

<b>Course Title: HIGH SCHOOL INTEGRATED SCIENCE B</b>	<b>Course Description</b>
<p><b>Course No.</b> 5302                      <b>Grade level:</b> 9-12</p> <p><b>Text and Resources:</b></p> <p><b>Physical and Earth Sciences:</b>  A. <i>Concepts and Challenges: Physical Science</i>; Globe Fearon  B. <i>Concepts and Challenges: Earth Science</i>; Globe Fearon  C. <i>Conceptual Physical Science</i>; Addison, Wesley, Longman  D. <i>Exploring Earth and Space</i>; Globe Fearon  E. <i>Exploring Matter and Energy: Physical Science</i>; Globe Fearon  F. <i>Glencoe Earth Science</i>; Glencoe-McGraw-Hill  G. <i>Holt Science and Technology: Earth Science</i>; Holt, Rinehart  H. <i>Modern Earth Science</i>; Holt, Rinehart, Winston  I. <i>Physical Science</i>; Glencoe McGraw-Hill  J. <i>Physical Science</i>; Holt, Rinehart, Winston  K. <i>Science Explorer: Earth Science</i>; Prentice Hall  L. <i>Science Interactions</i>; Glencoe McGraw-Hill  M. <i>Science Insights: Exploring Matter and Energy</i>; Scott Foresman, Addison, Wesley  N. <i>Science Insights: Exploring Earth and Space</i>; Scott Foresman</p> <p><b>Life Science/Biology:</b>  A. <i>Life Science, Holt Science and Technology</i>; Holt Publishing  B. <i>Concepts and Challenges: Life Science</i>; Globe Fearon  C. <i>Glencoe Life Science</i>; Glencoe McGraw-Hill  D. <i>Science Insights: Exploring Living Thing</i>; Scott Foresman Addison Wesley  E. <i>Holt Biology: Visualizing Life</i>; Holt Publishing Co.  F. <i>Biology</i>; Prentice Hall Publishing  G. <i>Biology: The Dynamics of Life</i>; Glencoe McGraw-Hill Co.</p>	<p><b>Course Duration:</b> *One Semester</p> <p><b>Credit Value:</b> 1 - 5 credits</p>
<p align="center"><b>Course Content: Key Content Standards and Course Objectives</b></p> <ol style="list-style-type: none"> <li><b>Biology: Human Evolution:</b> The frequency of an allele in a gene pool of a population depends on many factors, and may be stable or unstable over time (9/12 7 a-d), evolution is the result of genetic changes that occur in constantly changing environments (9/12 8a-e).</li> <li><b>Biology: Biomes:</b> Stability in an ecosystem is a balance between competing effects (9/12 6 a-c).</li> <li><b>Earth Science: Biogeochemical Cycles:</b> Each element on Earth moves among reservoirs in the solid Earth, oceans, atmosphere, and organisms as part of biogeochemical cycles (9/12 7 a-c).</li> <li><b>Earth Science: Plate Tectonics:</b> Plate tectonics operating over geologic time has changed the patterns of land, sea, and mountains on the Earth's surface (9/12 3 a-e).</li> <li><b>Earth Science: Energy in the Earth System:</b> Energy enters the Earth system primarily as solar radiation (9/12 4a-c), heating of Earth's surface and atmosphere by the sun drives convection (9/12 5a-e), climate is the long term average of a region's weather and depends on many factors (9/12 6a-c), life has changed Earth's atmosphere and changes in the atmosphere affect conditions for life (9/12 8a-c).</li> <li><b>Earth Science: California Geology:</b> The geology of California (9/12 9a-c).</li> <li><b>Investigation and Experimentation:</b> Students will ask meaningful questions and conduct careful investigations addressing the content of the above Integrated Science B standards.</li> </ol>	<p>Integrated Science B is the second phase of a standards-based science curriculum that incorporates the science strands of biology/life, physical, and Earth science. An integrated approach to the science strands will provide students with a broad-based understanding of the interrelationship of the strands. Students will study the science strands in conjunction with the investigation and experimentation standards. Students will develop a command for the academic language of science, as scientific vocabulary is important in building conceptual understanding.</p> <p>The course will focus on the grade 9-12 science standards, but teachers will backwards-map to foundational science standards, when necessary, to meet the needs of all students. The standards outlined in this course follow the <i>Sequenced Pattern of Instruction</i>.</p> <p>*Open entry/open exit</p>
<p align="center"><b>Methods of Study</b></p>	<p align="center"><b>Evaluation of Performance Standards</b></p>
<ol style="list-style-type: none"> <li>Students will complete all activities assigned.</li> <li>Students will participate in discussion with other class members and/or teacher.</li> </ol>	<ol style="list-style-type: none"> <li>Students will complete all assignments with a minimum of 70% accuracy.</li> <li>The supervising teacher will be satisfied with the quality of the student's work.</li> <li>The student must receive a minimum score of 70% on a teacher assigned final evaluation.</li> <li>Letter grade contracts are optional and require a higher level of performance.</li> </ol>