CLASS POLICY & GUIDELINES

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Office information: 401 Ferris Hall, ph# 974-0927
Office hrs: 9:30-11am Tues. & Thurs. (or by scheduled appointment)

Prerequisites: Successful completion of undergraduate-level electronics, ECE 531 or
permission, and a strong desire to improve one’s self by becoming analog-
capable.

Textbook:  • Baker, Li, & Boyce, CMOS Circuit Design, Layout, and Simulation, IEEE

• Laker & Sansen, Design of Analog Integrated Circuits and Systems, McGraw-
• Gray & Meyer, Analysis and Design of Analog Integrated Circuits, John Wiley
• Gregorian & Temes, Analog MOS Integrated Circuits for Signal Processing,
• Tsividis, Mixed Analog-Digital VLSI Devices and Technology, McGraw-Hill,
1996.
• + class handouts (journal papers, etc.)

Grading: (7) Quizzes 40%
(1) Final 25%
Projects 35%
Total 100%

Grading scale: A(>90%), B+(86 to 89%), B(80 to 85%), C+(76 to 79%), C(70 to 75%), D(60 to
69%), F(<60%).

Quiz scores become final one week after being returned. According to the professor’s
discretion, course grades may or may not be curved.

Homework will be assigned but not graded. The homework is assigned for your edification and
enjoyment. Working through the homework assignments is encouraged and strongly
recommended. Homework assignments will be made in class and/or via email.

Each project report should be concise. Use your favorite word-processing software to generate
each report. Good grammar, correct spelling, and clear, accurate descriptions are expected.
Lecture classes will meet in room 510 of Ferris Hall from 8:10 – 9:25am on Tuesdays & Thursdays. Class attendance is encouraged and strongly recommended.

Lecture notes will eventually be available on the Web in the form of PDF files at URL address www.ece.utk.edu/~bblalock/ece532/ class. When a lecture is missed, visit the class webpage to obtain a copy of the lecture notes. In some cases homework and/or project information may also be posted online.

The final exam will be comprehensive. The date & time for the final is available online.

SYLLABUS

Course Topics and Order of Coverage

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<th>Week</th>
<th>Topics</th>
<th>Chpts.</th>
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<td>1 (Jan10)</td>
<td>Review Chpts. 1-6</td>
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<td>2 (Jan15, Jan17):</td>
<td>CMOS passive elements, noise characteristics Chpt. 7</td>
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<td>3 (Jan22, Jan24; Quiz#1):</td>
<td>Analog MOSFET models Chpt. 9</td>
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<td>4 (Jan29, Jan31):</td>
<td>Current sinks &amp; sources Chpt. 20</td>
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<td>5 (Feb5, Feb7; Quiz#2):</td>
<td>Reference Circuits Chpt. 21</td>
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<td>6 (Feb12, Feb14):</td>
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<td>7 (Feb19, Feb21; Quiz#3):</td>
<td>Single-stage amplifiers Chpt. 22</td>
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<td>8 (Feb26, Feb28):</td>
<td>Feedback amplifier design Chpt. 23</td>
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<td>9 (Mar5, Mar7; Quiz#4):</td>
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<td>10 (Mar12, Mar14):</td>
<td>Differential amplifiers Chpt. 24</td>
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<td>11 (Mar19, Mar21):</td>
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<td>12 (Mar26; Quiz#5, Mar28):</td>
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<td>13 (Apr2, Apr4):</td>
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<td>14 (Apr9; Quiz#6, Apr11):</td>
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<td>15 (Apr16, Apr18):</td>
<td>Nonlinear analog circuits (e.g., comparators) Chpt. 26</td>
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<td>16 (Apr23; Quiz#7, Apr25):</td>
<td>Dynamic analog circuits Chpt. 27</td>
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Final exam: 8:00-10:00am, Tuesday, May 7, in Ferris 510.

Disclaimer: The syllabus is subject to change! Updated versions will be available on the course's homepage.