

# Course Assessment Results aligned to Program SLOs

## San Mateo CCCD

### CAN Program - Physical Sciences

SLO	Course Outcomes	Means of Assessment & Success Criteria / Tasks	Results	Action & Follow-Up
Use the scientific method and appreciate its importance to the development of scientific thought.	CAN Dept - Physics - CAN PHYS 250 - Physics with Calculus I - Laboratory Experience - Setup, perform, analyze, and document an experiment. (Created By CAN Dept - Physics)	<b>Assessment Method:</b> Evaluation of submitted laboratory reports <b>Assessment Method Category:</b> Presentation/Performance		
Document and communicate their work effectively.	CAN Dept - Physics - CAN PHYS 250 - Physics with Calculus I - Laboratory Experience - Setup, perform, analyze, and document an experiment. (Created By CAN Dept - Physics)	<b>Assessment Method:</b> Evaluation of submitted laboratory reports <b>Assessment Method Category:</b> Presentation/Performance		
Demonstrate critical thinking to analyze physical systems in terms of scientific concepts.	CAN Dept - Physics - CAN PHYS 210 - General Physics I - Newton's Laws - Perform an analysis of a physical system in terms of forces, velocities displacements and accelerations and time using Newton's laws. (Created By CAN Dept - Physics)	<b>Assessment Method:</b> Questions embedded in exams <b>Assessment Method Category:</b> Exam <b>Success Criterion:</b> Average $\geq$ 70%	03/05/2014 - Based on results from embedded questions in the exams and quizzes, the results are 78%  03/25/2013 - Fall 2012-73%	<b>Result Type:</b> Criterion met <b>Reporting Cycle:</b> 2013 - 2014  <b>Result Type:</b> Criterion met <b>Reporting Cycle:</b> 2012 - 2013

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	CAN Dept - Physics - CAN PHYS 210 - General Physics I - Energy - Analyze the motion of a body (rotational or linear) in terms or momentum, kinetic energy, and potential energy. (Created By CAN Dept - Physics)	<b>Assessment Method:</b> Questions Embedded in exams <b>Assessment Method Category:</b> Exam <b>Success Criterion:</b> Average >=70%	03/25/2013 - Fall-2012-87.7% <b>Result Type:</b> Criterion met <b>Reporting Cycle:</b> 2012 - 2013	
	CAN Dept - Physics - CAN PHYS 210 - General Physics I - Thermodynamics - Perform an analysis of isobaric, isochoric, isothermal and adiabatic processes in their relation to work, heat transfer, and changes in internal energy. (Created By CAN Dept - Physics)	<b>Assessment Method:</b> Questions embedded in exams <b>Assessment Method Category:</b> Exam <b>Success Criterion:</b> Average >=70 %	03/25/2013 - Fall-2012-85.5% <b>Result Type:</b> Criterion met <b>Reporting Cycle:</b> 2012 - 2013	
	CAN Dept - Physics - CAN PHYS 220 - General Physics II - DC Circuits - Analyze and explain the behavior of simple DC circuits with resistors, capacitors, and batteries. (Created By CAN Dept - Physics)	<b>Assessment Method:</b> Questions embedded in exams <b>Assessment Method Category:</b> Exam <b>Success Criterion:</b> Average >=70%		
	CAN Dept - Physics - CAN PHYS 220 - General Physics II - Optics - Analyze the reflection and refraction of light in terms of geometrical optics in different media. (Created By CAN Dept - Physics)	<b>Assessment Method:</b> Questions embedded in exams <b>Assessment Method Category:</b> Exam <b>Success Criterion:</b> Average >=70%		



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		<p>CAN Dept - Physics - CAN PHYS 260</p> <ul style="list-style-type: none"> <li>- Physics with Calculus II</li> <li>- ACDC - Analyze and explain the behavior of simple AC &amp; DC circuits with resistors, capacitors, and inductors (Created By CAN Dept - Physics)</li> </ul>	<p><b>Assessment Method:</b> Question embedded in exams</p> <p><b>Assessment Method Category:</b> Exam</p> <p><b>Success Criterion:</b> Average score will be <math>\geq 70\%</math></p>	<p>03/09/2011 - Average 78% Standard deviation 29%</p> <p><b>Result Type:</b> Criterion met</p> <p><b>Reporting Cycle:</b> 2010 - 2011</p> <p><b>Related Documents:</b> <a href="#">SLO data.pdf</a></p> <p>02/11/2010 - 71.7 % was the average. Success</p> <p><b>Result Type:</b> Criterion met</p> <p><b>Reporting Cycle:</b> 2009 - 2010</p> <p><b>Related Documents:</b> <a href="#">Phys 260 FA09 SLO2.pdf</a> <a href="#">SLO data.pdf</a></p>
		<p>CAN Dept - Physics - CAN PHYS 260</p> <ul style="list-style-type: none"> <li>- Physics with Calculus II</li> <li>- Induction - Solve problems involving induced electric and magnetic fields</li> </ul> <p>(Created By CAN Dept - Physics)</p>	<p><b>Assessment Method:</b> Questions embedded in exams</p> <p><b>Assessment Method Category:</b> Exam</p> <p><b>Success Criterion:</b> Average Score will be <math>\geq 70\%</math></p>	<p>03/09/2011 - Results Average 70% standard deviation 33% This was not successful</p> <p><b>Result Type:</b> Criterion not met</p> <p><b>Reporting Cycle:</b> 2010 - 2011</p> <p><b>Related Documents:</b> <a href="#">Phys 260 FA09 SLO3.pdf</a></p>
		<p>CAN Dept - Physics - CAN PHYS 270</p> <ul style="list-style-type: none"> <li>- Physics with Calculus III</li> <li>- Thermodynamics - Perform an analysis of isobaric, isochoric, isothermal and</li> </ul>		

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	adiabatic processes in their relation to work, heat transfer, and changes in internal energy. (Created By CAN Dept - Physics)	<p><b>Assessment Method:</b> Questions embedded in exams</p> <p><b>Assessment Method Category:</b> Exam</p> <p><b>Success Criterion:</b> Average <math>\geq 70\%</math></p>		
	CAN Dept - Physics - CAN PHYS 270 - Physics with Calculus III - Optics - Analyze the reflection and refraction of light in terms of geometrical optics in different media. (Created By CAN Dept - Physics)	<p><b>Assessment Method:</b> Questions embedded in exams</p> <p><b>Assessment Method Category:</b> Exam</p> <p><b>Success Criterion:</b> Average <math>\geq 70\%</math></p>		
	CAN Dept - Physics - CAN PHYS 270 - Physics with Calculus III - Special Relativity - Explain the principle assumptions of Special Relativity and able to perform calculations involving relativistic kinematics. (Created By CAN Dept - Physics)	<p><b>Assessment Method:</b> Questions embedded in exams</p> <p><b>Assessment Method Category:</b> Exam</p> <p><b>Success Criterion:</b> Average <math>\geq 70\%</math></p>		
	CAN Dept - Physics - CAN PHYS 270 - Physics with Calculus III - Modern Physics - Describe the photoelectric effect, the Compton effect, quantization of energy and the Bohr model of the atom. (Created By CAN Dept - Physics)	<p><b>Assessment Method:</b> Questions Embedded in exams</p> <p><b>Assessment Method Category:</b> Exam</p> <p><b>Success Criterion:</b> Average <math>\geq 70\%</math></p>		