# General Education: Science, Technology, Engineering and Mathematics (STEM) <br> 15 credits required: 4 credits (minimum) from Mathematics \& 7 credits (minimum) from Science 2016-2017 

Students must take a minimum of 15 credits in STEM following these
requirements: requirements:

- A minimum of 4 credits are required from the Mathematics list
- Complete at least two courses in two different disciplines
(different course prefixes) from the Science list
o Minimum of 7 Science credits required
o at least one of the Science courses must include or be taken with the accompanying laboratory
- No more than 4 credits from the Restricted STEM list may be counted toward the STEM requirement
- Some courses are on the STEM list and the HASS list, but each course can satisfy only one requirement

Some degree programs specify some or all STEM requirements; students should check with their academic advisor for specific requirements

## Mathematics

- Minimum of 4 credits required

| BUS2300 | Quantitative Problem Solving | 3 |
| :--- | :--- | :---: |
| MA1020 | Quantitative Literacy | 4 |
| MA1030 | College Algebra I and |  |
| 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 |
| MAA8888 | Approved Math Elective (transfer credit only) | var |
| PSY2720 | Statistics for the Behavioral Sciences | 4 |
| SS4010 | Social Statistics | 3 |

## Science

- At least two courses in two different disciplines are required; at least one must include or be taken with the accompanying laboratory
- Courses or course-groups satisfying the laboratory requirement are designated by an asterisk (*)
- Minimum of 7 credits required

| BL1010* | General Biology I | 4 |
| :---: | :---: | :---: |
| BL1020* | General Biology II (only applies to Science list if transferred in as a first semester Biology course) | 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 |
| BL9900 | Approved Science - Biology (transfer credit only) | var |
| BLL9900* | Approved Lab Sci - Biology (transfer credit only) | var |
| CH1112* | University Chemistry - Studio Lab I | 5 |
| CH1150* | University Chemistry I (plus CH1151/1153) | 4/5 |
| CH9900 | Approved Science - Chemistry (transfer credit only) | var |
| CHL9900* | Approved Lab Sci - Chemistry (transfer credit only) | var |
| EH3100* | Exercise Assessment and Prescription | 3 |


| EH3700* | Lifetime Fitness | 3 |
| :--- | :--- | ---: |
| FW1035* | Wood Anatomy and Properties | 4 |
| FW2010* | Vegetation of North America | 4 |
| 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 |
| FW9900 | Approved Sci - Forest/Env Sci (transfer credit only) | var |
| FWL9900* | Approved Lab Sci - For/Env Sci (transfer credit only) | var |
| GE2000* | Understanding the Earth | 3 |
| GE9900 | Approved Science - Geology (transfer credit only) | var |
| GEL9900* | Approved Lab Sci - Geology (transfer credit only) | var |
| 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 |
| PH9900 | Approved Science - Physics (transfer credit only) | var |
| PHL9900* | Approved Lab Sci - Physics (transfer credit only) | var |
| 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, but it will not satisfy the laboratory portion of the |  |  |
| requirement. |  |  |

## Restricted STEM

- No more than 4 credits
- No course may count in a degree audit toward both STEM and HASS requirements
BL1020CH1122CH1160CMG1000
CS1121General Biology II4
University Chemistry Studio Laboratory II *** ..... 5
University Chemistry II (plus CH1161/1163) *** ..... 4/5
Introduction to Programming II ..... 33
CS1131 Accelerated Introduction to Programming ***
CS1142 Programming at the Hardware Software Interface ..... 3
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 ..... 3ENG1001ENG1003ENG1100
ENG1101 Engineering Analysis and Problem Solving2
ENG1102
FA2701 Drafting for the Entertainment Industry 3


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${ }^{* *}$ This laboratory is optional with the associated course. If the laboratory is not taken, the associated course can count as a Science course but it will not satisty the laboratory portion of the requirement.

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
SS4009 Survey Methods 3
SS4050 GIS Applications for Social Science 3
***A maximum of 4 credits will count toward STEM requirements
Any course at the 2000-level or higher in the following STEM disciplines (with the exception of BE2100):
Biological Sciences (BL), Chemistry (CH), Computer Science (CS), Engineering (BE, CE, CM, EE, ENG, ENVE, GE, MEEM, MY, SSE), Forest Resources and Environmental Science (FW), Geological Sciences (GE), Mathematics (MA), Physics (PH), Technology (EET, MET, SAT, SU, TE)

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