# 7-YEAR BS/MD (MEDICAL) PROGRAM IN PHYSICS Suggested 3 Year Course Sequence

#### Freshmen Year

PHY 099 – Orientation to Physics (0-credit)

PHY 203- Physics for Physicists I\* PHY 204-Physics for Physicists II\*

MAT 127-Calculus A\*

CHE 201-Gen. Chem. I\*

MAT 128-Calculus B\*

CHE 202-Gen. Chem. II \*

Language I\*

First Seminar

Liberal Learning I\*

\* At least 2 of these must be AP credit, placement, or taken before the freshman year

### Freshmen Summer

Liberal Learning II Liberal Learning III

(May be taken in Fall/ Spring Freshmen year, if AP credits or placed out of > 2 courses)

#### **Sophomore Year**

PHY 306-Mathematical Physics
CHE 331-Organic Chem. I
Physics Option I
PHY 321-Modern Physics
CHE 332-Organic Chem. II
BIO 185-Themes in Biology

Language III

Physics Option II (one of the following):

- PHY 316 Biomedical Physics
- PHY 336 Biophysics
- PHY 451 Advanced Experimental Phys. (can count as Capstone)
- PHY 493 Independent Research II (can count as Capstone)

## **Sophomore Summer**

One of the following:

- PHY 493-Independent Research II (can count as Capstone)
- PHY 399-Physics Research Internship

## **Junior Year**

PHY 401-Classical Mechanics PHY 416 – Thermal Physics

PHY 421-Electromagnetic Theory I BIO 231-Genetics
Physics Option III Physics Option IV

Liberal Learning IV

Physics Option V (one of the following):

- PHY 316-Biomedical Physics
- PHY 336 Biophysics
- PHY 451 Advanced Experimental Phys. (can count as Capstone)
- PHY 493 Independent Research II (can count as Capstone)

#### **Junior Summer**

Liberal Learning V

(May be taken in Fall/ Spring Junior year, if AP credits or placed out of > 2 courses)

### **Senior Year** (Completed while at NJMS)

Biochemistry (equivalent to CHE 430)

Liberal Learning VI (Psychiatry)