

# ASSOCIATE OF SCIENCE DEGREE

The Associate of Science degree is appropriate for those students who plan to pursue further study in Astronomy, Biology, Chemistry, Geology, Mathematics or Physics. This degree is also appropriate for those interested in careers in Statistics, Mathematics, Bio-technology, Medical Sciences, Engineering and Secondary Education majors who plan to major in a Science (e.g. Math, Biology, Geology, Chemistry or Physics teachers).

It is required that individuals considering a career in science meet with one of the science faculty to discuss specific courses to meet their academic needs.

Degree seekers should choose from one of two pathways: Life Sciences or Physical Sciences.

## Requirements

### Life Sciences

Code	Title	Credits
<b>Communications</b>		<b>6.00</b>

COM-150 PUBLIC SPEAKING <sup>1</sup>

ENG-121 ENGLISH COMPOSITION I <sup>1</sup>

<b>Humanities</b>		<b>8.00</b>
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Select two courses from two different prefixes to equal 8 credits

ART-100 ART APPRECIATION <sup>1</sup>

ART-220 HISTORY OF ART I <sup>1</sup>

ART-221 HISTORY OF ART II <sup>1</sup>

ENG-201 WOMEN & LITERATURE <sup>1</sup>

ENG-233 CHILDRENS LITERATURE <sup>1</sup>

ENG-234 WORLD MYTHOLOGIES <sup>1</sup>

HIST-101 WEST CIV I: ANCIENT WORLD-1715 <sup>1</sup>

HIST-102 WESTERN CIV II <sup>1</sup>

HUM-101 MODERN CULTURE & THE ARTS <sup>1</sup>

HUM-234 WORLD MYTHOLOGIES

LNG-161 SPANISH I

LNG-162 SPANISH II <sup>1</sup>

LNG-163 SPANISH III <sup>1</sup>

LNG-261 SPANISH IV <sup>1</sup>

MUS-150 MUSIC APPRECIATION <sup>1</sup>

PHIL-210 ETHICS <sup>1</sup>

REL-231 COMPARATIVE RELIGION

REL-233 NEW TESTAMENT

<b>Social Science</b>		<b>8.00</b>
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Select two courses from two different prefixes to equal 8 credits:

ANTH-201 INTRO TO CULTURAL ANTHROPOLOGY <sup>1</sup>

ECON-203 PRIN OF ECONOMICS-MICRO <sup>1</sup>

HIST-201 US HISTORY I <sup>1</sup>

HIST-202 US HIST II: RECONSTRUC-PRESENT <sup>1</sup>

HIST-204 HISTORY OF MICHIGAN <sup>1</sup>

PSI-110 AMERICAN GOV'T & POLITICAL SCI <sup>1</sup>

PSY-101 PSYCHOLOGY

PSY-210	HUMAN GROWTH & DEVELOPMENT <sup>1</sup>
PSY-220	ABNORMAL PSYCHOLOGY <sup>1</sup>
PSY-250	HUMAN SEXUALITY <sup>1</sup>
PSY-260	SOCIAL PSYCHOLOGY <sup>1</sup>
SOC-120	PRIN OF SOCIOLOGY <sup>1</sup>
SOC-121	MODERN SOCIAL PROBLEMS <sup>1</sup>
SOC-220	MARRIAGE & FAMILY LIVING <sup>1</sup>

<b>Life Sciences (includes MTA requirements for Mathematics and Natural Sciences)</b>	<b>31.00</b>
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BIO-110 BIOLOGICAL FORM AND FUNCTION

BIO-121 MOLECULAR AND CELLULAR BIOLOGY <sup>1</sup>

BIO-122 ORGANISMAL BIOLOGY <sup>1</sup>

CHEM-133 GENERAL CHEMISTRY I <sup>1</sup>

CHEM-134 GENERAL CHEMISTRY II <sup>1</sup>

CHEM-210 ORGANIC CHEMISTRY I

CHEM-211 ORGANIC CHEMISTRY II

MATH-161 CALCULUS I & ANALYTIC GEOMETRY <sup>1</sup>

Plus select two classes from the following (Must equal 7 or 8 credits): 7.00

BIO-101 HUMAN BIOLOGY <sup>1</sup>

BIO-125 ENVIRONMENT AND SOCIETY <sup>1</sup>

BIO-230 MICROBIOLOGY <sup>1</sup>

GEOG-142 PHYSICAL GEOGRAPHY <sup>1</sup>

GEOL-145 PHYSICAL GEOLOGY <sup>1</sup>

<b>Total Credits</b>	<b>60.00</b>
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<sup>1</sup>

Course has prerequisite(s)

### Minimum Credits needed 60 credits

**Note:** No courses below the 100 level will be accepted toward this degree

**Note:** Anyone beginning the Associate of Science Degree at Glen Oaks in Fall 2016 or later must complete MTA requirements in order to qualify for the degree

Tuition is calculated by contact hours per semester.

Current/Updated: 07/01/2023

### Physical Sciences

Code	Title	Credits
<b>Communications</b>		<b>6.00</b>

COM-150 PUBLIC SPEAKING <sup>1</sup>

ENG-121 ENGLISH COMPOSITION I <sup>1</sup>

<b>Humanities</b>		<b>8.00</b>
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Select two courses from two different prefixes:

ART-100 ART APPRECIATION <sup>1</sup>

ART-220 HISTORY OF ART I <sup>1</sup>

ART-221 HISTORY OF ART II <sup>1</sup>

ENG-201 WOMEN & LITERATURE <sup>1</sup>

ENG-233 CHILDRENS LITERATURE <sup>1</sup>

ENG-234 WORLD MYTHOLOGIES <sup>1</sup>

HIST-101 WEST CIV I: ANCIENT WORLD-1715 <sup>1</sup>

HIST-102 WESTERN CIV II <sup>1</sup>

HUM-101 MODERN CULTURE & THE ARTS <sup>1</sup>

HUM-234	WORLD MYTHOLOGIES
LNG-161	SPANISH I
LNG-162	SPANISH II
LNG-163	SPANISH III
LNG-261	SPANISH IV
MUS-150	MUSIC APPRECIATION <sup>1</sup>
PHIL-210	ETHICS <sup>1</sup>
REL-231	COMPARATIVE RELIGION <sup>1</sup>
REL-233	NEW TESTAMENT <sup>1</sup>
<b>Social Science</b>	<b>8.00</b>

Select two courses from two different prefixes:

ANTH-201	INTRO TO CULTURAL ANTHROPOLOGY <sup>1</sup>
ECON-203	PRIN OF ECONOMICS-MICRO <sup>1</sup>
HIST-201	US HISTORY I <sup>1</sup>
HIST-202	US HIST II: RECONSTRUC-PRESENT <sup>1</sup>
HIST-204	HISTORY OF MICHIGAN <sup>1</sup>
PSI-110	AMERICAN GOV'T & POLITICAL SCI <sup>1</sup>
PSY-101	PSYCHOLOGY <sup>1</sup>
PSY-210	HUMAN GROWTH & DEVELOPMENT <sup>1</sup>
PSY-220	ABNORMAL PSYCHOLOGY <sup>1</sup>
PSY-250	HUMAN SEXUALITY <sup>1</sup>
PSY-260	SOCIAL PSYCHOLOGY <sup>1</sup>
SOC-120	PRIN OF SOCIOLOGY <sup>1</sup>
SOC-121	MODERN SOCIAL PROBLEMS <sup>1</sup>
SOC-220	MARRIAGE & FAMILY LIVING <sup>1</sup>

**Physical Sciences (includes MTA requirements for Mathematics and Natural Sciences) 4.00**

CHEM-133	GENERAL CHEMISTRY I <sup>1</sup>
CHEM-134	GENERAL CHEMISTRY II <sup>1</sup>
CHEM-210	ORGANIC CHEMISTRY I
CHEM-211	ORGANIC CHEMISTRY II
MATH-161	CALCULUS I & ANALYTIC GEOMETRY <sup>1</sup>
MATH-162	CALCULUS II & ANALYTIC GEOM <sup>1</sup>
PHYS-251	PHYSICS I <sup>1</sup>
PHYS-253	PHYSICS II <sup>1</sup>
<b>Natural Science Elective</b>	<b>4.00</b>
<b>Total Credits</b>	<b>60.00</b>

<sup>1</sup>

Course has prerequisite(s)

**Minimum Credits needed 60 credits**

**Note:** No courses below the 100 level will be accepted toward this degree

**Note:** Anyone beginning the Associate of Science Degree at Glen Oaks in Fall 2016 or later must complete MTA requirements in order to qualify for the degree

Tuition is calculated by contact hours per semester.

Current/Updated: 07/01/2023

## Suggested Schedule

### Life Sciences Pathway (Biological or Biomedical Sciences)

Course	Title	Credits
<b>Fall 1</b>		
Required Coursework		14.00-18.00
BIO-110 or BIO-125	BIOLOGICAL FORM AND FUNCTION or ENVIRONMENT AND SOCIETY	
CHEM-133	GENERAL CHEMISTRY I	
ENG-121	ENGLISH COMPOSITION I	
Humanities or Social Science		
MATH-104	INTERMEDIATE ALGEBRA (if needed)	
<b>Credits</b>		<b>14.00-18.00</b>
<b>Winter 1</b>		
Required Coursework		15.00-19.00
BIO-121	MOLECULAR AND CELLULAR BIOLOGY	
CHEM-134	GENERAL CHEMISTRY II	
COM-150	PUBLIC SPEAKING	
Humanities or Social Science		
MATH-151	COLLEGE ALGEBRA (if needed) <sup>1</sup>	
<b>Credits</b>		<b>15.00-19.00</b>
<b>Fall 2</b>		
Required Coursework		16.00
BIO-122	ORGANISMAL BIOLOGY	
CHEM-210	ORGANIC CHEMISTRY I	
MATH-161	CALCULUS I & ANALYTIC GEOMETRY	
Science Elective		
<b>Credits</b>		<b>16.00</b>
<b>Winter 2</b>		
Required Coursework		15.00
CHEM-211	ORGANIC CHEMISTRY II	
Humanities or Social Science		
Humanities or Social Science		
Natural Science Elective		
<b>Credits</b>		<b>15.00</b>
<b>Total Credits</b>		<b>60.00-68.00</b>

<sup>1</sup>

Recommended for students placing in MATH lower than MATH-161 CALCULUS I & ANALYTIC GEOMETRY, will not count towards Science degree --Science elective may come from BIO, CHEM, GEOG, or GEOL prefix

### Physical Sciences Pathway (Chemistry, Physics or Pre-Engineering)

Course	Title	Credits
<b>Fall 1</b>		
Required Coursework		15.00
CHEM-133	GENERAL CHEMISTRY I	
ENG-121	ENGLISH COMPOSITION I	
MATH-161	CALCULUS I & ANALYTIC GEOMETRY	
Humanities or Social Science		
<b>Credits</b>		<b>15.00</b>
<b>Winter 1</b>		
Required Coursework		15.00
CHEM-134	GENERAL CHEMISTRY II	
COM-150	PUBLIC SPEAKING	
MATH-162	CALCULUS II & ANALYTIC GEOM	
Humanities or Social Science		
<b>Credits</b>		<b>15.00</b>

**Fall 2**

Required Coursework	17.00
CHEM-210      ORGANIC CHEMISTRY I	
PHYS-251      PHYSICS I	
Humanities or Social Science	
Natural Science Elective Credits (4)	
<b>Credits</b>	<b>17.00</b>

**Winter 2**

Required Coursework	13.00
CHEM-211      ORGANIC CHEMISTRY II	
PHYS-253      PHYSICS II	
Humanities or Social Science	
<b>Credits</b>	<b>13.00</b>
<b>Total Credits</b>	<b>60.00</b>