

## Chemical Physics Concentration: Plan of Study #1

The degree courses are in boldface. The plan below is only a suggested sequence, but courses must be taken with observance of prerequisites. Pre- and co-requisites are indicated in brackets.

	Fall		Spring
Freshman	<b>PHYS 115</b> [ <i>MATH 131</i> ] <b>4</b> <b>PHYS 115L</b> <b>1</b> <b>MATH 131</b> [ <i>see catalog for math requirement</i> ] <b>4</b> English course <sup>1</sup> <b>3</b> (Basic skills course, if needed <sup>1</sup> , UNIV 101, or one FS) <b>3</b> 15 hrs.		<b>PHYS 116</b> [ <i>PHYS 115, MATH 132</i> ] <b>4</b> <b>PHYS 116L</b> [ <i>PHYS 115L</i> ] <b>1</b> <b>MATH 132</b> [ <i>MATH 131</i> ] <b>4</b> COMM 101 <b>3</b> Found. Stud. Course <b>3</b> 15 hrs.
Sophomore	<b>PHYS 306</b> [ <i>PHYS 116, 116L</i> ] <b>2</b> <b>PHYS 307</b> [ <i>PHYS 116, 116L</i> ] <b>2</b> <b>PHYS 321<sup>3</sup></b> [ <i>PHYS 116, MATH 132</i> ] <b>2</b> <b>CHEM 105</b> [ <i>see catalog for math requirement</i> ] <b>3</b> <b>CHEM 105L</b> <b>1</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> 16 hrs.		<b>PHYS 308</b> [ <i>PHYS 116, 116L</i> ] <b>3</b> <b>PHYS 308L</b> [ <i>PHYS 116, 116L</i> ] <b>1</b> <b>PHYS 322<sup>3</sup></b> [ <i>PHYS 321</i> ] <b>2</b> <b>PHYS 310<sup>2</sup></b> [ <i>PHYS 116, MATH 132</i> ] <b>or</b> <b>3</b> <b>PHYS 341<sup>2</sup></b> [ <i>PHYS 308, PHYS 321</i> ] <b>3</b> <b>CHEM 106</b> [ <i>CHEM 105/L</i> ] <b>3</b> <b>CHEM 106L</b> [ <i>CHEM 105/L</i> ] <b>1</b> Found. Stud. Course <b>3</b> 16 hrs.
Junior	<b>PHYS 315<sup>3</sup></b> [ <i>PHYS 306, 308L</i> ] <b>1</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> Option <b>3</b> 16 hrs.		<b>PHYS 341<sup>2</sup></b> [ <i>PHYS 215, PHYS 321</i> ] <b>or</b> <b>3</b> <b>PHYS 310<sup>2</sup></b> [ <i>PHYS 116, MATH 132</i> ] <b>3</b> <b>PHYS 316<sup>3</sup></b> [ <i>PHYS 315</i> ] <b>1</b> <b>PHYS 497<sup>3</sup></b> [ <i>PHYS 308, PHYS 322</i> ] <b>3</b> <b>CHEM 321/L</b> [ <i>CHEM 106/L</i> ] <b>4</b> English 305T <b>3</b> 14 hrs.
Senior	<b>CHEM 461</b> [ <i>CHEM 321/L, MATH 132, PHYS 116/L or 106/L</i> ] <b>4</b> <b>CHEM 461L</b> [ <i>CHEM 321/L, MATH 132, PHYS 116/L or 106/L</i> ] <b>1</b> <b>PHYS 405</b> <b>1</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> Option <b>3</b> 15 hrs.		<b>CHEM 462</b> [ <i>CHEM 461/L</i> ] <b>4</b> <b>CHEM 462L</b> [ <i>CHEM 461/L</i> ] <b>1</b> Found. Stud. Course <b>3</b> Option <b>3</b> Option <b>3</b> Option <b>1</b> 15 hrs.

[Prerequisite]    [Pre- or Co-requisite]

<sup>1</sup>Specific requirements are determined by proficiencies met upon entering. You may need one semester of English (107) or two (101 & 105). One basic skills course is built into the schedule, but you may need more. Additional courses reduce the number of "Option" courses later in the curriculum. One Foundational Studies UDIE course may be replaced by completion of a minor or second major.

<sup>2</sup> PHYS 310 and 341 are offered on an alternating basis in spring semesters.

<sup>3</sup> PHYS 321 & 322, 315 & 316, and 497 are offered every other year. PHYS 321 & 322 alternate with 315 & 316. PHYS 316 and 497 are offered in the same spring semester.

## Chemical Physics Concentration: Plan of Study #2

The degree courses are in boldface. The plan below is only a suggested sequence, but courses must be taken with observance of prerequisites. Pre- and co-requisites are indicated in brackets.

	Fall		Spring
Freshman	<b>PHYS 115</b> [ <i>MATH 131</i> ] <b>4</b> <b>PHYS 115L</b> <b>1</b> <b>MATH 131</b> [ <i>see catalog for math requirement</i> ] <b>4</b> English course <sup>1</sup> <b>3</b> (Basic skills course, if needed <sup>1</sup> , UNIV 101, or one FS) <b>3</b> 15 hrs.		<b>PHYS 116</b> [ <i>PHYS 115, MATH 132</i> ] <b>4</b> <b>PHYS 116L</b> [ <i>PHYS 115L</i> ] <b>1</b> <b>MATH 132</b> [ <i>MATH 131</i> ] <b>4</b> COMM 101 <b>3</b> Found. Stud. Course <b>3</b> 15 hrs.
Sophomore	<b>PHYS 306</b> [ <i>PHYS 116, 116L</i> ] <b>2</b> <b>PHYS 307</b> [ <i>PHYS 116, 116L</i> ] <b>2</b> <b>CHEM 105</b> [ <i>see catalog for math requirement</i> ] <b>3</b> <b>CHEM 105L</b> <b>1</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> 17 hrs.		<b>PHYS 308</b> [ <i>PHYS 116, 116L</i> ] <b>3</b> <b>PHYS 308L</b> [ <i>PHYS 116, 116L</i> ] <b>1</b> <b>PHYS 310</b> <sup>2</sup> [ <i>PHYS 116, MATH 132</i> ] <u>or</u> <b>3</b> <b>PHYS 341</b> <sup>2</sup> [ <i>PHYS 308, PHYS 321</i> ] <b>3</b> <b>CHEM 106</b> [ <i>CHEM 105/L</i> ] <b>3</b> <b>CHEM 106L</b> [ <i>CHEM 105/L</i> ] <b>1</b> Found. Stud. Course <b>3</b> 14 hrs.
Junior	<b>PHYS 321</b> <sup>3</sup> [ <i>PHYS 116, MATH 132</i> ] <b>2</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> Option <b>3</b> Option <b>1</b> 15 hrs.		<b>PHYS 322</b> <sup>3</sup> [ <i>PHYS 321</i> ] <b>2</b> <b>PHYS 341</b> <sup>2</sup> [ <i>PHYS 308, PHYS 321</i> ] <u>or</u> <b>3</b> <b>PHYS 310</b> <sup>2</sup> [ <i>PHYS 116, MATH 132</i> ] <b>3</b> <b>CHEM 321/L</b> [ <i>CHEM 106/L</i> ] <b>4</b> English 305T <b>3</b> Option <b>3</b> 15 hrs.
Senior	<b>PHYS 315</b> <sup>3</sup> [ <i>PHYS 306, 308L</i> ] <b>1</b> <b>CHEM 461</b> [ <i>CHEM 321/L, MATH 132, PHYS 116/L or 106/L</i> ] <b>4</b> <b>CHEM 461L</b> [ <i>CHEM 321/L, MATH 132, PHYS 116/L or 106/L</i> ] <b>1</b> <b>PHYS 405</b> <b>1</b> Found. Stud. Course <b>3</b> Found. Stud. Course <b>3</b> Option <b>2</b> 15 hrs.		<b>PHYS 316</b> <sup>3</sup> [ <i>PHYS 315</i> ] <b>1</b> <b>PHYS 497</b> <sup>3</sup> [ <i>PHYS 308, PHYS 322</i> ] <b>3</b> <b>CHEM 462</b> [ <i>CHEM 461/L</i> ] <b>4</b> <b>CHEM 462L</b> [ <i>CHEM 461/L</i> ] <b>1</b> Found. Stud. Course <b>3</b> Option <b>3</b> 15 hrs.

[Prerequisite]    [Pre- or Co-requisite]

<sup>1</sup>Specific requirements are determined by proficiencies met upon entering. You may need one semester of English (107) or two (101 & 105). One basic skills course is built into the schedule, but you may need more. Additional courses reduce the number of "Option" courses later in the curriculum. One Foundational Studies UDIE course may be replaced by completion of a minor or second major.

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<sup>3</sup> PHYS 321 & 322, 315 & 316, and 497 are offered every other year. PHYS 321 & 322 alternate with 315 & 316. PHYS 316 and 497 are offered in the same spring semester.