

Physics B.S. Mathematical Track	
Suggested Plan of Study	
Department of Physics and Astronomy	
Chairperson: K. Haglin Updated: 10/13/2021	
Physics Major Advisors Dr. Kevin Haglin 308-3718 klhaglin@stcloudstate.edu Dr. Zengqiang "John" Liu 308-3154 zliu@stcloudstate.edu Dr. Sneh Kalia 308-4285 skalia@stcloudstate.edu Dr. Steven Ratliff 308-3274 stratliff@stcloudstate.edu Dr. Annette Lee 308-2013 aslee@stcloudstate.edu Dr. John Sinko 308-4183 jesinko@stcloudstate.edu	
First Semester (15 cr)	Second Semester (15 cr)
PHYS 234 (5 cr) MATH 221 (4 cr) Liberal Education Goal Area (6 cr)	PHYS 235 (5 cr) MATH 222 (4 cr) CSCI 260 (2 cr) or ECE 102 (3 cr) Liberal Education Goal Area (3-4 credits)
Third Semester (15 cr)	Fourth Semester (15 cr)
PHYS 328 (3 cr) PHYS 346 (3 cr) MATH 312 (3 cr) Liberal education Goal Area (6 cr)	PHYS 329 (3 cr) ENGR 332 or CHEM 210 (3 or 4 cr) MATH 327 (4 cr) MATH 321 (3 cr) Liberal education Goal Area (1-2 cr)
Fifth Semester (15 cr)	Sixth Semester (15 cr)
PHYS 333 (3 cr) PHYS 431 (3 cr) or PHYS 334 (3 cr) MATH 411 or 427 (3-4 cr) Liberal education Goal Area (5-6 cr)	ENGR 332 or CHEM 210 (3 or 4 cr) PHYS 358 or PHYS 440 (4 cr) MATH 427 or PHYS 415 (1-3 cr) Liberal education Goal Area (2-4 cr)
Seventh Semester (15 cr)	Eighth Semester (15 cr)
PHYS 431 (3 cr) or PHYS 334 (3 cr) PHYS 430 (2 cr) PHYS 450 (1-3 cr) MATH 411 or 427 (3-4 cr) Liberal education Goal Area (3-6 cr)	PHYS 358 or PHYS 440 (4 cr) MATH 427 or PHYS 415 (1-3 cr) PHYS 432 (2 cr) Liberal education Goal Area (4-6 cr)

Notes:

Many Liberal Education Program (LEP) courses will satisfy more than one goal area. Students are encouraged to take courses that double-count in more than one goal area so they can take additional math/physics electives.

Students in this track will also earn a math minor.

Special Note on Upper division Courses. Most upper division ASTR, ENGR, and PHYS courses are offered every other year. It is important that students check with the department to determine which year and semester a specific course will be offered. The table below provides a general indication as to when upper division courses are offered, but these may change during any given semester.

Every Semester	PHYS 328, PHYS 346
Every Fall	PHYS 333, PHYS 430,
Every Spring	ENGR 425, PHYS 329, PHYS 432
Spring (Even Years)	ASTR 312, PHYS 358, PHYS 436
Spring (Odd Years)	ASTR 427, ENGR 332, PHYS 435, PHYS 440
Fall (Even Years)	ASTR 323, ENGR 447, PHYS 334
Fall (Odd Years)	ASTR 311, PHYS 431, PHYS 445, MATH 427