



PHYSICS MAJOR FORM

INSTRUCTIONS

- ❖ Fill out this form (front **AND** back) before meeting with the DUS
- ❖ Entry to the major typically requires completion of at least 2 physics & 2 math classes at Cornell with a B- average or higher
- ❖ If declaring the physics major, consider your potential advisor. The list of available advisors is : <http://bit.ly/2th442Q>
- ❖ Bring the form when meeting with the Physics DUS. Meet by dropping in during regular DUS office hours
- ❖ After your new major advisor is assigned, complete the Physics Major Course Plan (reverse side) with your new advisor.
- ❖ After meeting with your new advisor, return this sheet to Sue Sullivan in 117 Clark Hall

BIOGRAPHICAL INFORMATION

Last name First name Middle initial Gender

NetID Student ID # Graduation Year Citizenship

Major Concentration Double Major?

Ithaca Address Phone

Permanent Address Phone

CHANGES TO STATUS

Adding Physics Major Dropping Physics Major Changing Advisor Changing Concentration

Need key access to the SPS Lounge? Need to be added to SPS Listserve

Add to the Physics majors photo board outside the main Physics office. These photos are the same as on the Cornell student ID and labeled with your first and last name. By signing below, I consent my permission to the Physics Department to use my picture on the photo board.

Signature Date Printed Name

FOR DUS USE ONLY

New advisor Previous advisor (if changing advisor and/or major)

New major (if dropping major)

DUS Approval for all above changes to status Date



PHYSICS MAJOR COURSE PLAN

CORE REQUIREMENTS

- ❖ Enter the grade for any Cornell class taken & the corresponding semester; for AP / placement credit, indicate "AP"
- ❖ For core requirements not yet taken, indicate the semester in which you intend to take those classes
- ❖ Courses in **bold** are honors level or more mathematically sophisticated options.
- ❖ Circle the math classes you have taken.

| Sequence | Description | | Fr. Fall | Fr. Spr. | Soph. Fall | Soph. Spr. | Jr. Fall | Jr. Spr. | Sr. Fall | Sr. Spr. |
|--|---|----------------------|----------|----------|------------|------------|----------|----------|----------|----------|
| Introductory Sequence *2216 required if 1116 not taken 2207 & 2208 allowed only if started as bio major | Mechanics (1116 has special relativity; 1112 thermal phys.) | 1112* 1116 | | | | | | | | |
| | Electricity & Magnetism | 2213 2217 | | | | | | | | |
| | Waves (2218 also covers thermal physics) | 2214 2218 | | | | | | | | |
| | *Special Relativity (1 unit S/U) | 2216 | | | | | | | | |
| Quantum Physics | Quantum Physics I | 3316 | | | | | | | | |
| | Quantum Physics II (Fall only) | 3317 | | | | | | | | |
| | Mechanics II (Spring only) | 3318 | | | | | | | | |
| | Electromagnetism II (Fall only) | 3327 | | | | | | | | |
| Lab Class | e.g. 3310, 3360, 4410, AEP2640 | | | | | | | | | |
| Calculus II (integral calculus) | 1120, 1910, 1220 | | | | | | | | | |
| Multivariable Calculus | 1920, 2220, 2130, 2240* | | | | | | | | | |
| Differential Equations | 2930, 3230 | | | | | | | | | |
| Linear Algebra | 2940, 2210, 2310, 2230* | | | | | | | | | |

CONCENTRATION : INSIDE CONCENTRATION OR OUTSIDE CONCENTRATION

- ❖ Select either the "Inside Concentration" OR an "Outside Concentration" – you cannot do both
- ❖ If you already know your concentration and/or the classes you intend to take for your concentration, please fill them in. Otherwise, wait until your meeting with the DUS and major advisor to fill out your concentration & related classes.
- ❖ **Inside Concentration** : **PHYS 4410** (Advanced Experimental Physics), **PHYS 4230** (Statistical Thermodynamics), **7 additional credits of 3000+ level physics courses**, and **TWO additional 3000+ level math classes** (or AEP 4210 & 4220), all beyond the core. A maximum of 4 credits from independent study-style credits (4490/4498/4499) can be used.
- ❖ **Outside Concentration** : 15 credits in an *internally coherent concentration* outside of physics which is agreed upon by your major advisor; 8 credits of which must be for 3000+ level classes. Some examples of outside concentrations include : astronomy, mathematics, computer science, philosophy, science writing, biology, chemistry, electrical engineering, political science. Classes can come from multiple departments.

Physics Major Concentration

| Name of Class | Course # | Fr. Fall | Fr. Spr. | Soph. Fall | Soph. Spr. | Jr. Fall | Jr. Spr. | Sr. Fall | Sr. Spr. |
|---------------|----------|----------|----------|------------|------------|----------|----------|----------|----------|
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Signature Approval of Major Advisor

Printed Name

Date