

Columbia College

2019-2020
CATALOG ADDENDUM

11600 Columbia College Drive
Sonora, California 95370
(209) 588-5100
www.gocolumbia.edu

Columbia College is regionally accredited by

The Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges.

This is an addendum to the Columbia College Catalog for academic year starting May 6, 2019 and ending May 2, 2020. Included are curricular changes that took place after the 2019-2020 Catalog was printed. Please see the 2019-20 Catalog for all policies and procedures, including the Open Class Policy.

The Yosemite Community College District and Columbia College have made every reasonable effort to ensure that this catalog is accurate. The District and College reserve the right to modify, cancel, or add courses and academic awards or requirements without notice for reasons related to enrollment, financial support, or other reasons. The district also reserves the right to add, amend, or repeal any rules, regulations, policies and procedures.



General Education BREADTH REQUIREMENTS

General Education (GE) Breadth Requirements for Associate Degree from Columbia College and Transfer to CSU

Completion of Column 1 on the following pattern will satisfy Associate Degree General Education Requirements for Columbia College. **Completion of Column 2** will satisfy CSU GE Breadth Requirements for transfer to a CSU. The courses that satisfy both patterns are listed in the center column. Transfer students are encouraged to satisfy both patterns at the same time by careful selection of courses, in order to graduate with an Associate Degree as well as transfer to a CSU campus. CSU/UC transfer students should see pages 56 and 57 for an alternative method of completing transferable General Education Requirements. Where indicated, AP exam scores of 3, 4, or 5 may be used to satisfy specific GE breadth requirements. See page 6 for Columbia College's policy on application of credit from Advanced Placement (AP) examinations.

Work with a counselor to determine which column and courses below will best serve your academic goals.



COLUMN 1
AA/AS Degree Pattern



COLUMN 2
AA-T/AS-T Degree & CSU Transfer Pattern

Area A: English Language Communication and Critical Thinking

Complete **TWO COURSES** with at least a C:

- one in A2
- one in A1 or A3

A1: Oral Communication

SPCOM 1, SPCOM 4, SPCOM 9

A2: Written Communication

ENGL 1A, ENGL 1A:E* (or AP Score of 3, 4, or 5)

A3: Critical Thinking

ENGL 1B¹, ENGL 1C, HIST 5¹, PHILO 5¹, SPCOM 2

Complete **THREE COURSES** (nine units minimum) with at least a C:

- one in A1
- one in A2
- one in A3

Area B: Scientific Inquiry and Quantitative Reasoning

Complete **TWO COURSES**:

- one in B1 or B2 (1-199)
- one course (1-199) in B4 with at least a C

B1: Physical Sciences

ASTRO 40, CHEM 2A, CHEM 2B, CHEM 4A, CHEM 4B, CHEM 5, CHEM 14, CHEM 30(L), ESC 5(L), ESC 10, ESC 23(L), ESC 33(L), ESC 42, ESC 50(L), ESC 62, FNR 6, GEOGR 15, PHYCS 1, PHYCS 4A(L), PHYCS 4B(L), PHYCS 5A(L), PHYCS 5B(L), PHYCS 5C(L), PHYCS 30(L), (or AP Score of 3, 4, or 5)

B2: Life Sciences

ANTHR 1³, BIOL 2(L), BIOL 4(L), BIOL 6(L), BIOL 10(L), BIOL 17(L), BIOL 24(L), BIOL 60(L), BIOL 65(L), BIOL 150 (AA/AS degree only), (or AP Score of 3, 4, or 5)

B3: Lab (courses that contain a laboratory component)

BIOL 2(L), BIOL 4(L), BIOL 6(L), BIOL 10(L), BIOL 17(L), BIOL 24(L), BIOL 60(L), BIOL 65(L), CHEM 2AL, CHEM 2BL, CHEM 4AL, CHEM 4BL, CHEM 5L, CHEM 14L, CHEM 30(L), ESC 5(L), ESC 23(L), ESC 33(L), ESC 50(L), PHYCS 4A(L), PHYCS 4B(L), PHYCS 5A(L), PHYCS 5B(L), PHYCS 5C(L), PHYCS 30(L), (or AP Score of 3, 4, or 5)

B4: Mathematics, Quantitative Reasoning

MATH 2, MATH 4, MATH 6, MATH 8, MATH 12, MATH 16, MATH 18A, MATH 18B, MATH 18C, MATH 26, MATH 28, MATH 104 (AA/AS degree only), MATH 106 (AA/AS degree only), (or AP Score of 3, 4, or 5)

Complete a minimum of **THREE COURSES** (nine units minimum):

- one in B1*
- one in B2* (1-99)
- one in B3*
- one course (1-99) in B4 with at least a C

* A B1 or B2 course followed by (L) will also satisfy the B3 requirement

REFERENCES

- ¹ ENGL 1B, HIST 5, or PHILO 5 may satisfy Area A3 or Area C2, but not both.
- ² CHILD 1, HHP 2, PSYCH 20 or PSYCH 35 may be used to satisfy Area D or Area E, but not both.
- ³ ANTHR 1 may be used to satisfy either Area B2 or Area D, but not both.

Continued...

REFERENCES

Continued...

- ⁴ Satisfies Ethnic Studies Requirement
 - ⁵ Credit may be earned for ANTHR 7 or SOCIO 7 CHEM 30 or PHYCS 30
- * CSU/UC-Only 3 units are UC transferable



Area C: Arts and Humanities

Complete ONE COURSE
 from:

- C1 or C2

C1: Arts (Art, Music, Theater)

ART 11, ART 12, ART 13, ART 14, **ART 15**
 DRAMA 10, DRAMA 20, DRAMA 42, DRAMA 43,
 MUSIC 2, MUSIC 10, MUSIC 11, MUSIC 12,
 (or AP Score of 3, 4, or 5)

C2: Humanities (Literature, Philosophy, Languages other than English)

ENGL 1B¹, ENGL 11, ENGL 17, ENGL 18, ENGL 46, ENGL 47, ENGL 49, ENGL 50,
 ENGL 81,
 HIST 5¹,
 HUMAN 1, HUMAN 2, HUMAN 3, HUMAN 4,
 PHILO 1, PHILO 5¹, PHILO 25, PHILO 35,
 SIGN 40A, SIGN 40B, SIGN 40C,
 SPAN 1A, SPAN 1B, SPAN 2A, SPAN 2B,
 (or AP Score of 3, 4, or 5)

Complete THREE COURSES
 (nine units minimum):

- one in C1
 one in C2
 one in C1 or C2

Area D: Social and Behavioral Sciences

Complete ONE COURSE:

- one in D

ANTHR 1³, ANTHR 2, ANTHR 3, ANTHR 7⁵, ANTHR 10, ANTHR 15⁴,
 CHILD 1², CHILD 22, CHILD 36,
 ECON 10, ECON 11 (or AP Score of 3, 4, or 5),
 FNR 1,
 GEOGR 12, GEOGR 20,
 HHP 2², HHP 63,
 HIST 11, HIST 13, HIST 14, HIST 16, HIST 17, HIST 21 (or AP Score of 3, 4, or 5),
 POLSC 10, POLSC 12, POLSC 14, POLSC 16 (or AP Score of 3, 4, or 5),
 PSYCH 1, PSYCH 15, PSYCH 20², PSYCH 24, PSYCH 35², (or AP Score of 3, 4, or 5),
 SOCIO 1, SOCIO 2, SOCIO 5⁴, SOCIO 7⁵,
 SPCOM 5⁴

Complete THREE COURSES
 (nine units minimum) from at
 least two different disciplines:

- _____

Strongly recommended:
 Satisfy the CSU *US History, Constitution, and American Ideals* requirement for CSU graduation by completing POLSC 10 and HIST 16 or HIST 17. See p. 57 for more information.

Area E: Lifelong Learning and Self-Development

Complete ONE COURSE
 (three units minimum):

- one in E

BIOL 50,
 CHILD 1²,
 GUIDE 1, GUIDE 18, GUIDE 30,
 HHP 2², HHP 5, HHP 60,
 INDIS 48,
 PSYCH 5, PSYCH 10, PSYCH 20², PSYCH 30, PSYCH 35², PSYCH 40,
 SOCIO 12, SOCIO 28,
 or (Veterans only) DD 214 form

Complete ONE COURSE
 (three units minimum):

- one in E

Activities Requirement

Complete TWO UNITS of
 “activity” courses:

- at least one unit from HHP activity courses
 one additional unit of activity

See “Activities Requirement for Associate Degree” on page 59 for a list of courses that will satisfy the Activities Requirement for AA or AS degree at Columbia College. Veterans who can present a DD 214 documenting one year of service are exempt from this requirement.

(Activities Requirement does not apply to this pathway.)

IGETC Requirements 2019-2020

Intersegmental General Education Transfer Curriculum for Transfer to the UC or CSU Systems

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University (CSU) or the University of California (UC) system without the need, after transfer, to satisfy specific campus lower-division general education requirements. **IGETC for CSU may also be used to satisfy the requirements of the AA-T or AS-T degree.** Completion of the IGETC is not a requirement for transfer to CSU or UC, nor is it the only way to fulfill the lower-division general education requirements of these systems prior to transfer. Depending upon the major and/or the campus of choice, some students may be better served by taking courses which fulfill the CSU General Education Breadth Requirements (Column II) on page 2, or those listed in the catalog of the CSU or UC campus of choice. Students pursuing majors that require extensive lower-division major preparation may not find the IGETC option to be advantageous. The IGETC will probably be most useful for students who want to keep their options open before making a final decision about transferring to a particular CSU or UC campus.

Educational planning to ensure transfer success

Selection of courses from this list may be affected by one or more factors, including choice of major, university transfer requirements, prerequisite, or sequencing requirements. Failure to plan appropriately WILL adversely affect timely graduation and/or transfer. Students are encouraged to consult with a counselor in developing an individual education plan. (Counseling Office, Manzanita Building, Upper Level, 209-588-5109)

IGETC Certification

A student must request an IGETC Certification from the Admissions & Records Office. **The course requirements for all areas must be fully completed with a grade of C or better before the IGETC can be certified** (students completing an AS-T in Biology or Chemistry may meet IGETC for STEM requirements in lieu of fully completed IGETC). Certification will be sent after the last semester is completed at Columbia College. Courses taken from the IGETC list at another community college will be used in the final certification. Advanced Placement Examination credit may be used in some, but not all areas. See page 6 for Columbia College's policy on application of credit from Advanced Placement (AP) examinations.

Area 1: English Communication

Complete one course each from Group 1A and Group 1B. Students planning to transfer to CSU must also complete one course from Group 1C.

GROUP 1A: English Composition

Complete one course (three semester units).

ENGL 1A

ENGL 1A:E***

(or AP Score of 3, 4, or 5)

GROUP 1B: Critical Thinking/English Composition

Complete one course (three semester units).

ENGL 1B

ENGL 1C

HIST 5*/PHILO 5*

GROUP 1C: Oral Communication (CSU only)

Complete one course (three semester units).

SPCOM 1

SPCOM 4

Area 2A: Mathematical Concepts and Quantitative Reasoning

Complete one course (three semester units).

MATH 2, 6, 12, 16, 18A, 18B, 18C, 26, 28

(or AP Score of 3, 4, or 5)

Area 3: Arts and Humanities

Complete at least three courses (nine semester units). One course must be in Group 3A and one in Group 3B. The third course can be completed in Group 3A or Group 3B.

GROUP 3A: Arts

ART 11, 12, 13, 14, 15

DRAMA 10

MUSIC 2, 10, 11, 12

(or AP Score of 3, 4, or 5)

GROUP 3B: Humanities

ENGL 11, 17, 18, 46, 47, 49, 50, 81

HIST 5*

HUMAN 1, 2, 3, 4

PHILO 1, 5*, 25, 35

SIGN 40B, 40C

SPAN 1B, 2A, 2B

(or AP Score of 3, 4, or 5)

* Courses designated with an asterisk (*) may be counted in one area only.

** Indicates that transfer credit may be limited by either UC or CSU or both.

*** CSU/UC-Only 3 units are UC transferable.

(L) Designates a Laboratory course or a course that includes a Laboratory.

Area 4: Social and Behavioral Sciences

Complete at least three courses from at least two disciplines (minimum nine semester units).

GROUP 4A: Anthropology and Archaeology

ANTHR 1*, 2, 10, 15*

GROUP 4B: Economics

ECON 10, 11

GROUP 4C: Ethnic Studies

ANTHR 15*, SOCIO 5*, SPCOM 5

GROUP 4D: Gender Studies

ANTHR 7, HHP 2, HIST 21, SOCIO 7

GROUP 4E: Geography

GEOGR 12, GEOGR 20

GROUP 4F: History

HIST 11, 13, 14, 16, 17, 21

GROUP 4G: Interdisciplinary, Social and Behavioral Sciences

CHILD 1

GROUP 4H: Political Science, Government and Legal Institutions

POLSC 10, 12, 14, 16

GROUP 4I: Psychology

PSYCH 1, 5, 10, 24, 35

GROUP 4J: Sociology and Criminology

HHP 63, SOCIO 1, 2, 5*, 12,
(or AP Score of 3, 4, or 5)

Area 6: Language Other than English (UC only)

UC transfer students must demonstrate competence (proficiency) in a language other than English equal to two years of high school study.

To demonstrate competence in a language other than English:

- Complete two years of high school level work in the same foreign language with a grade of “C-” or better, **OR**,
- Complete one of the Columbia College courses below with a grade of “C” or better.
SIGN 40B SPAN 1A SPAN 2A
SIGN 40C SPAN 1B SPAN 2B

For other methods of completing Area 6, see a counselor.

U.S. History, Constitution, and American Ideals (CSU only)

Strongly Recommended

Satisfy the CSU US History, Constitution, and American Ideals requirement for CSU graduation by completing POLSC 10 and HIST 16 or HIST 17. See p. 57 for more information

Area 5: Physical and Biological Sciences

Complete at least two courses totaling seven units or more, with one course in Group 5A and one in Group 5B. One Group 5C course is also required unless fulfilled with a Group 5A or 5B course that includes a laboratory (designated by (L)).

GROUP 5A: Physical Sciences

ASTRO 40

CHEM 5**, 14**, 2A, 2B, 4A, 4B, 30(L)

ESC 5(L), 10, 23(L), 33(L), 42, 50(L), 62

GEOGR 15,

FNR 6,

PHYCS 1**, 4A(L), 4B(L), 5A(L), 5B(L), 5C(L), 30(L)

(or AP Score of 3, 4, or 5)

GROUP 5B: Biological Sciences

ANTHR 1*, BIOL 2(L)**, 4(L), 6(L), 10(L),

17(L)**, 24(L), 60(L), 65(L)

(or AP Score of 3, 4, or 5)

GROUP 5C: Laboratory Activity

CHEM 5L, 14L, 2AL, 2BL, 4AL, 4BL

(or another course from 5A or 5B with a lab as indicated by (L))

ADDITION

EFFECTIVE SUMMER 2019



Columbia College/Modesto Junior College

Intradistrict Equivalent Courses 2019-2020

The Yosemite Community College District is home to two community colleges, Columbia College (CC) and Modesto Junior College (MJC). That means that some of Columbia's courses are considered "equivalent" to courses offered at Modesto Junior College. If you have taken courses at either school and wish to take courses at the other, see the course crosswalk below. This list is subject to change. See the Articulation Officer in the Counseling Office if you have questions about course equivalencies between the two colleges. *Please note: although this list indicates equivalent content in courses at both colleges, it does not guarantee that courses will fulfill the same transfer requirements. Please verify by seeing a counselor and using www.assist.org.*

COLUMBIA COURSE	MJC COURSE	COLUMBIA COURSE	MJC COURSE	COLUMBIA COURSE	MJC COURSE	COLUMBIA COURSE	MJC COURSE
ANTHR 1	ANTHR 101	CHEM 4B+4BL	CHEM 113 or CHEM 123	GUIDE 50	MJC Guidance req. satisfied	MUSIC 56	MUSA 154
ANTHR 2	ANTHR 102	CHEM 14+14L	CHEM 143 (4 or 5 units)	GUIDE 100	STSK 78	MUSIC 60	MUSE 155
ANTHR 10	ANTHR 130	CHEM 30 or PHYCS 30	PHSCI 180	HHP 60	HE 110	MUSIC 72	MUSE 181
ANTHR 15	ANTHR 150	CHILD 1	CLDDV 103	HHP 62	HE 101	MUSIC 76	MUSE 161
ART 3	ART 125	CHILD 3	CLDDV 101	HIST 11	HIST 129	MUSIC 78	MUSE 176
ART 9A	ART 123	CHILD 4	CLDDV 167	HIST 21	HIST 116	OFTEC 130	OFADM 304
ART 11	ART 164	CHILD 16	CLDDV 128	HUMAN 1	HUMAN 105	OFTEC 131	OFADM 314
ART 12	ART 165	CHILD 17	CLDDV 154	HUMAN 2	HUMAN 106	PHILO 1	PHILO 101
ART 13	ART 169	CHILD 23	CLDDV 121	HUMAN 3	HUMAN 110	PHILO 25	PHILO 123
ART 21A	ART 147 or 148	CHILD 30	CLDDV 150	HUMAN 4	PHILO 115	PHILO 35	PHILO 135
ART 21B	ART 149	CHILD 31	CLDDV 151	MATH 2	MATH 134	PHYCS 1	PHYS 160
ART 31	ART 108	CHILD 35	CLDDV 107	MATH 4	MATH 105	PHYCS 4A	PHYS 142 (4 or 5 units)
ASTRO 40	ASTRO 160	CHILD 36	CLDDV 262	MATH 6	MATH 101	PHYCS 4B	PHYS 143 (4 or 5 units)
BIOL 2	BIO 101 (4 or 5 units)	CHILD 42	CLDDV 125	MATH 8	MATH 161	PHYCS 5A	PHYS 101 (4 or 5 units)
BIOL 4	ZOOL 101	CHILD 43	CLDDV 122	MATH 12	MATH 130	PHYCS 5B	PHYS 103 (4 or 5 units)
BIOL 6	BOT 101	CHILD 44	CLDDV 127	MATH 18A	MATH 171	PHYCS 4A+4B	PHYS 142+143 (4 or 5 units)
BIOL 2+BIOL 4+		DRAMA 10	THETR 100	MATH 18B	MATH 172	PHYCS 5A+5B+5C	PHYS 101+102+103
BIOL 6	BOT 101+ZOOL 101	DRAMA 20	COMM 120	MATH 18C	MATH 173	PHYCS 30 or CHEM 30	PHSCI 180
BIOL 10	ANAT 125	DRAMA 42	THETR 160	MATH 18A+18B	MATH 171+172	POLSC 10	POLSC 101
BIOL 10+BIOL 60	ANAT 125+PHYSO 101	ECON 10	ECON 101	MATH 101	MATH 29	POLSC 14	POLSC 110
BIOL 17	BIO 111	ECON 11	ECON 102	MATH 104	MATH 90	POLSC 16	POLSC 140
BIOL 24	BIO 114	EMS 157	EMS 350	MATH 106	MJC Mathematics competency is satisfied	PSYCH 1	PSYCH 101
BIOL 60	PHYSO 101	ENGL 1A	ENGL 101	MATH 602	MATH 19 or 20	PSYCH 5	PSYCH 110
BIOL 65	MICRO 101	ENGL 1C	ENGL 103	Columbia Mathematics competency is satisfied	MATH 89	PSYCH 10	PSYCH 141
BIOL 150	AP 50	ENGL 17	ENGL 135	MUSIC 2	MUSG 101	PSYCH 24	PSYCH 105
BUSAD 2A	BUSAD 201	ENGL 18	ENGL 136	MUSIC 4A	MUST 131	PSYCH 30	PSYCH 130
BUSAD 2B	BUSAD 202	ENGL 46	ENGL 137	MUSIC 4B	MUST 132	SOCIO 1	SOCIO 101
BUSAD 18	BUSAD 218	ENGL 47	ENGL 138	MUSIC 5A	MUST 133	SOCIO 2	SOCIO 102
BUSAD 20	BUSAD 248	ENGL 50	ENGL 163	MUSIC 5B	MUST 134	SOCIO 5	SOCIO 150
BUSAD 25 or GUIDE 25	GUIDE 112	ENGL 81	ENGL 132	MUSIC 10	MUSG 121	SOCIO 12	SOCIO 125
BUSAD 30	BUSAD 245	ESC 5	GEOL 161	MUSIC 11	MUSG 122	SPAN 1A	SPAN 101
CCTDM 12	CSCI 250	ESC 23	GEOL 166	MUSIC 31A	MUSG 121	SPAN 1B	SPAN 102
CCTIS 10	CSCI 220	ESC 33	EASCI 161	MUSIC 31	MUSG 122	SPAN 2A	SPAN 103
CCTIS 30	CSCI 223	ESC 50	EASCI 162	MUSIC 11A	MUSA 121	SPCOM 1	COMM 100
CHEM 2A+2AL	CHEM 101	GEOGR 12	GEOG 102	MUSIC 36	MUSA 151	SPCOM 2	COMM 104 or COMM 107
CHEM 2A+2AL+		GEOGR 15	GEOG 101	MUSIC 37	MUSA 152	SPCOM 4	COMM 102
2B+2BL	CHEM 101+CHEM 102	GEOGR 20	GEOG 110	MUSIC 39	MUSA 153	SPCOM 5	COMM 173
CHEM 2B+2BL	CHEM 102	GEOGR 60	GEOG 109	MUSIC 41A+41B	MUSA 123	MUSIC 54	MUSA 163
CHEM 4A+4AL	CHEM 112 or CHEM 122	GUIDE 1	MJC Guidance req. satisfied	MUSIC 49	MUSA 141		
CHEM 4A+4AL+		GUIDE 8	GUIDE 110	MUSIC 50	MUSA 145		
CHEM 4B+4BL	CHEM 112+CHEM 113	GUIDE 11	GUIDE 111	MUSIC 51	MUSA 124		
CHEM 4A+4AL +		GUIDE 18	MJC Guidance req. satisfied	MUSIC 52	MUSA 183		
CHEM 4B+4BL	CHEM 122+CHEM 123	GUIDE 25 or BUSAD 25	GUIDE 112	MUSIC 53	MUSA 173		
		GUIDE 30	MJC Guidance req. satisfied				

Accurate as of 5/29/19. This listing is subject to change.

COURSE CORRECTION
EFFECTIVE SUMMER 2019

Forestry & Natural Resources
PROGRAM

Career and Technical Education Division
 Manzanita, Upper Level, Room 267
 (209) 588-5142
 www.gocolumbia.edu/career_technical

Natural Resources

AS Degree: Natural Resources

▶ Previously offered as an ASOE degree

This Associate in Science (AS) Degree equips students with the applied skills, training, and experience for immediate entry into the workforce, and if desired can be optimized to prepare students for transfer to Natural Resources programs at four-year colleges and universities.

Transfer-oriented students should see a guidance counselor for additional required coursework in ANTHR, BIOL, Calculus, CHEM, Computer Science, ESC, ECON, GEOGR, PHYCS, and Statistics.

PROGRAM STUDENT LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

- Acquire, articulate, create and convey knowledge and understanding on the subject of natural resources management using a variety of methods of communication.
- Attain, use, and develop knowledge and understanding in the subject of natural resources management.
- Use acquired knowledge of natural resources management to make informed decisions about their personal lives, career choices, and the communities in which they live.
- Use multiple thinking strategies to identify and examine real-world examples of concepts explored in coursework and their implications for natural resources management.

DEGREE REQUIREMENTS

■ To earn this associate degree, complete the requirements below with a C or better in each course, in addition to completing the *AA/AS Degree Pathway* (Column 1) of the Columbia College General Education Breadth Requirements on page 60.

Required courses:

FNR 1	Natural Resource Conservation	3
FNR 3	Natural Resources Law and Policy	3
FNR 60	Introduction to Maps and Remote Sensing	2

Complete 1 course: 3

FNR 30	Introduction to Watershed Management (3)
FNR 61	Introduction to Water Resources Management (3)
FNR 63	Water for Consumption (3)
FNR 64	Water Infrastructure in California (3)
FNR 65	Rural Wastewater Strategies (3)
FNR 66	Decentralized Wastewater Management (3)
FNR 67	Operation of Wastewater Treatment Plants (3)

FNR 74 Wastewater Collection Systems (3)

Complete 1 course: 2-3

GEOGR 59	Geographic Information and Global Positioning Systems (2-3)
GEOGR 60	Introduction to Geographic Information Systems (3)

Complete 3 courses: 3-9

BIOL 39	Field Biology (1-2)
BIOL 40	Field Biology: Ecosystems (1)
BIOL 100	A Natural History of California (3)
BIOL 158	Birds of Central California (1)
BIOL 159	Wildflowers (1.5)
BIOL 160	Mushrooms and Other Fungi (1.5)
BIOL 179	Fishing and Fishery Biology of the Sierra Nevada (2)
ESC 35	Field Geology (1)
FNR 11	Natural Resources Field Camp (3)
FNR 12	Tallest, Oldest, Largest (3)
FNR 50	Natural History and Ecology (2)
FNR 71	Water Use Efficiency (1)
FNR 83	Ecological Restoration (1)
FNR 86	California Naturalist Certification (1.5)
FNR 172	Nature Photography (1.5)
FNR 173	Drawing Nature (3)
FNR 174	Nature Journaling (3)
FNR 182	Techniques of Surveying Sierra Nevada Wildlife (2)
FNR 184	Field Ornithology (1)
FNR 187	Edible and Medicinal Plants (3)

Complete 2 courses: 4-8

BIOL 24	Introduction to Environmental Science (4)
ESC 5	Physical Geology (4)
FNR 2	Introduction to Forestry (3)
FNR 10	Dendrology (3)
FNR 22	Ecology and the Use of Fire in Forest Ecosystems (2)
FNR 24	Fire-Fuels Management (3)
FNR 53	Forest Surveying (3)
FNR 62	Applied Forest Inventory & Management (2)
FNR 81	California Wildlife (3)

UNITS REQUIRED IN MAJOR: 20-31

TOTAL UNITS REQUIRED FOR ASSOCIATE DEGREE: 60

COURSE CORRECTION
EFFECTIVE SUMMER 2019

Certificate of Achievement: Natural Resources

► Previously offered as “Natural Resources Technology”

The Certificate of Achievement in Natural Resources helps prepare recipients for immediate employment in entry-level positions in the field of natural resources. The courses that make up the Natural Resources Certificate are also applicable to the Natural Resources AS degree, which has additional General Education requirements.

PROGRAM STUDENT LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

- Acquire, articulate, create and convey knowledge and understanding on the subject of natural resources management using a variety of methods of communication.
- Attain, use, and develop knowledge and understanding in the subject of natural resources management.
- Use acquired knowledge of natural resources management to make informed decisions about their personal lives, career choices, and the communities in which they live.
- Use multiple thinking strategies to identify and examine real-world examples of concepts explored in coursework and their implications for natural resources management.

CERTIFICATE REQUIREMENTS

■ To earn this Certificate of Achievement, complete the course requirements below with at least a C, unless the course can only be completed for P/NP. In those instances, a grade of P is required.

Required courses:

FNR 1	Natural Resource Conservation	3
FNR 3	Natural Resources Law and Policy	3
FNR 60	Introduction to Maps and Remote Sensing	2

Complete 1 course: 3

FNR 30	Introduction to Watershed Management (3)
FNR 61	Introduction to Water Resources Management (3)
FNR 63	Water for Consumption (3)
FNR 64	Water Infrastructure in California (3)
FNR 65	Rural Wastewater Strategies (3)
FNR 66	Decentralized Wastewater Management (3)
FNR 67	Operation of Wastewater Treatment Plants (3)
FNR 74	Wastewater Collection Systems (3)

Complete 1 course: 2-3

GEOGR 59	Geographic Information and Global Positioning Systems (2-3)
GEOGR 60	Introduction to Geographic Information Systems (3)

Complete 3 courses: 3-9

BIOL 39	Field Biology (1-2)
BIOL 40	Field Biology: Ecosystems (1)
BIOL 100	A Natural History of California (3)
BIOL 158	Birds of Central California (1)
BIOL 159	Wildflowers (1.5)
BIOL 160	Mushrooms and Other Fungi (1)
BIOL 179	Fishing and Fishery Biology of the Sierra Nevada (2)
ESC 35	Field Geology (1-2)
FNR 11	Natural Resources Field Camp (3)
FNR 12	Tallest, Oldest, Largest (3)
FNR 50	Natural History and Ecology (2)
FNR 71	Water Use Efficiency (1)
FNR 83	Ecological Restoration (1)
FNR 86	California Naturalist Certification (1.5)
FNR 172	Nature Photography (1.5)
FNR 173	Drawing Nature (3)
FNR 174	Nature Journaling (3)
FNR 182	Techniques of Surveying Sierra Nevada Wildlife (2)
FNR 184	Field Ornithology (1)
FNR 187	Edible and Medicinal Plants (3)

Complete 2 courses: 4-8

BIOL 24	Introduction to Environmental Science (4)
ESC 5	Physical Geology (4)
FNR 2	Introduction to Forestry (3)
FNR 10	Dendrology (3)
FNR 22	Ecology and Use of Fire in Forest Ecosystems (2)
FNR 24	Fire-Fuels Management (3)
FNR 53	Forest Surveying (3)
FNR 62	Applied Forest Inventory and Management (2)
FNR 81	California Wildlife (3)

TOTAL UNITS REQUIRED FOR CERTIFICATE OF ACHIEVEMENT:
 20-31

NEW PROGRAM
EFFECTIVE FALL 2019

Hospitality Management PROGRAM

Career and Technical Education Division
Manzanita, Upper Level, Room 267
(209) 588-5142
www.gocolumbia.edu/career_technical

Certificate of Achievement: Hospitality Supervision

The coursework contained in this certificate prepares the students for supervisory roles such as lead decorator, lead pastry cook, pastry sous chef, lead line cook, jr sous chef, bar supervisor, dining room supervisor, or shift supervisor.

PROGRAM STUDENT LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

- Demonstrate technical and communication skills needed to direct others in the performance of baking and pastry shop
- Describe and execute daily product need inventories, order procedures, staffing requirements, station assignments, and production lists.

CERTIFICATE REQUIREMENTS

To earn this Certificate of Achievement, complete the course requirements below with at least a C, unless the course can only be completed for P/NP. In those instances, a grade of P is required.

Required courses:

HPMGT 102	Introduction to Hospitality Careers	1.5
HPMGT 104	Hospitality Laws and Regulations	3
HPMGT 120	Safety and Sanitation	1
HPMGT 122	Restaurant Math	1
HPMGT 133A	Introduction to Commercial Food Preparation	3
HPMGT 134	Commercial Baking: Beginning	2.5

Emphasis: Complete one concentration (must complete two courses in a concentration for a total of 4 - 6.5 units)

Kitchen Concentration (complete two courses)

HPMGT 128	Kitchen Management	3
HPMGT 140	Contemporary International Cuisine	3.5
HPMGT 142	Garde Manger	3

Hotel and Restaurant Concentration (complete two courses)

HPMGT 136	Dining Room Service and Management I	2
HPMGT 146	Dining Room Service and Management II	2-3.5

Baking and Pastry Arts Concentration (complete two courses)

HPMGT 135	Commercial Baking: Advanced	3
HPMGT 137	Chocolate, Sugar, and Confections	3
HPMGT 138	Specialty Breads and Viennoiserie	3
HPMGT 141	Restaurant Desserts	2

**TOTAL UNITS REQUIRED FOR CERTIFICATE OF ACHIEVEMENT:
16-18.5**



ART (ART)

ART 15 — History of Graphic Design, 3 units

54 Lecture Hours, 108 Out-of-Class Hours = 162 Total Student Learning Hours

This course is a survey of the evolution of Graphic Design beginning with the development of writing and ending with the revolution of digital media. It looks at the history of visual communication and how it has evolved in art, graphic design, illustration and popular culture from the 19th century to the present. The survey takes into account sociopolitical and cultural contexts as well as artistic and technological characteristics of specific art movements. Students will create a project that will be based on a specific art movement and/or designers studied. Not repeatable. **Transfer:** (CSU/UC) (CSU-GE: C1) (IGETC: 3A)

ART 53/CCTDM 53 — Computer Graphics I, 3 units

36 Lecture Hours, 54 Laboratory Hours, 72 Out-of-Class Hours = 162 Total Student Learning Hours

Materials fee required

This course introduces the student to the fundamentals of computer graphics. Topics include the elements and principles of design, concept development, characteristics of vector and raster digital files, color modes, digital drawing and painting, and formatting for print and the Web. Students will acquire basic skills in current digital illustration software and create original design pieces. Credit may be earned for only one of the following: CCTDM 53 or ART 53. Not repeatable. **Transfer:** (CSU/UC) C-ID: (ARTS 250)

CCTDM

(COMPUTER AND COMMUNICATIONS TECHNOLOGY: DIGITAL MEDIA)

CCTDM 53/ART 53—Computer Graphics I, 3 units

36 Lecture Hours, 54 Laboratory Hours, 72 Out-of-Class Hours = 162 Total Student Learning Hours

Materials fee required

This course introduces the student to the fundamentals of computer graphics. Topics include the elements and principles of design, concept development, characteristics of vector and raster digital files, color modes, digital drawing and painting, and formatting for print and the Web. Students will acquire basic skills in current digital illustration software and create original design pieces. Credit may be earned once for CCTDM 53 or ART 53. Not repeatable. **Transfer:** (CSU/UC) C-ID: (ARTS 250)

ENGL (ENGLISH)

ENGL 1A:E — Enhanced Reading and Composition: Beginning, 5 units

Prerequisite(s): Placement through the assessment process
90 Lecture Hours, 180 Out-of-Class Hours = 270 Total Student Learning Hours

An enhanced option to ENGL 1A that focuses on the reading, writing, and critical thinking skills necessary to demonstrate competency in college-level composition. Provides a highly structured, intensive, and supportive learning framework with a focus on academic texts and writing expository essays, including a college-level research paper. Includes a required minimum 8,000 words of writing, using proper MLA formatting and documentation. Not repeatable. **Transfer:** (CSU/UC-Only 3 units are UC transferable. See a counselor.) (CSU-GE: A2) (IGETC: 1A) C-ID: (ENGL 100)

WT (WELDING TECHNOLOGY)

WT 121—Arc/Gas Welding, 3 units

Formerly listed as: WT 121 — Welding Technology Level I
36 Lecture Hours, 54 Laboratory Hours, 72 Out-of-Class Hours = 162 Total Student Learning Hours

Materials fee required

Covers welding safety, shielded metal arc welding (SMAW), and metal cutting processes. This course complies with American Welding Society (AWS) and Schools Excelling through National Skills Education (SENSE) curriculum standards. Students are required to supply leathers, safety glasses, and welding gloves. Field trips may be required. Not repeatable. C-ID: (WELD 101X)

WT 122—MIG Welding (GMAW/FCAW), 3 units

Formerly listed as: WT 122 — Welding Technology Level II
Prerequisite(s): Completion of WT 121 with at least a C or P
36 Lecture Hours, 54 Laboratory Hours, 72 Out-of-Class Hours = 162 Total Student Learning Hours

Materials fee required

Covers welding safety, welding symbols and detail drawings, characteristics of metallurgy, Gas Metal Arc Welding (GMAW), Flux Core Arc Welding (FCAW). This course complies with American Welding Society (AWS) and Schools Excelling through National Skills Education (SENSE) curriculum standards. Students are required to supply leathers, safety glasses, and welding gloves. Field trips may be required. Not repeatable. C-ID: (WELD 102X and 103X)

WT 123—TIG Welding (GTAW), 3 units*Formerly listed as: WT 123 — Welding Technology Level III**Prerequisite(s): Completion of WT 121 with at least a C or P**36 Lecture Hours, 54 Laboratory Hours, 72 Out-of-Class Hours = 162 Total Student Learning Hours***Materials fee required**

Covers welding safety, Gas Tungsten Arc Welding (GTAW), including Mild Steel, Stainless Steel and Aluminum all positions. This course complies with American Welding Society (AWS) and Schools Excelling through National Skills Education (SENSE) curriculum standards. Students are required to supply leathers, safety glasses, and welding gloves. Field trips may be required.

Not repeatable. C-ID: (WELD 104X)**UPDATED PROJECTED COURSE OFFERINGS****EFFECTIVE SUMMER 2019**

PROJECTED Course Offerings 2019-2021

This list of projected course offerings is provided to assist students and counselors in creating educational plans. While the college will do its best to honor these projected course offerings, please note that the list is subject to change due to enrollment constraints. Please consult the Schedule of Classes at apps.gocolumbia.edu/ClassSearch/ for actual course offerings for any given term.

CCTDM - Computer and Communications Technology: Digital Media							
14	Advanced Topics in Website Development*						
CHILD - Child Development							
3	Principles and Practices of Teaching Young Children	SU 19		SP 20	SU 20		SP 21
41	Implementing Curriculum for Young Children		FA 19				
HPMGT - Hospitality Management							
190	Hospitality Capstone		FA 19	SP 20		FA 20	SP 21
201A	Basic Baking and Pastry Arts		FA 19	SP 20		FA 20	SP 21
201B	Intermediate Culinary and Pastry Arts		FA 19	SP 20		FA 20	SP 21