| 20 | 2013 Scanning Sheet. Assignment Description: | | | | | | | | | | | | | _ Instructor: Date: Scanned File Name: |
|----|--|---|---|---|---|-----|--|--|---|---|-----------|---------|--------------|--|
| | ABET Outcomes Rubric or Example | | | | | | | | | | Rubric or | Example | | |
| А | в | с | D | Е | F | G F | | | J | к | student % | problem | Outcome # | EET 114 AC Circuits (3) – Outcomes Reviewed 2013 |
| | | | | | | | | | | | | | | Use Kirchoff's law to determine the current in a branch and a voltage between two nodes in an AC |
| 2 | 1 | 1 | 1 | | 1 | | | | | | | | 1 | circuit |
| | | | | | | | | | | | | | | Use Thevenin's (Norton's) Theorem nodal analysis and the superposition theorem to analyze a simple |
| 2 | 1 | 1 | 1 | | 1 | | | | | | | | 2 | circuit with at least 3 components in an AC circuit. |
| 2 | 1 | 2 | 1 | 1 | 1 | | | | | | | | 3 | Conduct AC analysis and measurement on circuits with independent sources. |
| | | | | | | | | | | | | | | Conduct AC analysis and measurement on circuits that have resistors, capacitors, and inductors to |
| 2 | 1 | 2 | 1 | 1 | 1 | | | | | | | | 4 | determine frequency response. |
| | | | | | | | | | | | | | | Compute the power in a circuit with resistors, capacitors, inductors, independent sources and |
| 2 | 1 | 1 | 1 | | 1 | | | | | | | | 5 | dependent sources. |
| 2 | 1 | 1 | 1 | | 1 | | | | | | | | 6 | Use available circuit simulation software to simulate AC circuit behavior. |
| 2 | 1 | 1 | 1 | | 1 | | | | | | | | 7 | Analyze circuits using phasors. |
| 2 | 1 | 1 | 1 | | 1 | | | | | | | | 8 | Analyze simple RL and RC DC switching circuits. |
| | | | | | | | | | | | | | | Be able to measure the AC voltage between two nodes and AC current through a branch using a |
| 2 | 1 | 2 | 1 | 1 | 1 | | | | | | | | 9 | multimeter. |
| 2 | 1 | 2 | 1 | 1 | 1 | | | | | | | | 10 | Be able to measure the phase difference between two AC voltages using an oscilloscope. |
| 1 | 1 | | 1 | | | 2 | | | | | | | 11 | Effectively prepare written reports of circuit experiments. |

1=supporting contribution

| 2=significant contribution | a. | defined engineering technology activities |
|--|-----------------|--|
| Rubric 5: Excellent Mastery of Outcome By Vast Majority of Students | b. c. | an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes |
| 4: Good Mastery of Outcome By Vast Majority of Students 3: Adequate Mastery of Outcome By Majority of Students | d. e. | an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives an ability to function effectively as a member or leader on a technical team |
| 2: Marginal Mastery of Outcome By Most Students1: Lack of Mastery of Concept By Most Students | <u>f.</u> g. | an ability to identify, analyze, and solve broadly-defined engineering technology problems an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature |
| Improvement Suggestions or Comments: | h. | an understanding of the need for and an ability to engage in self-directed continuing professional development an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity |
| | j. k. | a knowledge of the impact of engineering technology solutions in a societal and global context; and a commitment to quality, timeliness, and continuous improvement. |