

# Moorpark College

## Associate in Science in Chemistry for UC Transfer (AS)

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### Program Goals and Objectives

This Associate in Science degree in Chemistry for University of California Transfer (UCTP) degree is in response to the California Community Colleges (CCC) Memorandum dated August 2, 2019 which calls for the CCCs to participate in the University of California Transfer Pathways (UCTP) Guarantee pilot project. This UC Transfer Pathway provides a path to students who wish to transfer to a UC campus in a Chemistry program.

### Program Student Learning Outcomes

**Upon completion of this program, a student will be able to:**

- use the process of scientific inquiry to qualitatively and quantitatively solve chemistry problems by gathering evidential information, analyzing data, forming appropriate conclusions, and communicating these results through written and oral expressions.
- demonstrate a mastery of organic chemistry material at a level equal to or greater than the national average as determined by the nationally standardized Organic Chemistry exam developed by the American Chemical Society (ACS) after the capstone class CHEM M07B Organic Chemistry II.

### Catalog Description

This Associate in Science degree in Chemistry for UC Transfer degree is intended to enhance student transfer and increase academic preparation for CCC students as they prepare to transfer into a Chemistry program at a UC campus. Along with the Transfer Agreement Guarantee (TAG), students completing this degree are guaranteed admission to the UC system, but not necessarily to a particular UC campus or major of their choice. Students should consult with a counselor for more information on university admission and transfer requirements, as this degree in Chemistry may not be the best option for students intending to transfer to a particular UC campus or to a college or university that is not part of the UC system.

**To obtain an Associate in Science in Chemistry for the UC Transfer, students must:**

1. Complete all courses required for the Chemistry major, as prescribed on the UCTP Template.
2. Complete Cal-GETC\* courses in the following areas, as prescribed on the UCTP Template.
  - Area 1A Freshman Composition (3 units)
  - Area 1B Critical Thinking (3 units)
  - Area 3 Arts and Humanities (3 units)

- Area 4 Social and Behavioral Science (3 units)
- Area 5B Biological Science (4 units)
- Area 6 Ethnic Studies

3. Meet the specified requirements as stated in the Transfer Agreement Guarantee (TAG) for the available school.

4. Obtain a cumulative minimum grade point average of 3.5 in the major. Students who earn less than 3.5 GPA (UC transferable) still meet the associate degree graduation requirement but will not receive guaranteed admission into a UC.

5. Obtain a grade of “C” or better, or “P” for all courses in the Cal-GETC and courses required for the major. Although a “P” grade is allowed (Title 5 section 55062), it is highly recommended that students take the course for a letter grade (A, B, or C) due to unit limitations on “P/NP” courses by the UC system and Moorpark College.

6. Complete a minimum of 12 units within the college district.

\* **NOTE:** The degree allows for the postponement of one course in Area 3 (Arts and Humanities) and one course in Area 4 (Social and Behavioral Science) of the Cal-GETC. These are to be completed after transfer.

Course ID	Title	Units/Hours
<b>REQUIRED CORE COURSES</b>		
CHEM M01A	General Chemistry I	5
or CHEM M01AH	Honors: General Chemistry I	
CHEM M01B	General Chemistry II	5
CHEM M07A	Organic Chemistry I	5
CHEM M07B	Organic Chemistry II	5
MATH M25A	Calculus with Analytic Geometry I	5
or MATH M25AH	Honors: Calculus with Analytic Geometry I	
MATH M25B	Calculus with Analytic Geometry II	5
or MATH M25BH	Honors: Calculus with Analytic Geometry II	
MATH M25C	Calculus with Analytic Geometry III	5
MATH M35	Applied Differential Equations	3
PHYS M20A	Mechanics of Solids and Fluids	4

Course ID	Title	Units/Hours
PHYS M20AL	Mechanics of Solids and Fluids Laboratory	1
PHYS M20B	Thermodynamics, Electricity, and Magnetism	4
PHYS M20BL	Thermodynamics, Electricity, and Magnetism Laboratory	1
PHYS M20C	Wave Motion, Optics, and Modern Physics	4
PHYS M20CL	Wave Motion, Optics, and Modern Physics Laboratory	1
<b>Cal-GETC General Education Requirements: complete the following General Education courses.</b>		
<b>AREA 1A English Composition: One course</b>		<b>4</b>
ENGL C1000	Academic Reading and Writing	4
ENGL C1000H	Academic Reading and Writing - Honors	4
<b>AREA 1B Critical Thinking: One course</b>		<b>3-4</b>
COMM M25	Introduction to Rhetorical Criticism	3
ENGL C1001	Critical Thinking and Writing	3
ENGL C1001H	Critical Thinking and Writing - Honors	3
ENGL M01B	Literature: Critical Thinking and Composition	4
ENGL M01BH	Honors Literature: Critical Thinking and Composition	4
PHIL M05	Critical Thinking and Analytic Writing	3
<b>AREA 3 Arts and Humanities: One course</b>		<b>3-5</b>
ARTH M100	Understanding Art	3
ARTH M100H	Honors: Understanding Art	3
ARTH M110	History of Western Art: Prehistoric Through Gothic	3
ARTH M120	History of Western Art: Renaissance through Modern	3
ARTH M130	History of Art: Asian	3
ARTH M150	History of Western Art: Modern through Contemporary	3
CHIN M110	Elementary Chinese: Mandarin II	4
COMM M26	Rhetoric of Popular Culture	3
DANC M01	Dance Appreciation	3
DANC M01H	Honors: Dance Appreciation	3

Course ID	Title	Units/Hours
DANC M03	Dance History	3
DANC M31	World Dance Cultures	3
DES M100	Design and Society	3
DES M100H	Honors: Design and Society	3
DES M101	Design History	3
DES M101H	Honors: Design History	3
ENGL M01B	Literature: Critical Thinking and Composition	4
ENGL M01BH	Honors Literature: Critical Thinking and Composition	4
ENGL M13A	Survey of American Literature I	3
ENGL M13B	Survey of American Literature II	3
ENGL M14	Introduction to Poetry	3
ENGL M15A	Survey of English Literature I	3
ENGL M15B	Survey of English Literature II	3
ENGL M16	Introduction to Fiction	3
ENGL M17	Shakespeare	3
ENGL M20	Introduction to Drama	3
ENGL M29A	The Bible as Literature (Old Testament)	3
ENGL M29B	The Bible as Literature (New Testament)	3
ENGL M30A	Masterpieces of World Literature I	3
ENGL M30B	Masterpieces of World Literature II	3
ENGL M40	Children's Literature	3
FREN M110	Elementary French II	4
FTMA M101	Introduction to Cinema	3
FTMA M102	Introduction to Television Studies	3
FTMA M103	Introduction to Media Aesthetics	3
FTMA M104	Introduction to Documentary Studies	3
FTMA M105	History of International Cinema I: Emergence to World War II	3

Course ID	Title	Units/Hours
FTMA M106	History of International Cinema II: World War II to the Present	3
FTMA M107	Directors and Genres	3
FTMA M108	Women in Cinema	3
FTMA M109	Contemporary American Cinema	3
FTMA M110	Contemporary Global Cinema	3
GERM M110	Elementary German II	4
HIST M150	World History: From Prehistory to 1500	3
HIST M152	History of Asia from Prehistory to 1600	3
HIST M160	World History: From 1450 to the Present	3
HIST M162	History of Asia From 1600 To The Present	3
HIST M170	Western Civilization: From Prehistory to 1600	3
HIST M180	Western Civilization: From 1600 To The Present	3
HUM M07	Survey of the Arts	3
HUM M10A	Ethics, Culture and the Arts: The Roots of the Humanities	3
HUM M10B	Ethics, Culture and the Arts: Humanities and the Modern World	3
HUM M11	Conflict and the Human Condition	3
HUM M14	Humanities in the United States	3
JAPN M110	Elementary Japanese II	4
JOUR M05	Introduction to Visual Communication	3
MUS M01	Music Fundamentals	3
MUS M04	Survey of World Music	3
MUS M04H	Honors: Survey of World Music	3
MUS M08	Music Appreciation	3
MUS M08H	Honors: Music Appreciation	3
MUS M09A	Western Music History I	3
MUS M09AH	Honors: Western Music History I	3

Course ID	Title	Units/Hours
MUS M09B	Western Music History II	3
MUS M09BH	Honors: Western Music History II	3
PHIL M01	Introduction to Philosophy	3
PHIL M01H	Honors: Introduction to Philosophy	3
PHIL M02	Introduction to Ethics	3
PHIL M02H	Honors: Introduction to Ethics	3
PHIL M03	Introduction to Social and Political Philosophy	3
PHIL M08	Philosophy of Religion	3
PHIL M11	World Religions: West	3
PHIL M12	World Religions: East	3
PHIL M13	The Classical Mind	3
PHIL M14	The Modern Mind	3
PHIL M21	Ethics of Living and Dying	3
PHOT M40	History of Photography	3
SPAN M110	Elementary Spanish II	5
SPAN M200	Intermediate Spanish I	5
SPAN M200S	Intermediate Spanish for Spanish Speakers I	5
SPAN M210	Intermediate Spanish II	5
THA M01	Introduction to Theatre	3
THA M01H	Honors: Introduction to Theatre	3
THA M04	History of the Theatre	3
THA M04H	Honors: History of Theatre	3
<b>AREA 4 Social and Behavior Science: One course</b>		<b>3</b>
ANTH M02	Cultural Anthropology	3
ANTH M03	Archaeology	3
ANTH M06	Introduction to Native American Studies	3
ANTH M07	Peoples and Cultures of the World	3

Course ID	Title	Units/Hours
ANTH M08	Linguistic Anthropology	3
ANTH M09	Sex, Gender, and Culture	3
ANTH M11	The Anthropology of Magic, Witchcraft and Religion	3
ANTH M13	The Chumash and Their Neighbors: Indians of California	3
ANTH M14	Monkeys, Apes, and Humans	3
ANTH M15	Egyptology: Archaeology of the Land of the Pharaohs	3
ANTH M16	Mysteries of the Ancient Maya	3
ANTH M17	Forensic Anthropology	3
ANTH M18	Culture, Health, and Healing	3
BUS M30	Introduction to Business	3
CD M02	Human Development: Infancy through Adolescence	3
CD M03	Child, Family, and Community	3
CD M03H	Honors: Child, Family, and Community	3
CD M05	Teaching in a Diverse Society	3
CJ M08	Introduction to Constitutional Law	3
COMM M04	Interpersonal Communication	3
COMM M12	Intercultural Communications	3
COMM M13	Gender Communication	3
ECON M170	Economic History of the US	3
ECON M201	Principles of Microeconomics	3
ECON M202	Principles of Macroeconomics	3
ECON M202H	Honors: Principles of Macroeconomics	3
ETHS M01	Introduction to Chicana/o Studies	3
ETHS M10	Introduction to African American Studies	3
ETHS M40	Introduction to Ethnic Studies	3
FTMA M100	Introduction to Mass Communications	3
FTMA M108	Women in Cinema	3

Course ID	Title	Units/Hours
GEOG M02	Cultural Geography	3
GEOG M03	World Regional Geography	3
GEOG M03H	Honors: World Regional Geography	3
HED M20	Introduction to Public Health	3
HED M21	Social Determinants of Health, Disparities and Equities	3
HIST M25	History of the United States	3
HIST M25H	Honors: History of the United States	3
HIST M130	United States History Through Reconstruction	3
HIST M131	African American History to 1877	3
HIST M133	History of Mexican Americans	3
HIST M135	Native American History and Culture	3
HIST M137	History of American Women	3
HIST M137H	Honors: History of American Women	3
HIST M140	United States History 1865 to the Present	3
HIST M141	African American History Since 1877	3
HIST M143	History of California	3
HIST M145	Race and Ethnicity in American History	3
HIST M150	World History: From Prehistory to 1500	3
HIST M152	History of Asia from Prehistory to 1600	3
HIST M160	World History: From 1450 to the Present	3
HIST M162	History of Asia From 1600 To The Present	3
HIST M164	History of Latin America	3
HIST M170	Western Civilization: From Prehistory to 1600	3
HIST M180	Western Civilization: From 1600 To The Present	3
JOUR M01	Introduction to Mass Communications	3
NTS M07	Cultural Foods	3
PHIL M03	Introduction to Social and Political Philosophy	3



Course ID	Title	Units/Hours
POLS C1000	American Government and Politics	3
POLS C1000H	American Government and Politics - Honors	3
POLS M01	Introduction to Politics	3
POLS M02	Comparative Politics	3
POLS M04	International Relations	3
POLS M05	National, State and Local Politics	3
POLS M06	Introduction to Political Theory	3
POLS M09	Introduction to Political Science Research Methods	3
PSYC C1000	Introduction to Psychology	3
PSYC C1000H	Introduction to Psychology - Honors	3
PSY M03	Personal Growth and Social Awareness	3
PSY M04	Child Psychology	3
PSY M05	Social Psychology	3
PSY M06	Introduction to Behavioral Research Methods	3
PSY M07	Developmental Psychology (Lifespan)	3
PSY M08	Abnormal Psychology	3
PSY M10	Dying and Death	3
PSY M13	Human Sexuality	3
PSY M14	Cross-Cultural Psychology	3
PSY M16	Personality Theories	3
SJS M110	Introduction to Social Justice Studies	3
SJS M120	Introduction to Women's Studies	3
SJS M130	Introduction to LGBTQ Studies	3
SOC M110	Introduction to Sociology	3
SOC M110H	Honors: Introduction to Sociology	3
SOC M115	Social Problems	3
SOC M120	Introduction to Research Methods	3

Course ID	Title	Units/Hours
SOC M130	Introduction to Marriage and Family	3
SOC M140	Introduction to Gender	3
SOC M150	Introduction to Race and Ethnicity	3
SOC M160	Introduction to Criminology	3
SOC M212	Introduction to Sociology of Religion	3
SOC M216	Sociology of Deviant Behavior	3
SOC M218	Organized Crime and Terrorism	3
SWHS M110	Introduction to Social Work and Human Services	3
<b>AREA 5B Biological Sciences: One course</b>		<b>3-5</b>
ANAT M01	Human Anatomy	4
ANPH M01	Human Anatomy and Physiology	6
ANTH M01	Biological Anthropology	3
ANTH M01H	Honors: Biological Anthropology	3
BIOL M01	Introduction to Biology	4
BIOL M02A	General Biology I	5
BIOL M02AH	Honors: General Biology I	5
BIOL M02B	General Biology II	5
BIOL M02BH	Honors: General Biology II	5
BIOL M02C	Genetics and Molecular Biology	5
BIOL M03	Marine Life and Its Environment	4
BIOL M05	Field Biology: A Natural History of California	4
BIOL M06	Ecology	4
BIOL M16	Human Biology	3
BIOL M17	Heredity, Evolution and Society	3
BOT M01	Introduction to Botany	5
BOT M06	Plants and Society	4
ENSC M02	Environment and Human Interactions	4

Course ID	Title	Units/Hours
MICR M01	General Microbiology	5
PHSO M01	Human Physiology	4
PHSO M01H	Honors: Human Physiology	4
PSY M02	Introduction to Behavioral Neuroscience	3
PSY M02H	Honors: Introduction to Behavioral Neuroscience	3
ZOO M01	Introduction to Zoology	5
<b>Area 6 Ethnic Studies: One course</b>		<b>3</b>
ETHS M01	Introduction to Chicana/o Studies	3
ETHS M10	Introduction to African American Studies	3
ETHS M40	Introduction to Ethnic Studies	3
<b>Total Units for the Major</b>		<b>53</b>
Cal-GETC Requirements		19-24
Double-Counted Units		7
<b>Total Units for the Degree</b>		<b>65-70</b>