

The purpose of a statewide articulation agreement is to identify the courses a student at a Colorado public community college must complete as part of an AA/AS degree to be guaranteed to be able to complete the designated baccalaureate degree program at any public four-year college and university (hereafter referred to as receiving institutions) that offers that program within the minimum number of credits designated by the Colorado Commission on Higher Education. Studying biology at ACC will provide a foundation in the basics of biology, chemistry, physics, and math necessary to conduct higher-level study of living organisms and natural systems.

Required Courses	Credits	Pre or Co Reqs Rqd	Course Availability		
			Fall	Spr	Sum
General Education Courses					
• Arts / Humanities GT-AH1-AH4	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Arts / Humanities GT-AH1-AH4	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• BIO 111 - General College Biology I with Lab: GT-SC1* (5 Cr.)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CHE 111 - General College Chemistry I with Lab: GT-SC1* (5 Cr.)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• ENG 121 - English Composition I: GT-CO1*(3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• ENG 122 - English Composition II: GT-CO2 (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• History GT-HI1	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• MAT 201 - Calculus I: GT-MA1 (5 Cr.)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Social / Behavioral Science GT-SS1-SS3	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Social / Behavioral Science GT-SS1-SS3	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Additional Required Courses					
• BIO 112 - General College Biology II with Lab: GT-SC1* (5 Cr.)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CHE 112 - General College Chemistry II with Lab: GT-SC1* (5 Cr.)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Elective (See Notes for specific requirements)	4-5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1* (5 Cr.)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• PHY 112 - Physics: Algebra-Based II with Lab: GT-SC1* (5 Cr.)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Pre-Requisites, Co-Requisites, and Recommendations (grade C or better required)

Where requirements are listed as course categories (e.g. Electives, Arts/Humanities) rather than as specific courses, please note that depending upon course choice, pre-requisites may be required.

BIO 111 - General College Biology I with Lab: GT-SC1* (5 Cr.)

- Pre-Requisite: CCR 092 (or higher) or equivalent and MAT 050/MAT 055 or equivalent

BIO 112 - General College Biology II with Lab: GT-SC1* (5 Cr.)

- Pre-Requisite: BIO 111 - General College Biology I with Lab: GT-SC1 OR Score of 75+ on Biology Placement Test

CHE 111 - General College Chemistry I with Lab: GT-SC1* (5 Cr.)

- Pre-Requisite: CCR 092 (or higher) or equivalent and MAT 121 with a grade of "C" or better or equivalent placement scores.

CHE 112 - General College Chemistry II with Lab: GT-SC1* (5 Cr.)

- Pre-Requisite: CHE 111 - General College Chemistry I with Lab: GT-SC1
- Pre-Requisite: MAT 121 - College Algebra or Higher

ENG 121 - English Composition I: GT-CO1*(3 Cr.)

- Co-Requisite: CCR 094 - Studio 121 (3 Cr.)

ENG 122 - English Composition II: GT-CO2 (3 Cr.)

- Pre-Requisite: ENG 121 - English Composition I OR ENG 131 - Technical Writing I

MAT 201 - Calculus I: GT-MA1 (5 Cr.)

- Pre-Requisite: MAT 122 - College Trigonometry: GT-MA1 OR MAT 166 - Pre-Calculus: GT-MA1

PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1* (5 Cr.)

- Pre-Requisite: MAT 121 - College Algebra or Higher

PHY 112 - Physics: Algebra-Based II with Lab: GT-SC1* (5 Cr.)

- Pre-Requisite: MAT 121 - College Algebra or Higher
- Pre-Requisite: PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1

Program Outcomes

- Approach and examine issues related to biology from an evidence-based perspective.
- Employ scientific methodologies to develop hypotheses, design approaches to evaluate them, and critically interpret data to form conclusions.
- Select and apply contemporary technologies to solve problems or compile information, and communicate scientific information clearly and logically.
- Gain a comprehensive knowledge of biological concepts related to evolution, classification, ecology, molecular biology, biodiversity and structure and function in plants, animals and microbes.
- Perform proper procedures and techniques in the laboratory and utilize equipment safely.

Notes

- *This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.
- AAA 101 – College 101: Student Experience is required for all new college students seeking degrees or transfer.
- Course availability is subject to change.

- Electives: Select any Guaranteed Transfer course or any of the following (excluding Special Topics, Independent Study, Capstone, and Internships): AAA 101, AAA 109, AST (100 or higher), BIO (100 or higher), CHE (100 or higher), CIS 118, CSC 119, CSC 126, CSC 160, CSC 161, CSC 165, CSC 200, CSC 225, CSC 233, CSC 236, CSC 240, EGG (100 or higher), any Foreign Language courses (including ASL) numbered 111 or higher, HNR 100, HNR 289, HWE 100, HWE 111, HWE 125, MAT 121 (or higher, except 155 / 156), or PHY 111 (or higher).
- Follow the Recommended Course Sequence on the following pages of this document.
- In order to meet program requirements, students registered for ENG 121 or ENG 131 must also register for CCR 094 unless they can demonstrate otherwise meeting the CCR 094 standard through assessment testing, prior college coursework, or recent High School coursework. See an Advisor for details.
- In order to meet program requirements, students registered for ENG 121 or ENG 131 must also register for CCR 094 unless they can demonstrate otherwise meeting the CCR 094 standard through assessment testing, prior college coursework, or recent High School coursework. See an Advisor for details.
- Recommended courses may be listed above for certain electives; consult with the Academic Advising Office (advising@arapahoe.edu or 303.797.5664) for additional elective recommendations.
- Refer to 20/21 catalog for specific requirements and important information about this degree.
- Students are strongly encouraged to seek academic advising prior to registration regarding the acceptability of online science courses if they anticipate transferring to a 4-year institution or completing graduate work in the sciences or health professions. It should be noted that per Colorado Revised Statute, 23-1-125(1), general education courses taken online are guaranteed to satisfy core course (gtPathways) requirements at all Colorado public institutions of higher education.
- The Colorado Department of Higher Education website has additional information about this statewide agreement.

Graduation Requirements

- All courses required for this degree must be completed with a “C” or better to be considered for transfer to another Colorado institution. Transferability of courses to colleges/universities outside of Colorado is determined by the receiving institution.
- To graduate, students must apply for graduation (form available at www.arapahoe.edu/graduation) by the deadline and meet all degree requirements.

RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

Year 1: Fall	Credits	Course
	5	BIO 111 - General College Biology I with Lab: GT-SC1* (5 Cr.)
	5	CHE 111 - General College Chemistry I with Lab: GT-SC1 (5 Cr.)
	3	ENG 121 - English Composition I: GT-CO1 (3 Cr.)
	3	Social / Behavioral Science GT-SS1-SS3 ~Recommended Social / Behavioral Science Course(s)~ ANT 101 - Cultural Anthropology: GT-SS3* (3 Cr.) ECO 201 - Principles of Macroeconomics: GT-SS1* (3 Cr.) PSY 101 - General Psychology I: GT-SS3* (3 Cr.) PSY 226 - Social Psychology: GT-SS3* (3 Cr.) PSY 238 - Child Development: GT-SS3* (3 Cr.) PSY 249 - Abnormal Psychology: GT-SS3* (3 Cr.) SOC 101 - Introduction to Sociology I: GT-SS3* (3 Cr.)
Year 1: Spring	Credits	Course
	3	Arts / Humanities GT-AH1-AH4 ~Recommended Arts / Humanities Course(s)~ ART 111 - Art History Ancient to Medieval: GT-AH1* (3 Cr.) HUM 115 - World Mythology: GT-AH2* (3 Cr.) HUM 122 - Humanities: Medieval-- Modern: GT-AH2* (3 Cr.) MUS 120 - Music Appreciation: GT-AH1* (3 Cr.) PHI 113 - Logic: GT-AH3* (3 Cr.) PHI 218 - Environmental Ethics: GT-AH3* (3 Cr.) SPA 212 - Spanish Language IV: GT-AH4 (3 Cr.)
	5	BIO 112 - General College Biology II with Lab: GT-SC1 (5 Cr.)
	4-5	Elective ~Recommended Elective(s)~ AST 101 - Astronomy with Lab: Planetary Systems: GT-SC1* (4 Cr.) BIO 201 - Human Anatomy and Physiology I with Lab: GT-SC1* (4 Cr.) BIO 204 - Microbiology with Lab: GT-SC1* (4 Cr.) MAT 121 - College Algebra: GT-MA1* (4 Cr.) MAT 166 - Pre-Calculus: GT-MA1* (5 Cr.)
	3	ENG 122 - English Composition II: GT-CO2 (3 Cr.)
Year 2: Fall	Credits	Course
	5	CHE 112 - General College Chemistry II with Lab: GT-SC1 (5 Cr.)
	5	PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1 (5 Cr.)
	3	Social / Behavioral Science GT-SS1-SS3 ~Recommended Social / Behavioral Science Course(s)~ PSY 101 - General Psychology I: GT-SS3* (3 Cr.) PSY 102 - General Psychology II: GT-SS3* (3 Cr.) PSY 217 - Human Sexuality: GT-SS3* (3 Cr.) PSY 235 - Human Growth and Development: GT-SS3* (3 Cr.) PSY 237 - Child and Adolescent Psychology (3 Cr.) SOC 102 - Introduction to Sociology II: GT-SS3* (3 Cr.) SOC 207 - Environmental Sociology: GT-SS3* (3 Cr.)

Year 2: Spring	Credits	Course
	3	Arts / Humanities GT-AH1-AH4 ~Recommended Arts / Humanities Course(s)~ ART 110 - Art Appreciation GT-AH1* (3 Cr.) HUM 121 - Humanities: Early Civilization: GT-AH2* (3 Cr.) HUM 123 - Humanities: Modern World: GT-AH2* (3 Cr.) LIT 115 - Introduction to Literature I: GT-AH2* (3 Cr.) PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.) PHI 112 - Ethics: GT-AH3* (3 Cr.) SPA 211 - Spanish Language III: GT-AH4 (3 Cr.)
	3	History GT-HI1 ~Recommended History Course(s)~ HIS 101 - Western Civilization: Antiquity-1650: GT-HI1* (3 Cr.) HIS 102 - Western Civilization: 1650-Present: GT-HI1* (3 Cr.) HIS 111 - The World: Antiquity-1500: GT-HI1* (3 Cr.) HIS 112 - The World: 1500-Present: GT-HI1* (3 Cr.) HIS 121 - U.S. History to Reconstruction: GT-HI1* (3 Cr.) HIS 225 - Colorado History: GT-HI1* (3 Cr.) HIS 247 - 20th Century World History: GT-HI1* (3 Cr.)
	5	MAT 201 - Calculus I: GT-MA1 (5 Cr.)
	5	PHY 112 - Physics: Algebra-Based II with Lab: GT-SC1 (5 Cr.)

RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

Year 1: Fall	Credits	Course
	5	BIO 111 - General College Biology I with Lab: GT-SC1* (5 Cr.)
	3	ENG 121 - English Composition I: GT-CO1 (3 Cr.)
	3	Social / Behavioral Science GT-SS1-SS3 ~Recommended Social / Behavioral Science Course(s)~ ANT 101 - Cultural Anthropology: GT-SS3* (3 Cr.) ECO 201 - Principles of Macroeconomics: GT-SS1* (3 Cr.) PSY 101 - General Psychology I: GT-SS3* (3 Cr.) PSY 226 - Social Psychology: GT-SS3* (3 Cr.) PSY 238 - Child Development: GT-SS3* (3 Cr.) PSY 249 - Abnormal Psychology: GT-SS3* (3 Cr.) SOC 101 - Introduction to Sociology I: GT-SS3* (3 Cr.)
Year 1: Spring	Credits	Course
	4-5	Elective ~Recommended Elective(s)~ AST 101 - Astronomy with Lab: Planetary Systems: GT-SC1* (4 Cr.) BIO 201 - Human Anatomy and Physiology I with Lab: GT-SC1* (4 Cr.) BIO 204 - Microbiology with Lab: GT-SC1* (4 Cr.) MAT 121 - College Algebra: GT-MA1* (4 Cr.) MAT 166 - Pre-Calculus: GT-MA1* (5 Cr.)
	3	ENG 122 - English Composition II: GT-CO2 (3 Cr.)
Year 1: Summer	Credits	Course
	3	Social / Behavioral Science GT-SS1-SS3 ~Recommended Social / Behavioral Science Course(s)~ PSY 101 - General Psychology I: GT-SS3* (3 Cr.) PSY 102 - General Psychology II: GT-SS3* (3 Cr.) PSY 217 - Human Sexuality: GT-SS3* (3 Cr.) PSY 235 - Human Growth and Development: GT-SS3* (3 Cr.) PSY 237 - Child and Adolescent Psychology (3 Cr.) SOC 102 - Introduction to Sociology II: GT-SS3* (3 Cr.) SOC 207 - Environmental Sociology: GT-SS3* (3 Cr.)
Year 2: Fall	Credits	Course
	5	BIO 112 - General College Biology II with Lab: GT-SC1 (5 Cr.)
	5	MAT 201 - Calculus I: GT-MA1 (5 Cr.)
Year 2: Spring	Credits	Course
	5	CHE 111 - General College Chemistry I with Lab: GT-SC1 (5 Cr.)
	5	PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1 (5 Cr.)

Year 2: Summer	Credits	Course
	3	Arts / Humanities GT-AH1-AH4 ~Recommended Arts / Humanities Course(s)~ ART 110 - Art Appreciation GT-AH1* (3 Cr.) HUM 121 - Humanities: Early Civilization: GT-AH2* (3 Cr.) HUM 123 - Humanities: Modern World: GT-AH2* (3 Cr.) LIT 115 - Introduction to Literature I: GT-AH2* (3 Cr.) PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.) PHI 112 - Ethics: GT-AH3* (3 Cr.) SPA 211 - Spanish Language III: GT-AH4 (3 Cr.)
	3	Arts / Humanities GT-AH1-AH4 ~Recommended Arts / Humanities Course(s)~ ART 111 - Art History Ancient to Medieval: GT-AH1* (3 Cr.) HUM 115 - World Mythology: GT-AH2* (3 Cr.) HUM 122 - Humanities: Medieval-- Modern: GT-AH2* (3 Cr.) MUS 120 - Music Appreciation: GT-AH1* (3 Cr.) PHI 113 - Logic: GT-AH3* (3 Cr.) PHI 218 - Environmental Ethics: GT-AH3* (3 Cr.) SPA 212 - Spanish Language IV: GT-AH4 (3 Cr.)
	3	History GT-HI1 ~Recommended History Course(s)~ HIS 101 - Western Civilization: Antiquity-1650: GT-HI1* (3 Cr.) HIS 102 - Western Civilization: 1650-Present: GT-HI1* (3 Cr.) HIS 111 - The World: Antiquity-1500: GT-HI1* (3 Cr.) HIS 112 - The World: 1500-Present: GT-HI1* (3 Cr.) HIS 121 - U.S. History to Reconstruction: GT-H1* (3 Cr.) HIS 225 - Colorado History: GT-HI1* (3 Cr.) HIS 247 - 20th Century World History: GT-HI1* (3 Cr.)
Year 3: Fall	Credits	Course
	5	CHE 112 - General College Chemistry II with Lab: GT-SC1 (5 Cr.)
	5	PHY 112 - Physics: Algebra-Based II with Lab: GT-SC1 (5 Cr.)