

ACADEMIC PATHWAYS



**Sinclair College – Associate of Science Degree in Mathematics
To
University of Dayton – Bachelor of Science
Major – Applied Mathematical Economics**

This Academic Pathway is to be used only by students who are formally admitted to the University of Dayton and enrolled in the UD-Sinclair Academy Program. Being a prospective transfer student from Sinclair College is not the same as a UD-Sinclair Academy student. Students interested in taking advantage of this Academic Pathway must apply to the Program through the UD-Sinclair Academy website at <https://www.udayton.edu/academy/index.php>.

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
*BIO CHE PHY	1171 or 1211** or 2201	5	Principles of Biology I General Chemistry I General Physics I	BIO 151+151L or CHM 1GF+1GFL or PHY 206+210L	4
*BIO CHE PHY	1272 or 1221** or 2202	5	Principles of Biology II General Chemistry II General Physics II	BIO 152+152L or CHM 1GS+1GSL or PHY 207+211L	4
CIS	1111	3	Introduction to Problem Solving & Computer Programming	CPS 149	3
CIS	2212, 2217, and 2266***	3+3+3	Java Software Development I Java Software Development II Python for Data Analytics	CPS 150+151	8
COM	2206 or 2211****	3	Interpersonal Communication Effective Public Speaking	CMM 320 or CMM 351	3
ECO	2160	3	Principles of Macroeconomics	ECO 204	3
ECO	2180	3	Principles of Microeconomics	ECO 203	3
ENG	1101	3	English Composition I	ENG 100	3
HIS	1112	3	Western Civilization II	HST 103	3
MAT	2270	5	Calculus & Analytic Geometry I	MTH 168	4
MAT	2280	5	Calculus & Analytic Geometry II	MTH 169	4
MAT	2290	5	Calculus & Analytic Geometry III	MTH 218	4
PHI	2205 or 2206	3	Introduction to Philosophy Introduction to Ethics	PHL 103 or PHL 1XC	3
PSY SOC	1100 or 1101 ¹	3	General Psychology Introduction to Sociology	PSY 101 or SOC 101	3
REL	1111 or 1112	3	Eastern Religions Western Religions	REL 1XC or REL 103	3

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SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
SCC	1101	1	First Year Experience	ASI 150	1
TOTAL		62			56

- ***Select one natural science discipline and take the second course in the same discipline area chosen for the first course.**
- ****Completion of both CHE 1211 and CHE 1221 are required for transfer credit. Consult with Sinclair College Advisor for course sequencing.**
- *****Completion of all three courses (CIS 2212, 2217, and 2266) will be granted equivalent courses as CPS 150 and 151.**
- ******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-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.**
- **†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.**
- **PHL 1XC at UD will substitute for PHL 103 requirement. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.**
- **REL 1XC at UD will substitute for REL 103 requirement. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.**
- **CIS 2212 will be substituted for MAT 2310 or MAT 2600, and CIS 2217 for MAT 2320 to meet Associate Degree requirements.**
- **120 hours minimum are required 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	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
ENG	1201	3	English Composition II	ENG 200	3
TOTAL		3			3

FALL SEMESTER YEAR 1

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SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
CIS	1111	3	Introduction to Problem Solving & Computer Programming	CPS 149	3
ENG	1101	3	English Composition I	ENG 100	3
MAT	2270	5	Calculus & Analytic Geometry I	MTH 168	4
HIS	1112	3	Western Civilization II	HST 103	3
SCC	1101	1	First Year Experience	ASI 150	1
TOTAL		15			14

SPRING SEMESTER YEAR 1

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
CIS	2212*	3	Java Software Development I	CPS 1XX	3
COM	2206 or 2211**	3	Interpersonal Communication Effective Public Speaking	CMM 320 or CMM 351	3
ECO	2180	3	Principles of Microeconomics	ECO 203	3
MAT	2280	5	Calculus & Analytic Geometry II	MTH 169	4
PHI	2205 or 2206	3	Introduction to Philosophy Introduction to Ethics	PHL 103 or PHL 1XC	3
TOTAL		17			16

- *Completion of all three courses (CIS 2212, 2217, and 2266) will be granted equivalent courses as CPS 150 and 151.
- **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-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.
- PHL 1XC at UD will substitute for PHL 103 requirement. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.

FALL SEMESTER YEAR 2

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
¹ BIO CHE PHY	1171 or 1211*** or 2201	5	Principles of Biology I General Chemistry I General Physics I	BIO 151+151L or CHM 1GF+1GFL or PHY 206+210L	4
CIS	2217*	3	Java Software Development II	CPS 1XX	3

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UNIVERSITY of
DAYTON

SINCLAIR
COLLEGE

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
ECO	2160	3	Principles of Macroeconomics	ECO 204	3
MAT	2290	5	Calculus & Analytic Geometry III	MTH 218	4
TOTAL		16			14

- *Completion of all three courses (CIS 2212, 2217, and 2266) will be granted equivalent courses as CPS 150 and 151.
- ¹Select one natural science discipline and take the second course in the same discipline area chosen for the first course.
- ***Completion of both CHE 1211 and CHE 1221 are required for transfer credit. Consult with Sinclair College Advisor for course sequencing.

SPRING SEMESTER YEAR 2

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
¹ BIO CHE PHY	1272 or 1221*** or 2202	5	Principles of Biology II General Chemistry II General Physics II	BIO 152+152L or CHM 1GS+1GSL or PHY 207+211L	4
CIS	2266*	3	Python for Data Analytics	CPS 1XX	2
PSY SOC	1100 or 1101****	3	General Psychology Introduction to Sociology	PSY 101 or SOC 101	3
REL	1111 or 1112	3	Eastern Religions Western Religions	REL 1XC or REL 103	3
TOTAL		14			12

- *Completion of all three courses (CIS 2212, 2217, and 2266) will be granted equivalent courses as CPS 150 and 151.
- ¹Select one natural science discipline and take the second course in the same discipline area chosen for the first course.
- ***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.
- REL 1XC at UD will substitute for REL 103 requirement. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.

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Remaining Courses to Be Completed at UD for BS in Applied Mathematical Economics Sample Curriculum ²			
Fall Semester Third Year		Spring Semester Third Year	
Course	Credit Hours	Course	Credit Hours
ECO 346	3	MTH 310	3
ENG 200	3	MTH 412	3
MTH 308	3	CAP Crossing Boundaries: Practical Ethical Action	3
MTH 411	3	CAP Crossing Boundaries: Faith Traditions	3
CAP Crossing Boundaries: Integrative	3	CAP Arts	3
TOTAL	15	General Elective	3
		TOTAL	18
Fall Semester Fourth Year		Spring Semester Fourth Year	
Course	Credit Hours	Course	Credit Hours
ECO 347	3	MTH 480 (Capstone)	1
ECO 441	3	ECO Elective 300/400 Level	3
MTH 330	3	CAP Advanced Philosophical or Religious Studies	3
CAP Advanced Historical Studies	3	CAP Diversity and Social Justice	3
CAP Advanced Philosophical or Religious Studies	3	General Elective	3
General Elective	3	General Elective (Optional)	3
TOTAL	18	TOTAL	16

- ² The 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.