

Science Middle Grades Course Equivalency Guide

COMPETENCY	LU ONLINE Course Options	<p style="text-align: center;">Available Courses from: Straighterline Study.com Sophia Learning</p> <p style="text-align: center;">https://www.liberty.edu/online/transfer-partnerships/</p>	<p style="text-align: center;">Available College Level Exams: CLEP DSST/Dantes or Excelsior Exams</p> <p style="text-align: center;">*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.</p>
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	<p style="text-align: center;">Straighterline: BIO 101/Intro to Biology / BIO101L/Intro to Biology Lab BIO 201/Anatomy & Physiology I / BIO 201L/Anat & Phys I Lab BIO 202/Anatomy & Physiology II / BIO 202L/Anat & Phys II Lab BIO 250/Microbiology / BIO 250L/Microbiology Lab</p> <p style="text-align: center;">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 Genetics 101/Intro to Genetics</p> <p style="text-align: center;">Sophia Learning: Human Biology</p>	<p>CLEP Exams accepted: Biology *Natural Sciences *(3 hours Biology & 3 hour Physics)</p> <p>Excelsior Exams accepted: Anatomy & Physiology Microbiology</p>
Chemistry	<p>At this time, Liberty's Chemistry courses are only offered Residentially. When online courses are available, this guide will be updated.</p>	<p style="text-align: center;">Straighterline: CHEM 101/General Chem I / CHEM 101L/Gen Chem I Lab</p> <p style="text-align: center;">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>)</p>	<p>CLEP Exams accepted: Chemistry</p>

Physics	Science Lecture Options: PHYS 101/Elements of Physics PHYS 201/General Physics I (includes lab)	Straighterline: PHY 250/General Physics I / PHY 250L/Gen Physics I Lab Study.com: Physics 101/Intro to Physics Physics 111/Physics I / Physics 112/Physics	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 Sophia Learning: 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 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)	*Exams do not include Labs. Labs must be completed separately to fulfill the requirement.

Updated KH 7.20.21 ** 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.