

Science Middle Grades Course Equivalency Guide

COMPETENCY	LU ONLINE Course Options	Available Courses from: Straighterline Study.com Sophia Learning https://www.liberty.edu/online/transfer-partnerships/	Available College Level Exams: CLEP or DSST/Dantes *all exams are 3 credit hours each unless noted otherwise. Exams <u>do not include</u> Labs. Labs must be completed separately to fulfill the requirement.
Science: 21 minimum hours are required per the VDOE and Liberty's School of Education. The 21 hours must be spread throughout the 5 sections below. One course must be taken in each section to fulfill the required competency.			
Biology	Science Lecture Options: BIOL 101/ Principles of Biology BIOL 102/Principles of Human Biology	Straighterline: BIO 101/Intro to Biology BIO 201/Anatomy & Physiology I BIO 202/Anatomy & Physiology II BIO 250/Microbiology Study.com: Biology 101/Intro to Biology Biology 101L/Intro to Biology w/Lab (<u>4 hours</u>) Biology 102/Basic Genetics Biology 103/Microbiology Biology 105/Anatomy & Physiology Biology 201L/Anat & Phys I w/Lab (<u>4 hours</u>) Biology 202L/Anat & Phys II w/Lab (<u>4 hours</u>) Genetics 101/Intro to Genetics Sophia Learning: SCIE 1020/Human Biology SCIE 1021/Human Biology Lab SCIE 1050/Anatomy & Physiology I SCIE 1051/Anatomy & Physiology I Lab SCIE 1055/Anatomy & Physiology II SCIE 1056/Anatomy & Physiology II Lab SCIE 1045/Microbiology SCIE 1046/Microbiology Lab	CLEP Exams accepted: Biology *Natural Sciences *(3 hours Biology & 3-hours Physics)
Chemistry	At this time, Liberty's Chemistry courses are only offered Residentially. When online courses are available, this guide will be updated.	Straighterline: CHEM 101/General Chem I CHEM 250/Organic Chemistry I CHEM 251/Organic Chemistry II CHEM 450/Biochemistry Study.com: Chemistry 101/General Chemistry Chemistry 111L/Chemistry I w/Lab (<u>4 hours</u>) Chemistry 112L/Chemistry II w/Lab (<u>4 hours</u>) Sophia Learning: CHEM 1001/Intro to Chemistry	CLEP Exams accepted: Chemistry

Physics	Science Lecture Options: PHYS 101/Elements of Physics PHYS 201/General Physics I (includes lab)	Straighterline: PHY 250/General Physics Study.com: Physics 101/Intro to Physics Physics 111/Physics I Physics 112/Physics II	CLEP Exams accepted: *Natural Sciences *(3 hours Biology & 3 hour Physics)
Earth/Space Science	Science Lecture Options: PHSC 121/Intro to Astronomy PHSC 210/Elements of Earth Science PHSC 311/Oceanography PHSC 312/Meteorology ENVR 320/ Environment & Sustainability ENVR 330/ Energy Resources & Efficiencies ENVR 350/ Environmental Science & Policy	Straighterline: ENV 101/Intro to Environmental Science Study.com: Astronomy 101/Intro to Astronomy Earth Science 101/Earth Science Earth Science 104/Intro to Meteorology Environmental Science 101/Environment & Humanity Geology 101/Physical Geology Science 101/Intro to Life Sciences Science 102/Principles of Physical Science Sophia Learning: ENVS 1001/Environmental Science	DSST/Dantes Exams accepted: Astronomy Environmental Science Intro to Geology *Exams do not include Labs. Labs must be completed separately to fulfill the requirement.
Labs (2 labs are required)	Science Lab Options: BIOL 103/Principles of Biology Lab PHYS 103/Elements of Physics Lab PHSC 211/Elements of Earth Science Lab PHSC 122/Elements of Astronomy Lab	Straighterline: BIO101L/Intro to Biology Lab BIO 201L/Anat & Phys I Lab BIO 202L/Anat & Phys II Lab BIO 250L/Microbiology Lab CHEM 101L/Gen Chem I Lab CHEM 450L/Biochemistry Lab PHY 250L/Gen Physics I Lab Study.com: Biology 101L/Intro to Biology w/Lab (4 hours) Chemistry 111L/Chemistry I w/Lab (4 hours) Chemistry 112L/Chemistry II w/Lab (4 hours) Sophia Learning: SCIE 1021/Human Biology Lab SCIE 1051/Anat & Phys I Lab SCIE 1046/Microbiology Lab SCIE 1031/Intro to Chemistry Lab	*Exams do not include Labs. Labs must be completed separately to fulfill the requirement.

Updated KH 8.3.26 ** If you wish to take courses at another institution, please email contentcompevals@liberty.edu for instructions and approval.
 For our Transfer Partnerships, please visit our website at: <https://www.liberty.edu/online/transfer-partnerships/> . Please note, our partnerships update yearly and at times, these courses can change.