

# PHYSICAL SCIENCE

Program Code: N.PSC.AS

## Associate in Science (A.S.)

Graduation requirement — 60 semester hours

The following curriculum is designed to provide transfer students with the necessary background to complete a bachelor's degree with a major in one of the physical sciences.

Students should plan their transfer programs with a Parkland academic advisor or counselor and the catalog of the four-year college or university they plan to attend.

### Program Notes

- Math requirements vary. All physical science majors must complete MAT 128. MAT 124 and 125 are prerequisites for MAT 128. Consult transfer institution about additional math.
- General Education Core Curriculum requirements for the Associate in Science (A.S.) degree do not fully satisfy the IAI General Education Core Curriculum (GECC) requirements. Additional courses to complete the GECC may be taken at Parkland or after transferring. Contact Counseling Services (U267) for guidance on GECC completion.
- Recommended courses are designed to facilitate completion of the A.S. degree and transfer into a four-year college or university with junior standing in a chosen academic path. Students are advised to follow the recommendations.

## General Education Core Courses (32–36 hours)

**Cr. Hrs.**

Communications (9)

COM 103 Introduction to Public Speaking .....3

ENG 101 Composition I .....3

ENG 102 Composition II .....3

Humanities/Fine Arts electives ..... 6

- *Must choose one course from Humanities and one from Fine Arts*

Social/Behavioral Sciences electives ..... 6

- *Soc/Beh Sci courses must be from at least two disciplines*
- *One course from Hum/Fine Arts or Soc/Beh Sci must fulfill the non-Western culture requirement*

Mathematics elective .....3–5

Recommended: MAT 128 Calculus and Analytic Geometry I (3)

Life Sciences (laboratory-based) elective ..... 4–5

Physical Sciences (laboratory-based) elective ..... 4–5

Recommended Physical Science courses on following page

## A.S. Degree Requirement (8–9 hours)

**Cr. Hrs.**

*Must include one additional mathematics and one additional physical or life science course.*

*Any AST, BIO, CHE, ESC, PHY, or SCI courses numbered 100 through 289 whose second digit is even, beyond the general education requirements in science, may fulfill the additional science course requirement.*

Recommended: MAT 129 Calculus and Analytic Geometry II (4)

Recommended Physical Science courses on following page

### Suggested Full-time Sequence

#### FALL

1st Semester

ENG 101

Hum/FA or Lang elec

Math elec

Phys Sci elec

#### FALL

3rd Semester

Phy Sci elec

Math elec

Soc/Beh Sci elec

Lang/Gen elec

#### SPRING

2nd Semester

ENG 102

Hum/FA or Lang elec

Math elec

Phys Sci elec

#### SPRING

4th Semester

Life Sci elec

Math/Gen elec

Soc/Beh Sci elec

Lang/Gen elec

COM 103

# PHYSICAL SCIENCE

continued

## Recommended Courses

Recommended Physical Science and Math courses for each concentration. Some courses fulfill General Education Core and A.S. degree requirements. Select options to meet the 60-hour degree requirement.

		<b>Astronomy/Physics</b> <i>N.PSC.AS.AST</i>	<b>Chemistry</b> <i>N.PSC.AS.CHE</i>	<b>Meteorology</b> <i>N.PSC.AS.MET</i>	<b>Geology</b> <i>N.PSC.AS.GEL</i>
<b>Physical Science Electives</b>					
*CHE 141	General Chemistry I.....	5	5		5
*CHE 142	General Chemistry II.....	5	5		5
CHE 203	Organic Chemistry I.....		3		
CHE 204	Organic Chemistry Lab I.....		2		
CHE 205	Organic Chemistry II.....		3		
CHE 206	Organic Chemistry Lab I.....		2		
*PHY 121	General Physics I.....				5
*PHY 122	General Physics II.....				5
*PHY 141	Mechanics.....	4	4	4	
PHY 142	Electricity and Magnetism.....	4	4		
PHY 143	Modern Physics.....	4	4*		
ESC 101	Introduction to Weather.....			4	
ESC 102	Introduction to Physical Geology.....				4
<b>Mathematics and Computer Science Electives</b>					
*MAT 128	Calculus and Analytic Geometry I.....	5	5	5	5
*MAT 129	Calculus and Analytic Geometry II.....	4	4	4	
*MAT 228	Calculus and Analytic Geometry III and Introductory Matrix Theory.....	4	4**	4	
MAT 229	Differential Equations.....			5	
CSC 127	Introduction to Computing with Engineering Applications.....			3	

\* These courses may be used to fulfill the General Education Core Curriculum (GECC) requirements.

\*\* PHY 143 and MAT 228 are not required for graduation but recommended for physical chemistry majors only.