

**CURRICULUM MAP for the PHYSICS B.S. and B.A. degrees**

*Revised: 10 April 2013*

Learning Objective	Course				
	1001	1001-L	1002	1002-L	1003
A. Understand the fundamental principles of physics and be able to apply these core ideas to analyze physical processes.	INTRO	INTRO	INTRO	INTRO	INTRO
B. Apply quantitative reasoning and critical thinking to solve complex problems, both theoretical and experimental in nature.	INTRO	INTRO	INTRO	INTRO	INTRO
C. Independently learn new technical subjects and skills.	INTRO	INTRO	INTRO	INTRO	INTRO
D. Design and assemble experiments, quantitatively analyze the results using appropriate statistical procedures and tests of systematic errors, and draw meaningful conclusions.		INTRO		INTRO	
E. Effectively communicate scientific ideas, both theoretical and experimental, to a variety of audiences through written and oral presentations, both formal and informal.		INTRO		INTRO	
F. Work effectively as a member of a collaboration to solve problems.	INTRO	INTRO	INTRO	INTRO	INTRO

	Modern		Analytic Mechanics		Thermal Physics		Comp.	Elec.
1003-L	2004	2004-L	3101	3102	3151	3152	3180	3280
INTRO	INTRO	INTRO	DEVELOP	MASTER	DEVELOP	MASTER	DEVELOP	DEVELOP
INTRO	DEVELOP	DEVELOP	DEVELOP	MASTER	DEVELOP	MASTER	DEVELOP	DEVELOP
INTRO	DEVELOP	DEVELOP	DEVELOP	MASTER	DEVELOP	MASTER	DEVELOP	DEVELOP
INTRO		DEVELOP					DEVELOP	DEVELOP
INTRO	INTRO / DEVELOP	INTRO / DEVELOP					DEVELOP	DEVELOP
INTRO	DEVELOP	DEVELOP	DEVELOP	MASTER	DEVELOP	MASTER	DEVELOP	DEVELOP

Adv. Lab		Quantum			Math	Electromagnetism		
3281	3283	3301	3302	3303	3875	4001	4002	4003
DEVELOP	MASTER	DEVELOP	MASTER	MASTER	DEVELOP	DEVELOP	MASTER	MASTER
DEVELOP	MASTER	DEVELOP	MASTER	MASTER	DEVELOP	DEVELOP	MASTER	MASTER
DEVELOP	MASTER	DEVELOP	MASTER	MASTER	DEVELOP	DEVELOP	MASTER	MASTER
DEVELOP	MASTER							
DEVELOP	MASTER							
DEVELOP	MASTER	DEVELOP	MASTER	MASTER	DEVELOP	DEVELOP	MASTER	MASTER

Sel. Top.	Solid	Optics	Research	Capstone
4250	4600	4700	4850	4950
DEVELOP	MASTER	MASTER	MASTER	MASTER
DEVELOP	MASTER	MASTER	MASTER	MASTER
DEVELOP	MASTER	MASTER	MASTER	
			MASTER	
MASTER			MASTER	
DEVELOP	MASTER	MASTER	MASTER	MASTER