

## PHYSICS MAJORS (Suggested Associate in Science Degree Curriculum)

This worksheet is designed to help students select courses which are likely to apply to a major in PHYSICS. These suggested courses satisfy the Associate in Science Degree requirements at Prairie State College and provide the basis for transferring to a four-year institution. This program meets the guidelines of the **IAI (Illinois Articulation Initiative) General Education Core**. Students should obtain a copy of the Prairie State College **Associate in Science Degree Worksheet** and should visit the IAI website at [www.iTransfer.org](http://www.iTransfer.org) for additional information.

The physicist is concerned with theoretical scientific principles. Employment opportunities for physicists include the complete spectrum of the workforce and theoretical research activities. In the typical four-year curriculum, the first two years concentrate on the basic sciences including mathematics, chemistry, and physics. The last two years emphasize advanced mathematics and science courses.

### SUGGESTED CURRICULUM

*Each senior institution has its own transfer policies. Therefore, we cannot guarantee the accuracy of this information in regard to every individual school. Consult the school of your choice and/or the PSC Advising Center to discuss the transferability of courses.*

#### TRANSFERABLE GENERAL EDUCATION CORE (40-41 credits)

##### Area A: Communications ( 9 credits)

ENG 101 (3)	[C1 900]*	Composition I (Prereq. ENG 099, C or better, or qualifying score on English Placement Test)
ENG 102 (3)	[C1 901R]*	Composition II (Prereq. ENG 101, C or better)
COMM 101(3)	[C2 900]	Principles of Communication (Prereq. Placement in ENG 099 or above)

*\*Must have a C or better in ENG 101 & 102 to receive credit for the degree.*

##### Area B: Humanities and Fine Arts ( 9 credits)

Select three courses with at least one course selected from the humanities area and one course from the fine arts area. Refer to the Associate in Science Degree Worksheet, Area B, for a listing of approved course choices.

Humanities Course (3)	Select any Area B Humanities Course (Prereq. Placement in ENG 099 or above)
Fine Arts Course (3)	Select any Area B Fine Arts Course (Prereq. Placement in ENG 099 or above)
Humanities/Fine Arts Course (3)	Select any Area B Course (Prereq. Placement in ENG 099 or above)

##### Area C: Mathematics ( 5 credits)

MATH 171 (5)	[M1 900-2]	Calculus with Analytic Geometry I (Prereq. MATH 165 with C or better, OR qualifying score of Math Placement Test)
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##### Area D: Physical and Life Sciences ( 8-9 credits)

Select one life science course and one physical science course. One course must have a lab component. Refer to the Associate in Science Degree Worksheet, Area D, for a listing of approved course choices.

CHEM 110 (5)	[P1 902L]	General Chemistry I (Prereq. MATH 095 with C or better, <b>OR</b> placement in MATH 151, <b>AND</b> high school chemistry)
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Life Science course (3-4)	Select any Area D Life Science Course (Prereq. Placement in ENG 099 or above)
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##### Area E: Social and Behavioral Sciences ( 9 credits)

Select three courses in at least two different disciplines. Refer to the Associate in Science Degree Worksheet, Area E, for a listing of approved course choices.

Social/Behavioral Sci Course (3)	Select any Area E Social/Behav Sci Course (Prereq. Placement in ENG 099 or above)
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#### PHYSICS MAJOR COURSE RECOMMENDATIONS ( 21-22 credits)

*(Check with the school to which you plan to transfer to verify transferability of courses for this major)*

Select 21 credits from the “suggested” course recommendations listed below:

##### Suggested Physics Major courses often included:

CHEM 130 (5)	General Chemistry II (Prereq. CHEM 110 with C or better)
MATH 172 (5)	Calculus with Analytic Geometry II (Prereq. MATH 171)

- MATH 173 (5) Calculus with Analytic Geometry III (*Prereq. MATH 172*)
- MATH 201 (3) Engineering Computer Programming (*Prereq. MATH 171*)
- MATH 216 (3) Differential Equations (*Prereq. MATH 172*)
- PHYSI 210 (4) University Physics I (*Prereq. MATH 171 and high school physics*)
- PHYSI 220 (4) University Physics II (*Prereq. MATH 171*)
- PHYSI 230 (4) University Physics III (*Prereq. MATH 171*)

**Other suggested courses which satisfy the PSC AS degree requirements may include electives such as:**

Any additional University Physics II (*Prereq. MATH 171 and PHYSI 210*) general education courses selected from Areas B, C, D, or E

Any entry level majors course in a transferable major area

Any foreign language courses\*

Up to four credits of physical education courses

Additional courses recommended as transferable by the school to which you plan to transfer.

*\*Foreign Language Requirement: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school, or four semesters in college, will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.*

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## 62 CREDITS REQUIRED FOR AN ASSOCIATE IN SCIENCE DEGREE

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**FOR FURTHER INFORMATION CONTACT:**

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**PHYSICS DEPARTMENT FACULTY:**

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**FOR TRANSFER INFORMATION:**

Course Applicability System (CAS): [www.transfer.org](http://www.transfer.org)

Illinois Articulation Initiative (IAI): [www.iTransfer.org](http://www.iTransfer.org)

Links to Articulation Tables for Illinois Colleges: <http://www.itransfer.org/IAI/Other/Articulationlinks.taf>

Visit the web sites of colleges and universities to which you plan to transfer.

**FOR CAREER INFORMATION:**

American Institute of Physics: <http://www.aip.org>

Occupational Outlook Handbook, U.S. Department of Labor: <http://www.bls.gov/oco/home.htm>