

**Three choices in Physics Degree paths:
BS Physics-General, BS Physics-Teaching Certification, or BS Physics-Engineering**

Current Requirements for *all* students:

PHY 230 & 231
PHY 309 & 370W
PHY461 & 471
MAT 150, 151, 252 & 245
CHE 120 & 121

Additional Requirements for each path:

BS Physics-General: PHY 400, 401, 406, 3 credits CSC, & 12 credits of physics electives

BS Physics-Certification: PHY 400, 406, 6 credits of physics electives, EDU 201, EDU 413, IDS 470/471, PSY 370, SED 482, & one semester of student teaching

BS Physics-Engineering: PHY 355, EGR 151, EGR 251, 6 credits CSC and 9 credits of physics electives & a minor in computer science, chemistry or general management **or** an additional 12 credits in physics, engineering, or math.

Sequence of Physics courses for 4-year plan

BS Physics-General

Year	Fall	Spring
1	PHY 230, MAT 150, CSC	PHY 231, MAT 151
2	PHY 309, MAT 252, CHE 120	PHY 370W, CHE 121, PHY ELEC
3	PHY 461, MAT 245, PHY ELEC	PHY 400, PHY ELEC
4	PHY 401, PHY 406	PHY 471, PHY ELEC

BS Physics-Certification

Year	Fall	Spring
1	PHY 230, MAT 150	PHY 231, MAT 151
2	PHY 309, MAT 252, CHE 120	PHY 370W, CHE 121, EDU 201
3	PHY 461, MAT 245, PHY ELEC, PSY 370	PHY 400, PHY 471, SED 482
4	PHY 406, PHY ELEC, IDS 470/471, EDU 413	Student Teaching

BS Physics-Engineering

Year	Fall	Spring
1	PHY 230, MAT 150, CSC	PHY 231, MAT 151, EGR 151
2	PHY 309, MAT 252, CHE 120	PHY 370W, EGR 251, CHE 121
3	PHY 461, MAT 245, PHY 355	PHY ELEC, CSC (if not earlier)
4	PHY 471, PHY ELEC	PHY ELEC

Regular Schedule of Physics Course Offerings

Each Fall Semester	Each Spring Semester
PHY 100/103/111/120/200/210	PHY 100/101/103/111/120/201/210
PHY 230	PHY 231
PHY 309	PHY 370 (W)
PHY 355	
PHY 406	PHY 400
PHY 461	EGR 151
Elective #2	EGR 251
	Elective #3

Fall Semester of Every Other Year

PHY 401 (Every odd year; starting Fall 2011)

PHY 430 (Every even year; starting Fall 2012)

Physics Electives #1 - 3 (offered based on student/faculty interests and projected enrollments)

PHY 340 (Lasers and Fiber Optics)

PHY 356 (Electronics Instrumentation)

PHY 398 (Special Topics (sometimes offered as W))

PHY 405 (Scientific Computer Interfacing)

PHY 410/411 (Optics/Optics Laboratory)

PHY 415 (Solid State)

PHY 440 (Quantum Mechanics)

Tentative Physics Electives Schedule for 2011 – 2013*

Spring '11

PHY 398W (Astrophysics)

PHY 410/411 (Optics/Optics Laboratory)

PHY 440 (Quantum Mechanics)

PHY 512 (Methods of Theoretical Physics)

Fall '11

PHY 401

PHY 340 (Lasers and Fiber Optics)

PHY 530 (Optics Track)

Spring '12

PHY 398W (Astrophysics)

PHY 415 (Solid State)

PHY 5XX (Nanotech/MS Track)

Fall '12

PHY 405 (Scientific Computer Int.)

PHY 430 (Thermodynamics)

PHY 5XX

Spring '13

PHY 398 (Materials Science)

PHY 440 (Quantum Mechanics)

PHY 410/411 (Optics/Optics Laboratory)

PHY 5XX

*Course offerings subject to change based on major changes in student interests and/or enrollments.

Note: Students must complete the University Requirements appropriate to their specific degree program and should consult with their faculty advisor to select the appropriate courses for this purpose. To be awarded credit towards a degree in physics, a grade of "C-" or higher must be earned in each of the following course: PHY 230, 231, 309 and 370.

Revised: Friday, November 12, 2010

Sample Course Schedules for Typical SCSU Physics Majors

BS Physics-General

Year	Fall	Spring
1	PHY 230, MAT 150, CSC, INQ 101 (14 cr)	PHY 231, MAT 151, ENG 112, HIS/P,ELE? (17 cr)
2	PHY 309, MAT 252, CHE 120, FLA, COM 100 (17 cr)	PHY 370W, CHE 121, PHY ELEC, HIS/W, EXS, NSA (16 cr)
3	PHY 461, MAT 245, PHY ELEC, GEO 10X, PCH, ELE (17 cr)	PHY 400, PHY ELEC, ENG 217, Fine Arts, ELE (15 cr.)
4	PHY 401, PHY 406, PHI, SSA, W course (15 cr)	PHY 471, SSB, PHY ELEC

BS Physics-Certification

Year	Fall	Spring
1	PHY 230, MAT 150, ENG 11X, INQ 101 (14 cr)	PHY 231, MAT 151, ENG 112, PSY 100, HIS 11X (17 cr)
2	PHY 309, MAT 252, CHE 120, FLA, SHE 203 (17 cr)	PHY 370W, CHE 121, HIS 10X, EDU 201, COM 100, EXS (16 cr)
3	PHY 461, MAT 245, PHY ELEC, PSY 370, ESC 310, GEO 10X (17 cr)	PHY 400, PHY 471, SED 482, ENG 217, Fine Arts (15 cr)
4	PHY 406, PHY ELEC, IDS 470/471, EDU 413, PHI 310 (15 cr)	Student Teaching

BS Physics-Engineering

Year	Fall	Spring
1	PHY 230, MAT 150, CSC, INQ 101, MINOR (17 cr)	PHY 231, MAT 151, EGR 151, ENG 112, HIS/P (17 cr)
2	PHY 309, MAT 252, CHE 120, FLA, COM 100 (17 cr)	PHY 370W, EGR 251, CHE 121, EXS, PHI, MINOR (16 cr)
3	PHY 461, MAT 245, CSC, GEO 10X, PCH, MINOR (17 cr)	PHY 355, PHY ELEC, ENG 217, NSA, Fine Arts (16 cr.)
4	PHY 471, PHY ELEC, SSA, MINOR, MINOR (15 cr)	SSB, PHY ELEC, MINOR, MINOR, HIS/W (15 cr.)

Note: Assumes that no additional pre-requisite courses are needed (e.g. ENG 111, MAT 122) and that 18 credits are required for a minor.

University Requirements – Assuming initial placement at ENG 112, FLA 101, MAT 150

American Political Foundations – HIS/P
English Composition – ENG 112
Oral Communication – COM 100
Exercise Science – EXS
Fine Arts – ART/MUS/THR
Foreign Language – FLA 101
Health – PCH

History of World Civilization – HIS / W
Literature – ENG 217
Natural Sciences A (NSA) – BIO/ESC
Philosophy – PHI
Social Science A (SSA) – ECO/GEO/PSC
Social Science B (SSB) – ANT/PSY/SOC