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Options for B.S. Degrees in Physics

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PHYSICS TRACK REQUIREMENTS

This track is designed to prepare students for research and high-tech careers and for graduate study in the physical sciences.

1. 40 semester hours in physics, including PH 221, 222, 351-352, 445-446, 450-451, 461-462, and approved electives, including 3 semester hours selected from PH 425-428.
2. CH 115/116, 117/118.
3. 18 or more semester hours in mathematics, including MA 125, 126, 227, and 252.

A grade of C or better must be earned in each required course.

SUGGESTED CURRICULUM*

	Fall	Spring
Freshman	PH 221 CH 115/116 MA 125	PH 222 CH 117/118 MA 126
Soph.	PH 351 CH 325 MA 227	PH 352 MA 252
Junior	PH 461 PH 425	PH 462 PH 426
Senior	PH 445 PH 450	PH 446 PH 451

* All suggested curricula are in addition to other required University and NSM courses. See online catalog at www.uab.edu.

BIOPHYSICS TRACK REQUIREMENTS

This interdisciplinary track of the physics major is designed to place students in medical school, graduate school in the biosciences, teaching positions, high-tech enterprises, or science writing.

1. 29 hours in physics, including PH 221, 222, 351-352, and approved electives.
2. 16 semester hours in chemistry.
3. 18 semester hours in mathematics.
4. 8 semester hours in biology.

A grade of C or better must be earned in each required course.

A biophysics track student who has taken all or part of the PH 201-202 sequence before declaring a physics major may petition to have those courses substitute for the PH 221-222. Students seeking physics teaching certification should plan for 32 semester hours in physics courses.

SUGGESTED CURRICULUM

	Fall	Spring
Freshman	BY 123 CH115/116 MA 125	BY 124 CH 117/118 MA 126
Soph.	PH 221 CH 235/236 MA 227	PH 222 CH 237/238 MA 252
Junior	PH 351 PH 475	PH 352 BY 210
Senior	PH 445 PH 461	PH 476 PH 491

PHYSICS EDUCATION TRACK[†]

This track prepares science educators to teach at the secondary level, and to readily become “Highly-qualified” and certified teachers of Physics and Physical Science.

1. 32 semester hours in Physics, including PH 221, 222, 301 or 302, 304 or 305, 351-352, 490 and approved electives.
2. 8 semester hours in chemistry: CH 115-118.
3. 11 semester hours in math: MA 125-126 and one course from MA 413-419.

A grade of C or better must be earned in each required course.

A suggested Minor in Secondary Education requires 19 semester hours.

Teacher certification normally requires post-graduate in the UAB School of Education. Students should acquire advisors in both Physics and education as soon as possible.

SUGGESTED CURRICULUM[‡]

	Fall	Spring
Freshman	MA 125 PH 221	MA 126 PH 222
Soph.	PH 301 CH 115/116 PH 304 ECY 300	MA 418 CH 117/118 PH 490 EDT 300
Junior	PH 351 EDF 362	PH 352 EPR 363
Senior	PH 425 EHS 401-2	PH 491 EDR 442

[†] Pending approval as of 10/04.

[‡] Includes courses for Sec. Ed. Minor.