Degree program:	_Bachelor of Arts with a	Major in Physica	al Science

Program Student Learning Outcomes

- **1.** Students will be able to communicate effectively in written and oral forms, work successfully in teams, and understand ethical responsibilities.
- 2. Students will be able to think critically and be prepared for life-long learning.
- **3.** Students will be able to continue graduate studies in Physical Science or related field.
- **4.** Students will have a solid foundation in the concepts of Classical Mechanics, Electromagnetic Theory, and Modern Physics, and have the basic and the advanced experimental skills in group and individual setting.
- **5.** Students will have the knowledge of analytical reasoning and problem-solving in the physical sciences. With this knowledge and the experimental skills students will be prepared for a career in the physical sciences.

Worksheet #2 - Program Checklist - List required courses and indicate level/s of delivery

By putting (I, E, R or A) into Each Box

Degree Program: __Bachelor of Arts with a Major in Physical Science_

I = Students are INTRODUCED to material

 \mathbf{E} = The material is EMPHASIZED and taught in depth

 \mathbf{R} = The material is REINFORCED with additional exposure to the information

	Program-level outcon		ompetencies/Skills are being			
List of courses	#1 Students will be	#2 Students will	#3 Students will be	#4 Students	APPLIED	
required for	able to communicate	be able to think	able to continue	a solid found	ation in	have the knowledge
the degree	effectively in written	critically and be	graduate studies in	the concepts	of	of analytical
	and oral forms, work	prepared for	Physical Science or	Classical Me	· · · · · · · · · · · · · · · · · · ·	reasoning and
	successfully in teams,	life-long learning.	related field.	Electromagn		problem-solving in
	and understand			Theory, and		the physical
	ethical			Physics, and		sciences. With this
	responsibilities.			basic and the	;	knowledge and the
				advanced	-1-!11 - !	experimental skills
				experimental		students will be
				group and in setting.	uividuai	prepared for a career in the
				setting.		physical sciences.
						physical sciences.
PHYS 2325	Ι	E	T	T		E
			1 T	T		
PHYS 2125	E	E	1	1		E
PHYS 2326	E	R	E	E		R
PHYS 2126	E	R	E	E		R
MATH 2413		I	I	I		I
MATH 2414		E	E	E		E
MATH 2415		E	E	R		R
COSC 1336	I	I		I		I
COSC 1136	I	I		I		I
COSC 1337	I	I		I		I
COSC 1137	I	I		I		I

MATH 3310		I	I		
MATH 3330		E	E	E	
MATH 4340	I	Ι	I	I	I
MATH 4350	E	Ι		I	I
PHYS 3305	A	A	A	A	A
PHYS 3310	A	A	A	\mathbf{A}	A
PHYS 3315	A	A	A	\mathbf{A}	A
PHYS 3320	A	A	A	A	A
PHYS 3325	A	A	A	\mathbf{A}	A
PHYS 4305	A	A	A	A	A
PHYS 4399	A	A	A	\mathbf{A}	A

Worksheet #3 - Order Courses by Outcome and Level of Delivery (Courses may be listed more than once) Indicate level of delivery by checking the appropriate box) Add cells as necessary

Degree Program: __Bachelor of Arts with a Major in Physical Science_____

Program-level outcome	Level of Material		erial	Courses	Curriculum	Means of Assessment	
addressed (write out each	Delivery (List		ist	List courses (or groups of courses)	Component/s (Class		
program level outcome)	classes in order of		er of	in order of material delivery for	Activities) that Address		
	ma	aterial	l deliv	ery)	each outcome (I, E, R and then A).	Outcome	
	I	E	R	A	Courses may provide more than one		
					level of material delivery.		
#1 Students will be able	X				PHYS 2325		
to communicate	X				COSC 1336		
effectively in written	X				COSC 1136		
and oral forms, work	X				COSC 1337		
successfully in teams,	X				COSC 1137		
and understand ethical	X				MATH 4340		
***************************************		X			PHYS 2125		
responsibilities.		X			PHYS 2326		
		X			PHYS 2126		
		X			MATH 4350		
				X	PHYS 3305		
				X	PHYS 3310		
				X	PHYS 3315		
				X	PHYS 3320		
				X	PHYS 3325		
				X	PHYS 4305		
				X	PHYS 4399		
#2 Students will	X				COSC 1336		
be able to think	X				COSC 1136		
critically and be	X				COSC 1337		
prepared for	X				COSC 1137		
propared for	X				MATH 2413		

	, ,					<u></u>
life-long learning.	X				MATH 3310	
	X				MATH 4340	
	X				MATH 4350	
		X			PHYS 2325	
		X			PHYS 2125	
		X			MATH 2414	
		X			MATH 2415	
		X			MATH 3330	
			X		PHYS 2326	
			X		PHYS 2126	
				X	PHYS 3305	
				X	PHYS 3310	
				X	PHYS 3315	
				X	PHYS 3320	
				X	PHYS 3325	
				X	PHYS 4305	
				X	PHYS 4399	
#3 Students will be	X				PHYS 2325	
	X				PHYS 2125	
able to continue	X				MATH 2413	
graduate studies in	X				MATH 3310	
Physical Science or	X				MATH 4340	
related field.		X			PHYS 2326	
		X			PHYS 2126	
		X			MATH 2414	
		X			MATH 2415	
		X			MATH 2413 MATH 3330	
		21		X	PHYS 3305	
				X	PHYS 3310	
				X	PHYS 3315	
				X	PHYS 3320	
				X	PHYS 3325	
				X	PHYS 3325 PHYS 4305	
				X	PHYS 4305 PHYS 4399	
// 4 ~ 1 *****	X			Λ		
#4 Students will have	A				PHYS 2325	

					_	<u></u>
	X				PHYS 2125	
	X				MATH 2413	
	X				COSC 1336	
	X				COSC 1136	
	X				COSC 1337	
	X				COSC 1137	
	X				MATH 4340	
	X				MATH 4350	
		X			PHYS 2326	
		X			PHYS 2126	
		X			MATH 2414	
		X			MATH 3330	
			X		MATH 2415	
				X	PHYS 3305	
				X	PHYS 3310	
				X	PHYS 3315	
				X	PHYS 3320	
				X	PHYS 3325	
				X	PHYS 4305	
				X	PHYS 4399	
#E G. 1	X			Λ	MATH 2413	
#5 Students will have	X				COSC 1336	
the knowledge of	X				COSC 1336	
analytical reasoning and	X					
problem-solving in the	X				COSC 1337	
physical sciences. With	X				COSC 1137	
this knowledge and the	X				MATH 4340	
experimental skills	X	T 7			MATH 4350	
students will be prepared		X			PHYS 2325	
for a career in the		X			PHYS 2125	
physical sciences.		X			MATH 2414	
pirysical sciences.			X		PHYS 2326	
			X		PHYS 2126	
			X		MATH 2415	
				X	PHYS 3305	
				X	PHYS 3310	

	X	PHYS 3315	
	X	PHYS 3320	
	X	PHYS 3325	
	X	PHYS 4305	
	X	PHYS 4399	

Worksheet #4 - Needed Modifications, if any, for Curriculum Alignment

Goal: Degree programs are coherent in that they demonstrate 1) sequencing, 2. progression or increasing complexity, and 3) linkages between and among program core courses.

Curriculum Modifications Needed	Why Needed?
We do not think that we need to modify this program at this time, but we will reconsider this question during Fall 2008.	