

ACADEMIC PATHWAYS



**Sinclair College –Associate of Science Degree in Chemistry
To
University of Dayton – Bachelor of Science
Major – Medicinal-Pharmaceutical Chemistry**

SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOUR	UD COURSE #
CHE	1211*	General Chemistry I	5 (UD 4)	CHM 1GF+1GFL
CHE	1221*	General Chemistry II	5 (UD 4)	CHM 1GS+1GSL
CHE	2111	Organic Chemistry I	5 (UD 4)	CHM 313 + CHM 313L
CHE	2121	Organic Chemistry II	5 (UD 4)	CHM 314 + CHM 314L
COM	2206 or 2211**	Interpersonal Communication Effective Public Speaking	3	CMM 320 or CMM 351
ENG	1101	English Composition I	3	ENG 100
ENG	1201	English Composition II	3	ENG 200
HIS	1112	Western Civilization II	3	HST 103
MAT	2270	Calculus & Analytic Geometry I	5 (UD 4)	MTH 168
MAT	2280	Calculus & Analytic Geometry II	5 (UD 4)	MTH 169
MAT PHY	2290 or 1141***	Calculus & Analytic Geometry III College Physics I	4-5 (UD 4)	MTH 218 or PHY 201+201L
MET	1131	Personal Computer Applications for Engineering Technology	1	CPS 1XX
PHI	2205 or 2206	Introduction to Philosophy Introduction to Ethics	3	PHL 103
PSY	1100****	General Psychology	3	PSY 101
SCC	1101	First Year Experience	1	ASI 150
SOC	1101****	Introduction to Sociology	3	SOC 101
SOC	1145	Introduction to Cultural Anthropology	3	ANT 150
TOTAL			60-61 (UD 54)	

- **This Associate of Science in Chemistry from Sinclair College is designed for students considering a major in Biochemistry, Chemistry (Bachelor of Arts or Bachelor of Science), or Medicinal-Pharmaceutical Chemistry program at UD.**
- ***Completion of both CHE 1211 and CHE 1221 are required for transfer credit. Consult with Sinclair College Advisor for course sequencing.**
- ****COM 2206 or 2211 will meet the communication requirement at the University of Dayton with the completion of the Associate Degree. This exception applies to only UD-**

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Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.

- *****MAT 2290 (equivalent to MTH 218 at UD) is required for only Biochemistry (BS) and Chemistry (BS) majors. Students interested in Medicinal-Pharmaceutical Chemistry (BS) or Chemistry (BA) program should take PHY 1141, instead, to complete an associate degree at Sinclair.**
- ******PSY 1100 or SOC 1101 will meet the social science integrated course requirement at the University of Dayton with the completion of the Associate Degree.**
- **124 hours minimum are required for a BA degree and 120 hours minimum for a BS degree at UD. Required GPA at the time of the Associate Degree is 3.0.**

Students are recommended to complete the following additional coursework at Sinclair in order to graduate in a timely manner from UD:

SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOUR	UD COURSE #
PHY	1141 or 2201 ¹	College Physics I General Physics I	4-5 (UD 4)	PHY 201+201L or PHY 206+210L
PHY	1142 or 2202 ¹	College Physics II General Physics II	4-5 (UD 4)	PHY 202+202L or PHY 207+211L
REL	1111 or 1112 or 2204 or 2255	Eastern Religions Western Religions Great Books: The Bible and Western Culture People and Religion	3	REL 103
TOTAL			11-13 (UD 11)	

- ¹Students interested in Chemistry (BA degree) and Medicinal-Pharmaceutical Chemistry will complete PHY 1141+1142; students interested in Chemistry (BS degree) and Biochemistry will complete PHY 2201+2202. If students are undecided on a specific chemistry degree at UD, complete PHY 2201+2202.

FALL SEMESTER YEAR 1

SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOUR	UD COURSE #
CHE	1211*	General Chemistry I	5 (UD 4)	CHM 1GF+1GFL
ENG	1101	English Composition I	3	ENG 100
HIS	1112	Western Civilization II	3	HST 103
MAT	2270	Calculus & Analytic Geometry I	5 (UD 4)	MTH 168

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SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOUR	UD COURSE #
SCC	1101	First Year Experience	1	ASI 150
TOTAL			17 (UD 15)	

- ***Completion of both CHE 1211 and CHE 1221 are required for transfer credit. Consult with Sinclair College Advisor for course sequencing.**

SPRING SEMESTER YEAR 1

SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOUR	UD COURSE #
CHE	1221*	General Chemistry II	5 (UD 4)	CHM 1GS+1GSL
ENG	1201	English Composition II	3	ENG 200
MAT	2280	Calculus & Analytic Geometry II	5 (UD 4)	MTH 169
SOC	1101**	Introduction to Sociology	3	SOC 101
TOTAL			16 (UD 14)	

- ***Completion of both CHE 1211 and CHE 1221 are required for transfer credit. Consult with Sinclair College Advisor for course sequencing.**
- ****PSY 1100 or SOC 1101 will meet the social science integrated course requirement at the University of Dayton with the completion of the Associate Degree.**

FALL SEMESTER YEAR 2

SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOUR	UD COURSE #
CHE	2111	Organic Chemistry I	5 (UD 4)	CHM 313+313L
COM	2206 or 2211***	Interpersonal Communication Effective Public Speaking	3	CMM 320 or CMM 351
MET	1131	Personal Computer Applications for Engineering Technology	1	CPS 1XX
PSY	1100**	General Psychology	3	PSY 101
TOTAL			12 (UD 11)	

- ****PSY 1100 or SOC 1101 will meet the social science integrated course requirement at the University of Dayton with the completion of the Associate Degree.**
- *****COM 2206 or 2211 will meet the communication requirement at the University of Dayton with the completion of the Associate Degree. This exception applies to only UD-**

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Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.

SPRING SEMESTER YEAR 2

SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOUR	UD COURSE #
CHE	2121	Organic Chemistry II	5 (UD 4)	CHM 314 + CHM 314L
MAT PHY	2290 or 1141****	Calculus & Analytic Geometry III College Physics I	4-5 (UD 4)	MTH 218 or PHY 201+201L
PHI	2205 or 2206	Introduction to Philosophy Introduction to Ethics	3	PHL 103
SOC	1145	Introduction to Cultural Anthropology	3	ANT 150
TOTAL			15-16 (UD 14)	

- ****MAT 2290 (equivalent to MTH 218 at UD) is required for only Biochemistry (BS) and Chemistry (BS) majors. Students interested in Medicinal-Pharmaceutical Chemistry (BS) or Chemistry (BA) program should take PHY 1141, instead, to complete an associate degree at Sinclair.

Remaining Courses to Be Completed at UD for BS in Medicinal-Pharmaceutical Chemistry Sample Curriculum ²			
Fall Semester Third Year		Spring Semester Third Year	
Course	Credit Hours	Course	Credit Hours
BIO 151	3	BIO 152	3
BIO 151L	1	BIO 152L	1
CHM 201	3	MTH 367	3
CHM 201L	1	CHM 420	3
CHM 317	1	CHM 462L	1
CHM 302	3	CHM 495	0
CHM 302L	1	CAP Crossing Boundaries: Integrative	3
CAP Advanced Historical Studies	3	CAP Advanced Religious Studies	3
TOTAL	16	TOTAL	17

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Remaining Courses to Be Completed at UD for BS in Medicinal-Pharmaceutical Chemistry Sample Curriculum ²			
Fall Semester Fourth Year		Spring Semester Fourth Year	
Course	Credit Hours	Course	Credit Hours
CHM 426	3	CHM 454	3
CHM 319L	1	CHM 463L	1
CHM 427	3	CHM 490 (Capstone)	1
CHM 480	1	CHM Elective	3
BIO Elective with Lab	4	BIO Elective	3
CHM Elective	3	CAP Arts	3
CAP Advanced Philosophical Studies/Crossing Boundaries: Practical Ethical Action	3	CAP Crossing Boundaries: Faith Traditions	3
TOTAL	18	TOTAL	17

- ²The above is a sample curriculum guide. Review your DegreeWorks audit with your UD academic advisor to fully understand the remaining degree requirements and specific course options.