



Program Assessment Plan

<http://www.caspercollege.edu/assessment/index.html>

Instructions: To submit an assessment plan for a specified program, please respond to each of the questions below. *Use as much space as you need to describe the program assessment plan.* Once this form is completed, please email it as an attachment to kthatcher@caspercollege.edu. For guidelines and/or assistance in developing a plan for assessing student learning, please contact Kathleen Thatcher or consult resources on the Assessment website at <http://www.caspercollege.edu/assessment/index.html>.

1. **Program: Power Technology AAS and Certificate
Renewable Energy Technology AAS and Certificate**
2. **Department: Power Technology**
3. **School: Business and Industry**
4. **Person(s) Responsible for Developing Plan: Dick Burnett**
5. **Email: dburnett@caspercollege.edu**
6. **Phone: 307 268-3066**
6. **Date Submitted: 2/28/11**

1. Does this program offer distance learning? No

(*Note: Please complete a separate Assessment Plan form for each program.)

A. Conceptual Assessment Plan Components

Assessment enables an understanding of what students are learning as a result of the program. Assessment findings can be used for a variety of purposes including making decisions regarding curriculum and instruction as well as providing feedback to students.

1. *List your program's mission*

The Casper College Power Technology Department will provide the necessary training for its graduates to successfully compete in the rapidly expanding and changing field of Power Generation and Renewable Energy. This will be accomplished by: 1-providing the technical training required for successful employment in the power plant and renewable energy fields. 2-The evaluation and adjustments of the programs to meet industry needs.3- The recruitment, retention, advising, and development of qualified and reliable graduates.

2. *List your Program Goals*

A. To provide comprehensive training in the field of Power Generation and Renewable Energy technology, so that the associate degree and certificate graduates are technically qualified to obtain employment in the Power Generation and Renewable Energy industry or an allied field.

- 75% of students who graduate from the Power Technology or Renewable Energy program are able to find employment in the Power Generation or Renewable Energy field, or are pursuing an advanced degree.

- B. To provide the necessary training for graduates to continue on to advanced training in Power Technology or Renewable Energy technology in a four-year Engineering Technology program.
3. *List the student learning outcomes for the program addressed by this plan.*
- A. Demonstrate the knowledge and skill to draw and explain flow diagrams for each major system in a Power Plant or generation facility.*
 - B. Demonstrate the ability to troubleshoot and react to situations on the power plant simulator.*
 - C. Demonstrate the knowledge and skills to adhere to all safety rules and regulations required in an industrial atmosphere.*
 - D. Demonstrate the knowledge and skills for climbing wind towers, both large and small to safely perform work at an elevated location.*
4. *Explain the student learning outcomes relation to the unit mission and goals (i.e. Do the student learning outcomes reflect the unit goals and objectives, further the mission, are rooted in the academic discipline, etc.?)*

These Student outcomes are all needed to establish the expertise needed to be successful and safe In an Industrial setting.

5. *Describe how and by whom assessment findings will be used.*

Assessment findings will be used by the Instructors, Department Head, Outcomes and Assessments Coordinator, and Dean of the School of business and Industry to determine areas of strength in the program as well as to provide opportunities in the overall program.

B. Implementation Assessment Plan Components

It is important to create a detailed implementation plan that aligns each student learning outcome with each of the following items:

- (A)** how/where program outcomes are learned,
- (B)** what evidence/indicator(s) will be collected, including both direct and indirect evidence,

- (C) how the evidence/indicator(s) will be collected and by whom,
 (D) how the evidence/indicator(s) will be analyzed and by whom, and
 (E) how assessment findings will be communicated back to the academic unit's faculty and students and used to improve the program.

Please note, it is important that the implementation plan collects useful information and that the collection and analysis methods are manageable given the resources available in your academic unit.

1. *Instructions:* For each program-level outcome (not course objectives), please provide information for each category listed below. Both direct and indirect evidence/indicators should be utilized in your assessment plan. You are encouraged to utilize existing evidence/indicators when feasible to keep the process manageable. You should also collect evidence/indicators throughout the program and not just at the end.

Program Learning Outcome	A How/Where is outcome learned?	B Evidence/ Indicator(s) of Learning	C Collection method(s) for each source of evidence	D Analysis method(s) for each source of evidence	E Feedback Procedures (Faculty, staff & students)
<i>A. Demonstrate the knowledge and skill to draw and explain flow diagrams for each major system in a Power Plant or generation facility.</i>	POWR 1500,POWR 1600 and POWR2600 RETK 1500 ,RETK 1505 and RETK 1520	Successful completion of homework, written tests and successful lab ability.	Grade evaluation on homework, written tests and performance in labs.	Student scores, performance assessments and course evaluations.	Discuss with advisory board members, faculty and Dean. Develop action Plan, and follow -up
<i>B. Demonstrate the ability to troubleshoot and react to situations on the power plant simulator.</i>	POWR 1500,POWR 1600 and POWR 2600	Successful completion of all POWR labs on simulator.	Written tests and performance in labs.	Student scores, performance assessments and course evaluations	Discuss with advisory board members, faculty and Dean. Develop action Plan, and follow -up
<i>C. Demonstrate the knowledge and skills to adhere to all safety rules and regulations required in an industrial atmosphere.</i>	ENVT 1600	Successful completion of homework, written tests and successful lab ability. Must obtain 10/hr OSHA certification.	Grade evaluation on homework, written tests and performance in labs. OSHA 10/hr Certification.	Student scores, performance assessments and course evaluations	Discuss with advisory board members, faculty and Dean. Develop action Plan, and follow -up
<i>D. Demonstrate the knowledge and skills for climbing wind towers, both large and small to safely perform work at an elevated location.</i>	RETK 1990	Students will be instructed and tested by Certified Instructor.	Written tests and performance and participation in climbing labs.	performance assessments and course evaluations	Discuss with advisory board members, faculty and Dean. Develop action Plan, and follow -up

2. Describe the responsibilities, timeline, and the process for implementing this assessment plan.
 - A. The department head will gather data needed to for review on an annual basis, to correspond with the departmental review schedule.
 - B. The plan will be reviewed on an annual basis, to correspond with the departmental review schedule.
 - C. The data will be evaluated by Department Head and Dean. (follow-up)

C. Global Design & Use

It is critical that program assessment plans be developed and approved by all faculty in the department. In addition, *include student input and external sources* (e.g., national standards, advisory boards, employers, alumni, etc.) in the development of the assessment plan(s).

1. *Describe the process through which your academic unit created this assessment plan. Include:*
 - a. *Timeline regarding when or how often this plan will be reviewed and revised. (This could be aligned with your unit's departmental review schedule.)*
 - The plan will be reviewed on an annual basis, to correspond with the departmental review schedule.
 - b. *How students were included in the process and/or how student input was gathered and incorporated into the assessment plan.*
 - *Student input was not used for this year assessment plan.*
 - c. *What external sources were consulted in the development of this assessment plan?*
 - *No external sources were used for this assessment plan, but will use in the future.*
 - d. *Assessment of the manageability of the plan in relation to departmental resources and personnel.*
 - *At the current time the plan is manageable and resources are adequate.*