservation Genetics	3
FW4220*	Wetlands	4
FW4240*	Mammalogy	4
FW4260*	Population Ecology	3
GE2000*	Understanding the Earth	3
PH1090*	The Physics Behind Music (plus PH1091**)	4
PH1110*	College Physics I (plus PH1111)	4
PH1140*	Applied College Physics I (plus PH1141)	4

PH1160*	Honors Physics I- Mechanics (plus PH1161 or PH1100)	5
PH1600*	Introductory Astronomy (plus PH1610**)	3
PH2100*	University Physics I-Mechanics (plus PH1100)	4
SS3220*	Archaeological Sciences	4

***This laboratory is optional with the associated course. If the laboratory is not taken, the associated course can count as a science course for General Education STEM requirements, but does not satisfy the requirement of taking at least one laboratory course.*

Restricted STEM Courses

No more than 4 credit hours may be counted from the following list of courses. Courses may not count on a degree audit toward both STEM requirements and HASS requirements.

BL1020*	General Biology II	4
CH1122*	University Chemistry Studio Laboratory II ***	5
CH1160*	University Chemistry II (plus CH1161/1163) ***	4/5
CMG1000	Introduction to Construction Management	3
CS1121	Introduction to Programming I	3
CS1122	Introduction to Programming II	3
CS1131	Accelerated Introduction to Programming ***	5
CS1141	C for Java Programmers	2
EC3002	Microeconomic Theory	3
EC4050	Game Theory/Strategic Behavior	3
EC4200	Econometrics	3
EET1120	Circuits I	4
EET1411	Basic Electronics	4
EH1500	Foundations of Kinesiology	3
ENG1001	Engineering Problem Solving	2
ENG1003	Introduction to Computer Aided Drafting	1
ENG1100	Engineering Analysis	2
ENG1101	Engineering Analysis and Problem Solving	3
ENG1102	Engineering Modeling and Design	3
FA4740	Transducer Theory	3
FA4741	Transducer Theory Lab	1
HU3700	Philosophy of Science	3
HU3701	Philosophy of Technology	3
MIS2100	Introduction to Business Programming	3
PH1210	College Physics II (plus PH1200)	4
PH1360	Honors Physics II (plus PH1361)	3
PSY3060	Physiological Psychology	3
SAT1700	Cyber Ethics	3
SS2200	Introduction to Archaeology	3
SS3210	Field Archaeology	var
SS3230	Archaeology of Industry	3
SS3250	Human Origins & Evolution	3
SS3510	History of American Technology	3
SS3511	History of Science in America	3
SS3580	Technology and Western Civilization	3
SS3820	Ethical, Legal, and Societal Implications (ELSI) of Nanotechnology	3
SS4050	GIS Applications for Social Science	3

Any course at the 2000-level or higher in the following STEM disciplines (with the exception of BE2100).

- Biology (BL)
- Chemistry (CH)
- Computer Science (CS)
- Engineering (BE, CE, CM, EE, ENG, ENVE, GE, MEEM, MY, SSE)
- Forestry (FW)
- Geology (GE)
- Mathematics (MA)
- Physics (PH)
- Technology (EET, MET, SAT, SU, TE)

***NOTE that a maximum of 4 credits will count toward STEM requirements.