ACADEMIC PLANNING GUIDE — PHYSICS

NORTH PARK UNIVERSITY • CHICAGO • ILLINOIS

Revised July 2012

	Fall Semester		Spring Semester	
First Year	•NPD 1000: Dialogue	4	•Fine Arts Option	2
	•PHYS 1210: Introductory Physics I	4	•BTS 1850: Introduction to the Bible	4
	PHYS 1330: Mechanical Comprehension	2	PHYS 1220: Introductory Physics II	4
	PHYS 1510: Mathematical Methods of Physics	2	PHYS 1410: Pursuit of Knowledge	2
	Elective	4	MATH 1520: Calculus and Analytic Geometry II	4
	TOTAL SEMESTER HOURS	**16**	**TOTAL SEMESTER HOURS**	**16**
Second Year	• Culture and Society Option	4	• NPD 2000: Dialogue II	4
	•MATH 1510: Calculus and Analytic Geometry I	4	•Science Quad (BIOL)	2
	PHYS 2110: Modern Physics	4	•Personal Development Option	2
	PHYS 3310: Dynamics	4	PHYS 2510: Electronics for Scientists	3
			PHYS 2520: Electronics Lab	1
			Elective	4
	TOTAL SEMESTER HOURS	**16**	**TOTAL SEMESTER HOURS**	**16**
Third Year	•NPD 3000: Dialogue III	4	•Foreign Language 1020 Option	4
	•Foreign Language 1010 Option	4	PHYS 3510: Quantum Mechanics	4
	PHYS 3410: Electromagnetic Fields or PHYS 3510: Quantum Mechanics (BS required to take both for major)	4	PHYS Elective (BS only)	2
			MATH 2030: Differential Equations	4
	Elective	4		
	TOTAL SEMESTER HOURS	**16**	**TOTAL SEMESTER HOURS**	**14**
Fourth Year	PHYS 4010: Fourth Year Seminar (BS only)	2	•Biblical Studies Option	4
	PHYS Elective	4	PHYS 3110: Statistical Thermodynamics (BS only)	4
	Elective	4	PHYS 4030: Knowledge Reloaded	2
	Elective	4	Elective	4
	TOTAL SEMESTER HOURS	**14**	**TOTAL SEMESTER HOURS**	**14**

• Course meets a general education requirement

Students may need prerequisite courses prior to taking MATH 1510

The Academic Planning Guide is designed as a guide for students planning their course selections. The information on this page provides only a suggested schedule. Actual course selections should be made with the advice and consent of a faculty advisor. While accurately portraying the information contained in the college catalog, this form is not considered a legal substitute for that document. Students should become familiar with the catalog in effect at the time in which they entered the institution.

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Graduation Requirement:

120 semester hours, minimum

General Education Requirements:

44 semester hours

- ☐ The North Park Dialogue (12)
  - ☐ Dialogue I (4)
  - ☐ Dialogue II (4)
  - ☐ Dialogue III (4)
- ☐ Culture and Society (4)
- ☐ Personal Development (2)
- ☐ Biblical Studies (8)
  - ☐ BTS 1850 (4)
  - ☐ BTS option (4)
- ☐ Foreign Language (8)
  - ☐ 1010 Level (4)
  - ☐ 1020 Level (4)
- ☐ Mathematics (4) Met by major course MATH 1510
- ☐ Fine Arts (2)
- ☐ Natural Science (4)
  - ☐ Biology (2)
  - ☐ Chemistry/Physics (2) Met by major course PHYS 1210

See General Education checklist for specific courses that will fulfill each requirement. http://www.northpark.edu/generaleducation

Some general education courses may meet course requirements for your major.

Major Requirements:

***Required Semester Hours*:** **BA: 48 semester hours**
BS: 58 semester hours

***Prerequisites and Supporting Courses*: 12 semester hours**

- ☐ MATH 1510: Calculus and Analytic Geometry I (4)
- ☐ MATH 1520: Calculus and Analytic Geometry II (4)
- ☐ MATH 2030: Differential Equations (4)

Major Requirements cont.:

***Required Core Courses*:** **BA: 32 semester hours**
BS: 42 semester hours

- ☐ PHYS 1210: Introductory Physics I (4)
- ☐ PHYS 1220: Introductory Physics II (4)
- ☐ PHYS 1330: Mechanical Comprehension (2)
- ☐ PHYS 1410: Pursuit of Knowledge (2)
- ☐ PHYS 1510: Mathematical Methods of Physics (2)
- ☐ PHYS 2110: Modern Physics (4)
- ☐ PHYS 2510: Electronics for Scientists (3)
- ☐ PHYS 2520: Electronics Lab (1)
- ☐ PHYS 3310: Dynamics (4)
- ☐ PHYS 4030: Knowledge Reloaded (2)

BA degree only:
Select one:

- ☐ PHYS 3410: Electromagnetic Fields (4)
- ☐ PHYS 3510: Quantum Mechanics (4)

BS degree only

- ☐ PHYS 3110: Statistical Thermodynamics (4)
- ☐ PHYS 3410: Electromagnetic Fields (4)
- ☐ PHYS 3510: Quantum Mechanics (4)
- ☐ PHYS 4010: Fourth Year Seminar (2)

Elective Courses: Refer to the college catalog for a listing of approved elective courses
BA: 4 semester hours
BS: 6 semester hours

Notes:

- It is recommended that students take Math 3100
- In addition all students will be required to write a senior thesis. Students may undertake some type of original research project which will result in a written paper to be submitted to the department for review. Students should also present their research at either a departmental symposium or at an organized off-campus meeting.

Additional Graduation Requirements

- ☐ Total of 120 semester hours, minimum. Additional courses may need to be taken to meet this requirement.
- ☐ Grade Point Average
  - ☐ Overall cumulative grade point average of 2.00
  - ☐ Cumulative grade point average in major of 2.00
- ☐ Last 30 semester hours must be taken at North Park
- ☐ Acceptance into the major

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