PSU Department of Civil \& Env Engineering Course Mapping Worksheet

| Course Name | SPST: FUNDAMENTALS ELECTRICAL ENGR | YEAR |
| :---: | :--- | :---: |
| CEE No. | ECE299 | 2005 |
| Instructor | Morris |  |

NSTRUCTIONS:

1. For convenience, the course lectures are divided into the 10 weks of the term. Enter key topic areras covered for each week of the term.
2. For each week, identify any of the 13 outcomes that are addressed by the lecture materials in that week. For each relevant outcome (A-M) go the corresponding cell and assign a number between 1 and 10 that reflects the relative emphasis placed on that outcome area such that the total points assigned for each week adds up to 10 . To make this task easier, the "Pt Total" box (light blue box with red text) keeps track of the points you have assigned.
3. When you have finished with lecture topics for all 10 weeks the cumulative point total (dark blue box with yellow text) should display 100. The relative emphasis on each outcome area in course lectures is is shown by the text) should display 100. The relative emphasis on each outcome a
4. Now consider the outcome areas that are addressed by weekly or other regular class assignments. Rows are provided for up to 10 such assignments but the spreadsheet can handle any number between 1 and 10 . To do this, enter the total number of assignments in the yellow box, as indicated.
5. As with the lecture topics, assign a total of 10 points among the "A-K" outcome cells. The "Pt Total" box once gain keeps track of your tally. The bottom row and the cumulative-point box (dark blue) are normalized to the number of assignments to once again add up to 100 points when the form is correctly filled out.
6. Finally, repeat this process for any final projects, labs or other special assignments. The spreadsheet accepts up to two. If more rows are needed, inspect the cell formulas and cut and paste as needed. If you have trouble,


CEE Struc Geo Env Tran Area |  |  |  |  |
| :--- | :--- | :--- | :--- | CEE Outcomes

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| Week | Topics Covered in Lectures During this Week | Pt Total | A | B | C | D | E | F | G | H | 1 | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Voltage, current, power, sources, resistance (Ch 1/2) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 2 | Resistive circuits (Ch 2); inductance \& capacitance (Ch3) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 3 | (MLK vacation); transients (Ch4) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 4 | Sinusoidal signals and circuit analysis (Ch 5) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 5 | Frequency response, Bode plots, resonance (Ch 6) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 6 | Diodes, diode circuits (Ch 10) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 7 | Op amps (Ch 14) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 8 | Magnetic circuits, transducers, transformers (Ch 15) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 9 | DC \& AC motors (Ch 16 \& 17) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 10 | MOSFET \& CMOS (Ch 12); instrumentation (Ch 9 \& 11) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
|  | This value should equa |  |  |  |  |  |  |  |  |  |  |  |  |


|  | Weekly Assignments Enter TOTAL No. OF ASSIGNMENTS here => | 9 <br> Pt Total |  |  | C | D | E | F | G | H | 1 | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | A | B |  |  |  |  |  |  |  |  |  |
| 1 | Voltage, current, power, sources, resistance (Ch 1/2) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 2 | Resistive circuits (Ch 2); inductance \& capacitance (Ch3) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 3 | (MLK vacation); transients (Ch4) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 4 | Sinusoidal signals and circuit analysis (Ch 5) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 5 | Frequency response, Bode plots, resonance (Ch 6) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 6 | Diodes, diode circuits (Ch 10) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 7 | Op amps (Ch 14) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 8 | Magnetic circuits, rransducers, transformers (Ch 15) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 9 | DC \& AC motors (Ch 16 \& 17) |  | 2 |  | 2 | 2 | 2 |  |  |  |  |  | 2 |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |



|  | LAB Assignments | Enter TOTAL No. OF ASSIGNMENTS here => | 8 |  |  | C | D | E | F | G | H | 1 | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Pt Total | A |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | DC (resistor) circuits |  |  | 1 | 4 |  | 1 | 1 |  |  |  |  |  | 3 |
| 3 | Transients |  |  | 1 | 4 |  | 1 | 1 |  |  |  |  |  | 3 |
| 4 | AC circuits |  |  | 1 | 4 |  | 1 | 1 |  |  |  |  |  | 3 |
| 5 | Frequency response |  |  | 1 | 4 |  | 1 | 1 |  |  |  |  |  | 3 |
| 6 | Diode and diode circuits |  |  | 1 | 4 |  | 1 | 1 |  |  |  |  |  | 3 |
| 7 | Op amp applications |  |  | 1 | 4 |  | 1 | 1 |  |  |  |  |  | 3 |
| 8 | Transformer |  |  | 1 | 4 |  | 1 | 1 |  |  |  |  |  | 3 |
| 9 | DC motor |  |  | 1 | 4 |  | 1 | 1 |  |  |  |  |  | 3 |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

