

Blue Ridge Community and Technical College (BRCTC) A.S. Liberal Arts- Natural Sciences Concentration 2018-2019 Catalog		American Public University System (APUS) B.S. Natural Sciences April 2019	
Course # and Title	Credits	Course # and Title	Credits
		General Education Requirements Fulfilled	18 of 30
		Communication: Writing, Oral, and Multimedia (COMM)	9
ENGL 101: Written English I (ENGL110)	† 3	COMM120: Information and Digital Literacy - fulfilled by Gen Ed Block†	3
		ENGL110: Making Writing Relevant	3
		ENGL221: Scientific Writing (Required)	0 of 3
		Arts and Humanities (ARHU)	6
BRCTC Humanities Option*	3	PHIL202: Philosophy of Science (Required)	0 of 3
		APUS General Education ARHU Course Choice	3
		Civics, Political & Social Sciences (SSPS)	6
BRCTC Economics Option*	3	APUS General Education SSPS Course Choice	3
PSCI 101 American Federal Government (POLS210)	3	APUS General Education SSPS Course Choice	3
		History (HIST)	3
		HIST270: History of Science (Required)	0 of 3
		Mathematics and Applied Reasoning (MAAR)	3
MATH 106 Trigonometry (MATH111)	3	MATH111: College Trigonometry (Required)	3
		Natural Sciences (NASC)	3
		SPST180: Introduction to Astronomy (Required)	0 of 3
		Elective Requirements Fulfilled	19 of 19
BRCTC Social Science Option*	3	Credit used to fulfill General Education requirements†	3
ENGL 102 Writing for the Arts & Humanities (ENGL102)	3	Credit applies to APUS Elective Requirements**	19
BRCTC World History Option*	3		
ENGL 208 Survey of World Literature I (LITR201)	3		
MATH 105 Algebra (MATH110)	3		
MATH 108 Pre-calculus	4		
MATH 114 Elem Probability & Statistics (MATH120)	3		
COMM 202: Fundamentals of Speech (COMM200)	3	Excessive/Non-Applicable Transfer Credit	4
MATH 207 Calculus I - split	1		
		Major Requirements Fulfilled	19 of 36
CHEM 127: General, Organic & Biochem I (CHEM133)	4	CHEM133: General Chemistry I with Lab	4
BIOL 101 General Biological Science I (BIOL133)	4	BIOL133: General Biology I with Lab	4
CHEM 128: General, Organic, & Biochem II (CHEM134)	4	CHEM134: General Chemistry II with Lab	4
BIOL 102 General Biological Science II (BIOL134)	4	BIOL134: General Biology II with Lab	4
MATH 207 Calculus I (MATH225)	3	GEOG103: Physical Geography	0 of 3
		MATH225: Calculus	3
		Choose one of the following: PHYS133: Elements of Physics with Lab, or SCIN233: Physics I with Lab	0 of 4
		MATH226: Calculus II	0 of 3
		Choose one of the following: PHYS134: Elements of Physics II with Lab or SCIN234: Physics II with Lab	0 of 4
		MATH302: Statistics	0 of 3
		Concentration in Biology Requirements Fulfilled	0 of 32
		BIOL240: Elements of Biological Chemistry	0 of 3
		BIOL241: Cell Biology	0 of 3
		SCIN211: Principles of Genetics with Lab	0 of 4
		BIOL342: Evolutionary Biology with Lab	0 of 4
		EVSP416: General Ecology with Lab	0 of 4
		SCIN400: Research Methods in Natural Sciences	0 of 3
		Select 4 courses from the following: BIOL301: Molecular Biology EVSP342: Population Ecology EVSP417: Conservation Biology GEOG200: Fundamentals of Geographic Information Systems I SCIN202: Introduction to Microbiology SCIN206: Marine Biology SCIN310 Vertebrate Zoology SCIN311: Fishery Biology SCIN314: Botany SCIN316: Plant Identification, Taxonomy, and Systematics SCIN401: Mammalogy SCIN402: Ornithology SCIN403: Plant Science SCIN490: Independent Study- Natural Sciences SPST200: Introduction to Space Studies SPST306: Human Space Flight	0 of 12
		Concentration in Earth Science Requirements Fulfilled	0 of 32
		SCIN138: Introduction to Physical Geology with Lab	0 of 4
		GEOG200: Fundamentals of Geographic Information Systems I	0 of 3
		ERSC204: Earth System History	0 of 3
		ERSC206: Weather and Climate	0 of 3
		SCIN261: Introduction to Planetary Science with Lab	0 of 4
		ERSC305: Ocean and Atmospheric Dynamics	0 of 3
		SCIN400: Research Methods in Natural Sciences	0 of 3
		Select 3 courses from the following: ERSC302: Geomorphology ERSC303: Conservation of Natural Resources ERSC401: Natural Hazards and Society EVSP310: Water Science EVSP311: Soil Science EVSP414: Air Quality Management EVSP416: General Ecology GEOG201: Fundamentals of Geographic Information Systems II SCIN490: Independent Study Natural Sciences SPST200: Introduction to Space Studies SPST435: Planetary and Space Exploration SPST465: Space Weather	0 of 9
		Final Program Requirement Fulfilled	0 of 3
		SCIN499: Senior Seminar in Natural Sciences (to be taken as the last course before graduation) ***	0 of 3
Total Credit Applied Towards APUS Degree		Total Program Requirements Fulfilled	56 of 120
*Credit variances in academic placement and credit award can occur based on student course selections and on the APUS' 2018 catalog program requirements. †Per APUS' General Education Block policy, the student's APUS General Education requirements (excluding Required) will be fulfilled on the merit of a conferred Associate of Arts or Associate of Science degree. As the amount of transfer credit may not exceed the sum of transferrable credit the student earned, the amount of transfer credit applicable to the Electives will be reduced by the sum of General Education Block credit awarded.		Note: In order to transfer courses to APUS, the student must earn a grade of "C" or better. **Any transferable course not counted toward General Education or Major requirements may be taken. Please note, courses such as developmental, practicum, internships, clinical, and vocational courses are not transferable. ***Prerequisite: Senior Standing and completion of all major courses prior to enrollment. Not eligible for transfer credit.	