**Automotive Steering, Suspension & Alignment**

**Chapter 11 –** **Electronic Stability Control Systems**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. The need for Electronic Stability Control and Federal Motor Vehicle Safety Standard (FMVSS) No. 126

2. Sine with Dwell Test, ESC Sensors, Traction Control, and ESC/TC Diagnosis

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**OBJECTIVES:**

1. Discuss the need for electronic stability control (ESC).

2. List the requirements for ESC systems.

3. Describe how to test the functioning of an ESC system.

4. List the sensors needed for the ESC system.

5. Describe how a traction control (TC) system works.

6. List the steps in the diagnostic process for ESC and TC system faults.

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**RESOURCES:** [(All resources may be found at jameshalderman.com)](https://jameshalderman.com/)

1. Task Sheet: Electronic Stability Control System Identification

2. Chapter PowerPoint

3. [Crossword and Word Search Puzzles (A4)](https://jameshalderman.com/a4_puzzles_lib_page/)

4. [Crossword and Word Search Puzzles (A5)](https://jameshalderman.com/a5_puzzles_lib_page/)

5. [Videos: (A4) Suspension and Steering](https://jameshalderman.com/a4_vid_lib_page/)

6. [Videos: (A5) Brakes](https://jameshalderman.com/a5_vid_lib_page/)

7. [Animations: (A4) Suspension and Steering](https://jameshalderman.com/a4_anim_lib_page/)

8. [Animations: (A5) Brakes](https://jameshalderman.com/a5_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Electronic Stability Control System Identification

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**ASSIGNMENTS:**

1. Chapter crossword and word search puzzles from the website.

2. Complete end of chapter quiz from the textbook.

3. Complete multiple choice and short answer quizzes downloaded from the website.

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**CLASS DISCUSSION:**

1. Review and group discussion chapter Frequently Asked Questions and Tech Tips sections.

2. Review and group discussion of the five (5) chapter Review Questions.

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**NOTES AND EVALUATION:**

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