

Wisconsin Content Standards

APPENDIX C

All professional education content courses leading to certification shall include teaching and assessment of the Wisconsin Content Standards in the content area.

<p>In this column, list the Wisconsin Content Standards that are included in this course. The Standards for each content area are found in the Wisconsin Content Standards document.</p>	<p>In this column, indicate the nature of the performance assessments used in this course to evaluate student proficiency in each standard.</p>
<p>A. Science Connections</p>	<p>Students will discuss preconceived notions about the behavior of physical systems derived from real-world applications across a variety of disciplines and will identify the important parameters & physical principals to predict the response and compare with their calculated solutions for varying conditions. Students will answer questions orally during lecture & will write responses and solutions to questions on exams & homework problems.</p>
<p>B. Nature of Science</p>	<p>Students will discuss the historical and ongoing development of key physical ideas & theories and will investigate the experiments performed and relate expectations to common assumptions at the time. Students will answer questions orally during lecture & will write responses & solutions to questions on exams & homework problems.</p>
<p>C. Science Inquiry</p>	<p>Students will participate in classroom demonstrations to make predictions, collect data and evaluate responses under a variety of conditions to identify key parameters and investigate underlying physical principals. Students will also suggest and attempt alternative configurations and explanations. Students will answer questions orally during lecture & will write responses & solutions to questions on exams & homework problems.</p>
<p>D. Physical Science</p>	<p>Students will apply their knowledge of physical principals and the underlying themes to analyze physical systems across a variety of disciplines to answer both conceptual & numerical questions on homework problem sets & written examinations.</p>
<p>E. Earth and Space Science</p>	<p>Students will apply their knowledge of physical principals and the underlying themes to answer both conceptual and numerical questions on homework problem sets and written examinations to demonstrate their understanding of the dynamical processes affecting earth and it's place in the universe. Students will answer questions orally during lectures & will write responses and solutions to questions on exams & homework problems.</p>
<p>F. Life and Environmental Science</p>	<p>Students will investigate the conservation of energy and apply this principal to biological & environmental situations relating energy to mechanical work and heat. Students will discuss the implications of energy efficiency and will calculate associated costs & savings. Students will answer questions orally during lecture & will write responses & solutions to questions on exams & homework problems.</p>
<p>G. Science Applications</p>	<p>Students will analyze physical systems derived from real-world applications across a variety of disciplines (e.g. agriculture, astronomy, biology, chemistry, and geology) and will identify the important parameters & physical principals. Students will answer questions orally during lecture & will write responses & solutions to questions on exams & homework problems.</p>