

VII. PHYSICS MAJOR CHECKLIST

Fill in *term and year* in the blank next to the course and credits. **NOTE:** You must have a total of at least 120 credits, with at least 42 credits at the 300 level or above. These 120 credits may not include MATH 117, MATH 118, MATH 124, MATH 125, or MATH 126. A grade of C- or better is required in each course used under headings 1, 2, and 4.

1. Physics (41 credits)

PHCC 141 (Phys. Sci. Engr. I)	5		PH341 (Mechanics)	4	
PHCC 142 (Phys. Sci. Engr. II)	5		PH351 (Electricity & Magnetism)	4	
PH 245 (Electronics)	3		PH353 (Optics & Waves)	4	
PH 293 (Selected Topics)	1		PH 361 (Thermodynamics)	3	
PH 314 (Modern Physics)	4		PH 425 (Advanced Lab)	2	
PH 315 (Modern Physics Lab)	2		PH 451 (Quantum Mech. I)	3	
			PH 492 (Seminar)	1	

2. Related Courses (30 credits)

CHEMCC 111 (Chemistry I)	4		CS 156 (Intro. to C Prog. I)	1	
CHEMCC 112 (Chemistry Lab I)	1		CS 157 (Intro. to C. Prog. II)	1	
COCC 150 (Composition)	3		MATHCC 160 (Calculus I)	4	
COCC 301B (Writing in Disciplines)	3		MATHCC 161 (Calculus II)	4	
[or COCC 300 (Writing Arguments)]			MATH 261 (Calculus III)	4	
CS155 (Intro. to UNIX)	1		MATH 340 or 345 (Differential Eqs.)	4	

Note: MATH 229 is strongly recommended, but not required. MATH 369 is recommended as useful preparation for PH 451.

3. All University Core Curriculum (15 credits)

3B (Arts/Hum.)	6	
3C (Soc./Behav. Sci.)	3	
3D (Hist. Perspect.)	3	
3E (Glob./Cult. Awareness)	3	

4. Additional Technical Requirements (18 credits)

Technical electives must be selected from Categories 1-10 on the following pages to satisfy the requirements of one of the two programs below.

A. Physics Program

PH 452 (Quantum Mech. II)	3	
PH 462 (Statistical Physics)	3	
Category 3 (2 courses)	6	
Additional courses, but not from the B lists	6	

B. Applied Physics Program

Categories 1-3, but not PH 384	3	
From one of the Categories 4-10, both A and B lists (12) (must include at least 6 credits at the 300 level or above)		
Additional course, but not from the B lists	3	

Note: It is strongly recommended, but not required, that students take at least 3 credits of PH 498 (Research) and/or at least one of the following courses: PH 521/522 (Introduction to Lasers/Lab), PH 531 (Introductory Solid State Physics), PH 561 (Elementary Particle Physics)

5. Unrestricted Electives (16 credits)
