

OUTCOMES	ACTIONS*	ASSESS. METHODS	WHEN	HOW	WHO
1. A comprehension of the core areas of physics, including classical and quantum mechanics, electromagnetism, statistical and thermal physics	PHYS 101,102, 203, 212, 333, 334, 343, 344, 453, 454; PHYS 480-492; PHYS 495-499; EE 361-362.	Course examinations and grades	At the end of every semester when the related course is offered	Students take examinations in class [keep one per course (Best, Median, Worst)]	Instructor
		ALES, GRE	at Graduation	by Inference	QAO**
		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head
2. A comprehension of basic mathematics, including differential and integral calculus, linear algebra, differential equations and complex analysis	PHYS 101,102, 212, 333, 334, 343; MATH 101, 102, 200, 201, 212, 220;	Course examinations and grades	At the end of every semester when the related course is offered	Students take examinations in class [keep one per course (Best, Median, Worst)]	Instructor
		ALES, GRE	at Graduation	by Inference	QAO**
		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head
3. A comprehension of computer programming and chemistry	IT 101; CSE 101, 201; CHEM 101.	Course examinations and grades	At the end of every semester when the related course is offered	Students take examinations in class (keep one per course (Best, Median, Worst))	Instructor
		Class Survey	At the end of every semester when the related course is offered	All students take a class survey	Instructor
		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head

<p>4. A comprehension of the importance and practice of good ethical standards</p>	<p>HSS & Free Electives; PHYS 493, 494; Seminars.</p>	<p>Project Reports, Project Presentations</p> <p>Class Survey</p>	<p>During and at the end of every semester when the related course is offered</p> <p>At the end of every semester when the related course is offered</p>	<p>All students present projects reports and make presentations</p> <p>All students take a class survey</p>	<p>Instructor + Coordinator</p> <p>Instructor</p>
<p>5. A recognition of contemporary issues in science and its applications</p>	<p>PHYS 212, 493, 494; PHYS 480-492; PHYS 495-499; ECO 101; HSS & Free Electives, Complementary courses.</p>	<p>Course examinations and grades</p> <p>Project Reports, Project Presentations</p> <p>Class Survey</p>	<p>At the end of every semester when the related course is offered</p> <p>During and at the end of every semester when the related course is offered</p> <p>At the end of every semester when the related course is offered</p>	<p>Students take examinations in class (keep one per course (Best, Median, Worst))</p> <p>All students present projects reports and make presentations</p> <p>All students take a class survey</p>	<p>Instructor</p> <p>Instructor</p> <p>Instructor</p>
<p>6. An ability to construct theoretical models, solve problems, design and conduct experiments, as well as to analyze and interpret data</p>	<p>PHYS 103, 104, 203, 471, 472, 474, 475; EE 361, 362.</p>	<p>Course examinations and grades</p> <p>Lab. Reports</p>	<p>At the end of every semester when the related course is offered</p> <p>During and at the end of every semester when the related course is offered</p>	<p>Students take examinations in class (keep one per course (Best, Median, Worst))</p> <p>All freshman students present laboratory reports</p>	<p>Instructor</p> <p>Coordinator</p>

		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head
7. An ability to demonstrate their understanding of at least one advanced topic in theoretical or experimental physics	PHYS 480-492; PHYS 495-499; PHYS 493, 494.	Course examinations and grades	At the end of every semester when the related course is offered	Students take examinations in class (keep one per course (Best, Median, Worst)	Instructor
		Project Reports, Project Presentations	During and at the end of every semester when the related course is offered	All students present projects reports and make presentations	Instructor
		Class Survey	At the end of every semester when the related course is offered	All students take a class survey	Instructor
		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head
8. An ability to function_on multi-disciplinary teams	PHYS 103, 104, 493, 494; D2 Courses.	Course examinations and grades	At the end of every semester when the related course is offered	Students take examinations in class (keep one per course (Best, Median, Worst)	Instructor
		Project Reports, Project Presentations	During and at the end of every semester when the related course is offered	All students present projects reports and make presentations	Instructor
		Lab. Reports	During and at the end of every semester when the related course is offered	All freshman students present laboratory reports	Coordinator
		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head

9. An ability to effectively communicate information in both written and verbal form	PHYS 103, 104, 474, 493, 494; PHYS 480-492; PHYS 495-499; HSS & Free Electives; D2 Courses.	Course examinations and grades	At the end of every semester when the related course is offered	Students take examinations in class (keep one per course (Best, Median, Worst))	Instructor
		Project Reports, Project Presentations	During and at the end of every semester when the related course is offered	All students present projects reports and make presentations	Instructor
		Lab. Reports	During and at the end of every semester when the related course is offered	All freshman students present laboratory reports	Coordinator
		Class Survey	At the end of every semester when the related course is offered	All enrolled students take a class survey	Instructor
		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head
10. A recognition of the need for and an ability to engage in life-long learning	PHYS 493, 494; HSS & Free Electives; C Courses.	Course examinations and grades	At the end of every semester when the related course is offered	Students take examinations in class (keep one per course (Best, Median, Worst))	Instructor
		Project Reports, Project Presentations	During and at the end of every semester when the related course is offered	All students present projects reports and make presentations	Instructor
		Class Survey	At the end of every semester when the related course is offered	All enrolled students take a class survey	Instructor
		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head

11. An ability to use modern physics techniques, skills, and computing tools necessary for physics practice (use laboratory and workshop equipment to generate data, prepare technical drawings, prepare technical reports, give technical presentations, take notes effectively, write computer programs, use mathematics and/or computational tools and packages to make models)	PHYS 103,104, 471, 472, 474, 493, 494; MATH 101, 102, 200, 201, 212, 220; IT 101; CSE 101, 201; CHEM 101.	Course examinations and grades	At the end of every semester when the related course is offered	Students take examinations in class (keep one per course (Best, Median, Worst)	Instructor
		Project Reports, Project Presentations	During and at the end of every semester when the related course is offered	All students present projects reports and make presentations	Instructor
		Lab. Reports	During and at the end of every semester when the related course is offered	All freshman students present laboratory reports	Coordinator
		Exit Survey	at Graduation	All senior students take an exit survey	Dept. Head

*Educational activity where the intended outcome is provided for ; ** Quality Assurance Officer