Academic Program Assessment Plan– AAS Applied Technologies

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| **Division/****Department** | **ARTS AND APPLIED TECHNOLOLGIES/****Dept of Applied Technologies** | **Degree/Type** | **AAS in Applied Technologies** | **Date Submitted** | June 5, 2017 |
| **UNM Essential Learning Goals** |
| UNM has established the following essential learning goals for all UNM students: University of New Mexico students will develop the following aptitudes and habits of mind in the course of their general and major study at UNM* KNOWLEDGE of human cultures and the natural world, gained through study in the sciences and mathematics, social sciences, humanities, histories, languages and the arts.
* SKILLS, both intellectual and applied, demonstrated in written and oral communication, inquiry and analysis, critical and creative thinking, quantitative literacy, information literacy, performance, teamwork and problem solving.
* RESPONSIBILITY, both personal and social, that will be manifested in civic knowledge and engagement, multicultural knowledge and competence, ethical reasoning and action, and foundations and skills for lifelong learning.
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| **Assessment Cycle (1-year/2-year/3-year)** | 2 yr degree/ assessed yearly |
| **Program Goal #1** | Identify and apply the basic elements of DC/AC electronic components, electronic devices, mechanical systems |
| **Student Learning Outcomes****(In each row enter an SLO targeted at this Program Goal)** | **Year of cycle in which this outcome will be assessed.** | **UNM Essential Learning Goal (Knowledge, Skills, Responsibility)** | **Assessment Measure including Direct/ Indirect (Provide a description of the assessment instrument used; include the course AND if it was direct or indirect)** | **Performance Benchmark (State the ‘criteria for success’ or performance target for meeting the SLO, i.e., at least 70% of students will perform with score of 70 or better)** |
| **Student Learning Outcome** | **Year of Cycle** | **UNM Essential Learning Goal** | **Assessment Measure** | **Performance Benchmark** |
| Students will perform Conversion between Circuit Types in a classroom setting. | Year 1, fall | Knowledge | Course: **ELCT 101**: **DC Circuit Analysis** Direct Assessment: 1. SLOs will be assessed using a rubric from final project.
2. Instructor will report results to Dept. Chair.
 | 70% of the students will score 70% or better on assessment tool. |
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| Students will solve application problems involving diodes, Bipolar Junction Transistors, Transistor Amplifiers, Power Amplifiers, Thyristors, and OP AMPs | Year 2, spring | Knowledge  | Course: **ELCT 203: Electronic Devices** Direct Assessment: 1. SLOs will be assessed using a rubric from final project.
2. Instructor will report results to Dept. Chair.
 | 70% of the students will score 70% or better on assessment tool. |
| **Program Goal #2** | Focus instruction on technologies and methods related to solar technology |
| **Student Learning Outcomes****(In each row enter an SLO targeted at this Program Goal)** | **Year of cycle in which this outcome will be assessed.** | **UNM Essential Learning Goal (Knowledge, Skills, Responsibility)** | **Assessment Measure including Direct/ Indirect (Provide a description of the assessment instrument used; include the course AND if it was direct or indirect)** | **Performance Benchmark (State the ‘criteria for success’ or performance target for meeting the SLO, i.e., at least 70% of students will perform with score of 70 or better)** |
| **Student Learning Outcome** | **Year of Cycle** | **UNM Essential Learning Goal** | **Assessment Measure** | **Performance Benchmark** |
| Students will design a complete photovoltaic system | Year 1 Fall | Skill  | Course: **SLRT 162: Photovoltaics I: Analysis**Direct Assessment: 1. SLOs will be assessed using a rubric from final project.
2. Instructor will report results to Dept. Chair.
 | 70% of the students will score 70% or better on assessment tool. |
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| Students will design and present a “green” domestic dwelling | Year 2 spring | Knowledge  | Course: **SLRT 250: Green Architectural Design**Direct Assessment: 1. SLOs will be assessed using a rubric from final project.
2. Instructor will report results to Dept. Chair.
 | 70% of the students will score 70% or better on assessment tool. |
| **Program Goal #3** | Prepare students for careers in electronics and solar technologies. |
| **Student Learning Outcomes****(In each row enter an SLO targeted at this Program Goal)** | **Year of cycle in which this outcome will be assessed.** | **UNM Essential Learning Goal (Knowledge, Skills, Responsibility)** | **Assessment Measure including Direct/ Indirect (Provide a description of the assessment instrument used; include the course AND if it was direct or indirect)** | **Performance Benchmark (State the ‘criteria for success’ or performance target for meeting the SLO, i.e., at least 70% of students will perform with score of 70 or better)** |
| **Student Learning Outcome** | **Year of Cycle** | **UNM Essential Learning Goal** | **Assessment Measure** | **Performance Benchmark** |
| Students will operate different types of pumps, valves, fluids, plumbing components, and actuators used in hydraulic systems | Year 1 fall | Skill | Course: **ELCT 103: Mechanical Systems**Direct Assessment: 1. SLOs will be assessed using a rubric from final project.
2. Instructor will report results to Dept. Chair.
 | 70% of the students will score 70% or better on assessment tool. |
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| Students will analyze the solar resource available at a given proposed site | Year 1 spring | Skill  | Course: **SLRT 163: Photovoltaics II: Equipment and Installation**Direct Assessment: 1. SLOs will be assessed using a rubric from final project.
2. Instructor will report results to Dept. Chair.
 | 70% of the students will score 70% or better on assessment tool. |