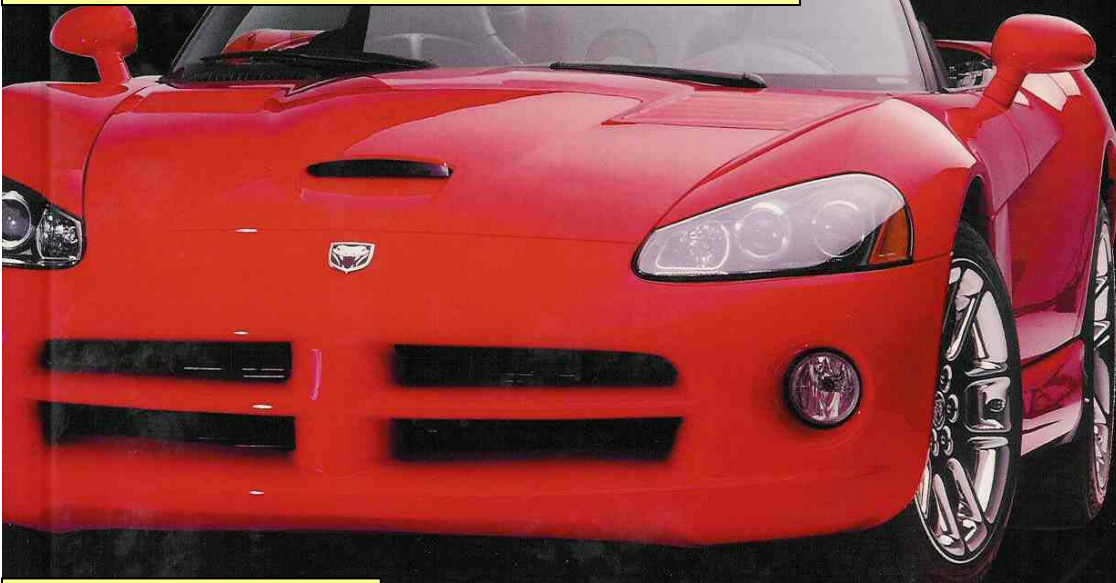


KENTUCKY

— GLENCOE —

Automotive Excellence

**Correlation with Kentucky Automotive
Technology Course
and
Responses to the Vocational Studies
Evaluation Instrument**



**Adoption Group IV
Commonwealth of
Kentucky
2003-2009**

- Brakes
- Electrical & Electronic Systems
- Engine Performance
- Suspension & Steering

Automotive Technology		
ACADEMIC EXPECTATIONS	CONTENT/PROCESS	PAGE REFERENCES
2.3	<p>Students will:</p> <ul style="list-style-type: none"> understand and apply basic and advanced electrical concepts and principles related to automotive technology. 	<p>SE, Volume 1: <i>Electrical & Electronic Systems</i>: EL-2 through EL-125</p> <p>IRG: 245-258</p>
5.5	<ul style="list-style-type: none"> understand and apply concepts of engine repair. 	<p>SE, Volume 2: <i>Engine Repair</i>: ER-2 through ER-157</p> <p>IRG: 289-309</p>
5.1	<ul style="list-style-type: none"> understand apply concepts of climate control systems. 	<p>SE, Volume 2: <i>Heating & Air Conditioning</i>: HA-2 through HA-127</p> <p>IRG: 310-325</p>
2.5	<ul style="list-style-type: none"> demonstrate knowledge and understanding of automotive brake systems. 	<p>SE, Volume 1: <i>Brakes</i>: BR-2 through BR-117</p> <p>IRG: 231-244</p>

Automotive Technology		
ACADEMIC EXPECTATIONS	CONTENT/PROCESS	PAGE REFERENCES
6.3	<ul style="list-style-type: none"> engage in meaningful, hands-on, minds-on, and conceptual based automotive based activities. 	<p>SE, Volume 1: Automotive Excellence: BR-41, BR-70, EL-17, EL-35, EP-28, EP-113, SS-7, SS-73 <i>Workplace Know-How:</i> HB-32, BR-30, BR-84, EL-44, EL-124, EP-16, EP-68, EP-122, SS-18, SS-42, SS-80</p> <p>SE, Volume 2: Automotive Excellence: HA-94, AT-75, AT-117, MD-101 <i>Workplace Know-How:</i> HB-64, HA-44, AT-20, AT-150, MD 44, MD-66</p>
2.34	<ul style="list-style-type: none"> develop competencies in the safe and efficient use of the tools, machines, materials, and basics of automotive fundamentals. 	<p>SE, Volume 1: HB-18 through HB-33, HB-34 through HB-65</p> <p>SE, Volume 2: HB-18 through HB-33, HB-34 through HB-65</p> <p>IRG: 209-218, 219-220, 227-228, 229-230</p>
2.2	<ul style="list-style-type: none"> demonstrate and develop competencies with manual transmissions. 	<p>SE, Volume 2: MD-26 through MD45</p> <p>IRG: 346-348</p>

Automotive Technology		
ACADEMIC EXPECTATIONS	CONTENT/PROCESS	PAGE REFERENCES
6.2	<ul style="list-style-type: none"> apply concepts from mathematics, science, and communications in the context of automotive technology. 	<p>SE, Volume 1: Automotive Excellence <i>Communications:</i> BR-6, BR-35, BR-91, EL-13, EL-48, EL-79, EL-100, EP-11, EP-75, EP-101, EP-129, SS-16, SS-46 <i>Automotive Excellence Mathematics:</i> BR-8, BR-47, BR-83, EL-4, EL-56, EL-108, EP-21, EP-85, EP-119, EP-148, SS-13, SS-55 <i>Automotive Excellence Science:</i> BR-27, BR-70, BR-114, EL-17, EL-52, EL-119, EP-6, EP-66, EP-113, EP-143, SS-7, SS-49</p> <p>SE, Volume 2: Automotive Excellence <i>Communications:</i> ER-11, ER-91, ER-115, ER-141, HA-20, HA-77, HA-123, AT-4, AT-99, AT-132, MD-39, MD-84, MD-125 <i>Automotive Excellence Mathematics:</i> ER-9, ER-47, ER-130, HA-40, HA-80, HA-115, AT-17, AT-60, AT-147, MD-8, MD-49, MD-75, MD-131 <i>Automotive Excellence Science:</i> ER-6, ER-87, ER-133, HA-3, HA-59, HA-109, AT-9, AT-117, AT-135, MD-14, MD-52, MD-101</p>

Automotive Technology		
ACADEMIC EXPECTATIONS	CONTENT/PROCESS	PAGE REFERENCES
2.3, 5.1	<ul style="list-style-type: none"> demonstrate and develop competencies with automotive suspension and steering systems. 	SE, Volume 1: <i>Suspension & Steering</i>: SS-1 through SS-81 IRG: 279-288
2.3	<ul style="list-style-type: none"> demonstrate knowledge and understanding of fuel and ignition systems. 	SE, Volume 1: EP-70 through EP-91, EP-92 through EP-109 IRG: 267-268, 269-271
2.6	<ul style="list-style-type: none"> demonstrate knowledge and understanding of automotive emission systems. 	SE, Volume 1: EP-136 through EP-151 IRG: 276-278
1.1	<ul style="list-style-type: none"> develop competencies and understanding of automotive transmission and transaxles. 	SE, Volume 2: <i>Automatic Transmission & Transaxle</i>: AT-2 through AT-151 IRG: 326-342
1.16	<ul style="list-style-type: none"> use computer based technologies to process information and manipulate computer systems and diagnostics capabilities. 	SE, Volume 2: AT-104 through AT-127 IRG: 338-339

Automotive Technology		
ACADEMIC EXPECTATIONS	CONTENT/PROCESS	PAGE REFERENCES
2.38	<ul style="list-style-type: none"> develop workplace readiness and employability skills necessary to work with others, and reach an employable exit points. 	<p>SE, Volume 1: HB-2 through HB-18, HB-19 through HB-33</p> <p>SE, Volume 2: HB-2 through HB-18, HB-19 through HB-33</p> <p>IRG: 225-226, 227-228</p>
2.36, 2.37	<ul style="list-style-type: none"> develop personal and professional skills through involvement with the SkillsUSA-VICA student organization activities. 	IRG: 61, 62
2.37	<ul style="list-style-type: none"> demonstrate employability and social skills relative to careers. 	<p>SE, Volume 1: <i>Career Focus Activity:</i> BR-1, EL-1, EP-1, SS-1</p> <p>SE, Volume 2: <i>Career Focus Activity:</i> ER-1, HA-1, AT-1, MD-1</p> <p>IRG: 47-50, 185-188, 209-220</p>

Vocational Studies Evaluation Tool

Content–Vocational Studies	Comments
Career Opportunities	The <i>Automotive Career Opportunities</i> section found in the Student Edition introduces students to a wide range of interesting, attainable career choices in the automotive industry.
Career Search	The Student Edition addresses <i>NATEF</i> program guidelines and career opportunities in the automotive industry.
Career Preparation	The Student Edition addresses <i>NATEF</i> program guidelines and recognizes ASE Certification Areas within the automotive industry.
Employability Skills	The <i>Employability Skills Needed For Success</i> section found in the Student Edition, Volume 1 presents important skills that are necessary for success on the job. The <i>Workplace Know-How</i> feature identifies employability characteristics and workplace skills that are important to a successful career in the automotive industry.

Content-Vocational Studies (continued)	Comments
Success in the Workplace	<p>The <i>Employability Skills Needed For Success</i> section found in the Student Edition, Volume 1 presents important skills that are necessary for success on the job. The <i>Workplace Know-How</i> feature identifies employability characteristics and workplace skills that are important to a successful career in the automotive industry.</p>

Instruction and Assessment	Comments
Identifies a Sense of Purpose	<p>Each chapter in the Student Edition begins with elements designed to quickly launch a student's focus and interest on the chapter's topic. Each chapter begins with a problem and challenge to introduce the students to the new material that will be covered in the chapter. The students are presented with a list of the skills and knowledge that they can expect to have mastered once they have completed the chapter. Photographs expand and reinforce the automotive concepts presented in each chapter.</p>
Builds on Student Ideals	<p>The <i>Automotive Excellence</i> section found in each chapter of the Student Edition provides students with an opportunity to correlate a NATEF standard to automotive content.</p>

Instruction and Assessment (continued)	Comments
Engages Students	Each chapter in the Student Edition begins with elements designed to quickly launch a student’s focus and interest on the chapter’s topic. Each chapter begins with a problem and challenge to introduce the students to the new material that will be covered in the chapter. The students are presented with a list of the skills and knowledge that they can expect to have mastered once they have completed the chapter. Photographs expand and reinforce the automotive concepts presented in each chapter.
Develops Vocational Ideas	In <i>Glencoe Automotive Excellence</i> , new learning is based on previous knowledge, with each new concept building on a prior experience.
Promotes Student Thinking	Both the Student Edition and the Instructor Resource Guide provide numerous activities and suggestions to help students incorporate and integrate critical thinking skills. The <i>Automotive Excellence</i> section located in each chapter of the Student Edition provides students with information or a situation and then prompts them to <i>Apply It!</i> by responding to a set of questions or performing a hands-on experiment.

<p style="text-align: center;">Instruction and Assessment (continued)</p>	<p style="text-align: center;">Comments</p>
<p>Assesses Student Progress</p>	<p>The <i>Review Questions</i> located in the <i>Chapter Review</i> at the end of each chapter in the Student Edition reinforce the chapter objectives and provide an opportunity to use critical thinking skills. One written test is provided for each chapter of the Student Edition.</p>
<p>Enhances The Learning Environment</p>	<p><i>Glencoe Automotive Excellence</i> offers engaging, relevant, and appropriate content for the widest range of learners – from young scholars to visual learners and low achievers. The researched-based content is presented in a visually dynamic style that will engage and motivate students. The program has been designed to offer a variety of lesson plan options which will develop the knowledge and problem-solving skills of all of your students – regardless of their learning styles and ability levels.</p>
<p>Reading level is appropriate for interest and ability level of intended student group: level remains consistent throughout.</p>	<p><i>Glencoe Automotive Excellence</i> offers engaging, relevant, and appropriate content for the widest range of learners – from young scholars to visual learners and low achievers. The researched-based content is presented in a visually dynamic style that will engage and motivate students. The program has been designed to offer a variety of lesson plan options which will develop the knowledge and problem-solving skills of all of your students – regardless of their learning styles and ability levels.</p>

Instruction and Assessment (continued)	Comments
Common wealth Accountability Testing System (CATS) “like” Assessment is provided	<i>Job Sheets</i> are a ready-made source of performance assessment items which are located in the <i>Technical Applications workbooks</i> . <i>Performance checklists</i> can be created from the job sheets to grade a student’s ability once practice has occurred.
Variety of Assessments (diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer performance, portfolio prompts) is included.	A large selection of testing and assessment resources is available for <i>Glencoe Automotive Excellence</i> to help you measure the progress of your students. At the end of each chapter in the Student Edition, you will find a <i>Chapter Review</i> which can be used to assess student’s mastery of automotive concepts and chapter objectives. A <i>Knowledge Check</i> section appears throughout each chapter which will help you to evaluate student’s reading comprehension. One written test is provided for each chapter of the Student Edition.
Includes activities and opportunities for integration of technology.	The <i>Automotive Excellence Answer Key CD-ROM</i> provides answers for the <i>Knowledge Check</i> , <i>Chapter Reviews</i> , and <i>Test Preps</i> sections located in the Student Edition of <i>Glencoe Automotive Excellence</i> . Teacher and student resources are available at Glencoe’s <i>Teaching Today</i> website featuring daily teaching tips, free downloadable materials, annotated Web resources, educational news, and more.

Instruction and Assessment (continued)	Comments
<p>Reflects researched-based practices (e.g. hands-on activities, technology, problem-solving situations)</p>	<p><i>Glencoe Automotive Excellence</i> has achieved the highest degree of accuracy through rigorous scientifically-based research. This edition is the product of the most recent research studies, teacher feedback, and detailed editorial development. The result is an up-to-date, solid foundation for an engaging, stimulating, and high-quality automotive education course for your students.</p>
<p>Differentiation techniques and activities suggested.</p>	<p><i>Glencoe Automotive Excellence</i> offers engaging, relevant, and appropriate content for the widest range of learners – from young scholars to visual learners and low achievers. The researched-based content is presented in a visually dynamic style that will engage and motivate students. The program has been designed to offer a variety of lesson plan options which will develop the knowledge and problem-solving skills of all of your students – regardless of their learning styles and ability levels.</p>

Organization and Structure	Comments
<p>Organization is logical and allows for spiraling of content.</p>	<p><i>Glencoe Automotive Excellence</i> is composed of two Student Edition Volumes, with 4 chapters in Volume 1 and 6 chapters in Volume 2. Each chapter follows a straightforward format, beginning with a <i>Problem and Challenge</i> section to prepare students with the automotive concepts being introduced in the chapter. Each chapter closes with a <i>Chapter Review</i> which provides a review of important automotive terms and concepts, as well as a variety of activities.</p>
<p>Vocabulary and key terms are clearly defined and easily accessible within each lesson.</p>	<p>Each chapter begins with a list of <i>Terms to Know</i> presented in the chapter. These key terms are printed in bold-face type the first time they are introduced and defined within the text.</p>
<p>Visual illustrations (e.g. graphs, charts, models) and examples are clearly presented and content-related</p>	<p>Graphs, charts, and models are used throughout the book to illustrate concepts. Examples are related to the content of the chapter.</p>
<p>Illustrations and language reflect diversity (e.g. racial, ethnic, cultural, age, gender, disabilities).</p>	<p>A variety of situations that reflect diversity are presented throughout the text.</p>

<p style="text-align: center;">Organization and Structure (continued)</p>	<p style="text-align: center;">Comments</p>
<p>Legible type, length of lines, spacing, and page layout and widths of margins contribute to overall appearance and use.</p>	<p><i>Glencoe Automotive Excellence</i> has achieved the highest degree of accuracy through rigorous scientifically-based research. This edition is the product of the most recent research studies, teacher feedback, and detailed editorial development. The result is an up-to-date, solid foundation for an engaging, stimulating, and high-quality automotive education course for your students.</p>
<p>Student materials seem durable and conducive to daily use.</p>	<p>The very best materials are used in all Glencoe products. The materials are easy for students to use, both in school and at home.</p>
<p>Includes sufficient glossary, index and appendices.</p>	<p>The <i>Index</i> can be found on pages 27-48. The <i>Glossary</i> can be found on pages 1-26.</p>
<p>Employs accurate grammar and spelling.</p>	<p><i>Glencoe Automotive Excellence</i> has achieved the highest degree of accuracy through rigorous scientifically-based research. This edition is the product of the most recent research studies, teacher feedback, and detailed editorial development. The result is an up-to-date, solid foundation for an engaging, stimulating, and high-quality automotive education course for your students.</p>

Organization and Structure (continued)	Comments
<p>Organization of material can be effectively used with Standards Based Units, Core Content and Program of Studies.</p>	<p>The correlation between <i>Glencoe Automotive Excellence</i> and the eight areas of the 2002 NATEF Automotive Standards is identified in a page -by-page correlation table located in the Instructor Resource Guide.</p>

Resource Materials	Comments
<p>Teacher materials coordinate easily with student materials (e.g. additional resources included at point of need, student pages shown, integration of technology indicated).</p>	<p>Each chapter in the Instructional Resource Guide begins with an <i>Instructional Plan</i> with a <i>Focus and Planning Section</i> designed to introduce, teach and assess the student’s mastery of the objectives introduced in the chapter.</p>
<p>Activities are included that adapt to the various learning styles, intelligences, and interest / ability levels.</p>	<p><i>Glencoe Automotive Excellence</i> offers engaging, relevant, and appropriate content for the widest range of learners – from young scholars to visual learners and low achievers. The researched-based content is presented in a visually dynamic style that will engage and motivate students. The program has been designed to offer a variety of lesson plan options which will develop the knowledge and problem-solving skills of all of your students – regardless of their learning styles and ability levels.</p>

Organization and Structure (continued)	Comments
Extension activities including adaptations and accommodations for students with special needs.	Materials are identified in the Instructor Resource Guide that can be used to supplement instruction and evaluation.
Resources provide objectives, background information, common student errors, hints, advice for lesson implementation and real-world connections, connections with career and / technology and references (e.g. solution manuals, study guides).	In <i>Automotive Excellence Communications, Mathematics, and Science</i> , students are presented with background information and then prompted to work through a set of problems, respond to a set of questions, and perform a hands-on experiment. A <i>Career Focus Activity</i> feature appears at the beginning of each part of the text and provides the students with an opportunity to explore a career within the automotive industry.
Suggestions are made for integration of themes and / or interdisciplinary instruction.	The <i>Automotive Excellence Mathematics, Science, and Communications</i> sections throughout the Student Edition help students apply their automotive concepts to different academic areas.
Integration opportunities suggested and examples given.	The <i>Automotive Excellence Mathematics, Science, and Communications</i> sections throughout the Student Edition help students apply their automotive concepts to different academic areas.
Teacher resources are available online.	Teacher resources are available online at www.knowledgematters.com .



Marcia L. Rieder

Kentucky Sales Representative

2005 Crooked Creek Court

Crestwood, Kentucky 40014

Tel 502 241 6701

Fax 502 243 9769

marcia_rieder@mcgraw-hill.com

South Central Region

6510 Jimmy Carter Boulevard

Norcross, GA 30071

Tel 770 613 0281

Toll Free 800 731 2365