

<b>SENATE PROGRAM PROPOSAL FORM</b> for:			(Do not write in this space)																			
<ul style="list-style-type: none"> <li>• CHECK ONE: <input type="checkbox"/> Add, <input checked="" type="checkbox"/> Change, <input type="checkbox"/> Combine, <input type="checkbox"/> Drop, <input type="checkbox"/> Archive</li> <li>• CHECK ONE: <input checked="" type="checkbox"/> Degree program, <input type="checkbox"/> Minor, <input type="checkbox"/> Certificate, <input type="checkbox"/> Emphasis area</li> </ul>			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Initials</th> <th style="width: 10%; text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td>ROUTING: Academic Affairs</td> <td style="text-align: center;"><b>BAT</b></td> <td style="text-align: center;"><b>11/13/09</b></td> </tr> <tr> <td>Graduate School (if applicable)</td> <td></td> <td></td> </tr> <tr> <td>Senate C &amp; I</td> <td style="text-align: center;"><b>MTA</b></td> <td style="text-align: center;"><b>1/29/10</b></td> </tr> <tr> <td>Reported to Senate</td> <td></td> <td></td> </tr> <tr> <td>Academic Affairs</td> <td></td> <td></td> </tr> </tbody> </table>			Initials	Date	ROUTING: Academic Affairs	<b>BAT</b>	<b>11/13/09</b>	Graduate School (if applicable)			Senate C & I	<b>MTA</b>	<b>1/29/10</b>	Reported to Senate			Academic Affairs		
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From: <u>Physics &amp; Astronomy</u> Department	Approved By: <u>Bruce A. Wilking</u> Department Chair	Date: <u>9/11/09</u>																				
From: <u>Arts &amp; Sciences</u> School or College	Approved By: <u>Ronald Yasbin</u> Dean	Date: <u>10/8/09</u>																				
Title of Degree, Minor, or Certificate Program: <b>BS Secondary ED</b>																						
Page(s) _____ and year <b>2009-10</b> of the current Bulletin listing.																						
If other departments are affected by this proposal, please secure "sign-offs" and indicate for each department the following:																						
<b>Department</b>	<b>Contact Person</b>	<b>Phone #</b>																				
1. <b>Div. Teaching &amp; Learning</b>	<b>Dr. Harold Harris</b>	<b>5344</b>	Proposal received: <input checked="" type="checkbox"/> No major objections, <input type="checkbox"/> Objections																			
2.			Proposal received: <input type="checkbox"/> No major objections, <input type="checkbox"/> Objections																			
3.			Proposal received: <input type="checkbox"/> No major objections, <input type="checkbox"/> Objections																			
<b>Current Bulletin listing:</b>	<b>Proposed Bulletin listing:</b>	<b>Rationale:</b>																				
<p><b>B.S. degree in Secondary Education with an Emphasis in Physics.</b> The course sequence below meets the science requirements for Missouri certification for teaching physics at the secondary school level. All candidates must enroll in a program that includes Levels I, II, and III coursework in the College of Education, which includes one semester as a Teacher Intern and one semester of full-time Student Teaching. In addition, students must complete the following Science Core Courses and the courses listed under Physics Endorsement:</p> <p><b>Science Core Courses:</b></p> <p><b>Philosophy</b> <b>PHIL 3380</b>, Philosophy of Science</p> <p><b>BIOL 1811</b>, Introductory Biology I: From Molecules to Organisms <b>BIOL 1821</b>, Introductory Biology II: Organisms and the Environment <b>CHEM 1111</b>, Introductory Chemistry I <b>CHEM 1121</b>, Introductory Chemistry II <b>GEOL 1001</b>, General Geology <b>ATM SCI 1001</b>, Elementary Meteorology</p>	<p><b>B.S. degree in Secondary Education with an Emphasis in Physics.</b> The course sequence below meets the science requirements for Missouri certification for teaching physics at the secondary school level. All candidates must enroll in a program that includes Levels I, II, and III coursework in the College of Education, which includes one semester as a Teacher Intern and one semester of full-time Student Teaching. In addition, students must complete the following Science Core Courses and the courses listed under Physics Endorsement:</p> <p><b>Science Core Courses:</b></p> <p><b>Philosophy</b> <b>PHIL 3380</b>, Philosophy of Science</p> <p><b>BIOL 1811</b>, Introductory Biology I: From Molecules to Organisms <b>BIOL 2102</b>, General Ecology or another environmental science <b>CHEM 1111</b>, Introductory Chemistry I <b>CHEM 1121</b>, Introductory Chemistry II <b>PHYSICS 2111</b>, Physics: Mechanics and Heat <b>PHYSICS 2112</b>, Physics: Electricity, Magnetism, and Optics</p>	<p>The Missouri Department of Elementary and Secondary Education has changed requirements for certification of physics teachers. The revised listing describes a course of study that addresses all of the current requirements.</p>																				

<p><b>BIOL 1202</b>, Environmental Biology or another environmental science  <b>PHYSICS 2111</b>, Physics: Mechanics and Heat  <b>PHYSICS 2112</b>, Physics: Electricity, Magnetism, and Optics</p> <p><b>Physics Endorsement  Physics</b>  <b>PHYSICS 3200</b>, Mathematical Methods of Theoretical Physics  <b>PHYSICS 3221</b>, Mechanics  <b>PHYSICS 3223</b>, Electricity and Magnetism  <b>PHYSICS 3231</b>, Introduction to Modern Physics  <b>PHYSICS 4310</b>, Modern Electronics  <b>PHYSICS 4311</b>, Advanced Physics Laboratory I  <b>PHYSICS 4802</b>, or SEC ED 3240, Methods of Teaching Science in Secondary Schools  <b>PHYSICS 4837</b>, Teaching Intern Seminar</p>	<p><b>GEOL 1001</b>, General Geology or <b>ATM SCI 1001</b>, Elementary Meteorology or <b>ASTRON 10xx</b></p> <p><b>Physics Endorsement  Physics</b>  <b>PHYSICS 3200</b>, Mathematical Methods of Theoretical Physics  <b>PHYSICS 3221</b>, Mechanics  <b>PHYSICS 3223</b>, Electricity and Magnetism  <b>PHYSICS 3231</b>, Introduction to Modern Physics  <b>PHYSICS 4310</b>, Modern Electronics  <b>PHYSICS 4311</b>, Advanced Physics Laboratory I  <b>PHYSICS 4802</b>, or <b>SEC ED 3240</b>, Methods of Teaching Science in Secondary Schools  <b>PHYSICS 4837</b>, Teaching Intern Seminar</p>	
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Revised: October, 2008