



2016-17 Academic Department Annual Report

Academic Department:
Document Prepared By:

Applied Technologies
Thomas Street

Annual Report Submission Instructions:

This Annual Report of your Academic Department is intended to serve as a summary of departmental activities over the past year and as an outline of plans for the upcoming year.

Please note that responses are limited to the space provided below for each prompt and do not need to be written in narrative form (you are welcome to use bullet points/lists, as appropriate).

Please submit your Academic Department 2016-17 Annual Report to your Dean via email by May 31st.

For your reference, prior year reports (2011-2015) can be found on the Instructional Support website, <http://www.grcc.edu/instructionalsupport/departmentyearendreports>. If you have any questions about the 2015-16 reports entered into WEAVEonline, please contact Sheila Jones, Dean of Instructional Support, sheilajones@grcc.edu or x4289.

Part I: Report on 2016-17 Progress

Part I is intended to provide a “big picture” overview of your department’s activities during this past academic year. When completing the sections below, please consider the main points/highlights of each category.

Current Year Goals & Outcomes

This section asks you to provide details about the status of your department’s goals and outcomes for this past year. Please limit your response to the space provided in the text boxes below.

Overview

The Applied Technology department met its goals for 2016-2017. Additionally, we successfully managed a faculty shortage.

Overall program enrollment is stable and increasing. This is driven by both apprentices and employers encouraging employees to obtain training. Key metrics and goals are as follows:

Commencements 2017

Program	Grad
EET (906 and 926)	11
Controls (903 and 923)	7
Industrial Maintenance (918 & 985)	6
HVAC (924 & 918)	6
Total	30

Enrollment as of 5/11/17 (After Graduation)

Program	Enrolled
EET (906 and 926)	20
Controls (903 and 923)	31
Industrial Maintenance (918 & 985)	45
HVAC (924 & 918)	29
Total	125

Notes: Only includes students officially in these programs.

Billing Units

	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Applied Tech	2109	1733	1837	1700

Course Offerings (Variety)

We currently offer 24 different EL courses and 11 HVA courses.

Program Development

Mechatronics- Basic Industrial Electricity Certificate: A 16 credit mini-certificate was created and fully approved by GRCC. It is now in the 2017-2018 catalog. We anticipate more GRCC “completers”

Guided Pathways Initiative: The Applied Technology department continues to support the GPI. Our programs will be aligned to the Pathway Degree with Manufacturing and Applied Technology Concentration A.A. We anticipate additional demand for EL 144 and HVA 110

Coursework

EL 275 - Mechatronics-Automated Systems: This course was first run in the winter term. It was a great success with full enrollment.

Hybrid HVAC Course: The HVAC team is developing it’s first hybrid course. The intent is to offer the theory online and laboratories onsite. We look forward to 2017-2018 school year.

New Middle College Program

The Herman Miller Middle school program is on track. The first EL144 course will be taught in the Fall of 2017. Lab expansions are underway this summer. A contingent worker was hire to help organize the components and construct the trainers.

Staffing

Full Time Tenure Track: The Applied Technology department is currently searching for a full time tenure track professor. This search will replace a professor.

Adjuncts: We are continuing to search for adjunct instructors. Day instructors are very problematic. We have sought out adjunct from the now closed ITT tech.

Community Support

SkillsUSA: We continue to support SkillUSA every spring.

Transfer Options

GRCC Industrial Maintenance: Ferris's Manufacturing Engineering bachelor's degree is well align with our industrial maintenance degree. We are working with Ferris to develop a closer alignment.

GRCC EET Degree: Ferris's Electronics Engineering Technology bachelor's degree is well align with our EET degree. We are working with Ferris to develop a closer alignment.

Student Assessments

We are continuing to match our student assessments with the departmental plan

Equipment

We are developing our labs and purchased the following equipment

- ELVIS Trainers for EL203/EL205
- Freescale Dragon Trainers for EL 261/EL263

Departmental Professional Development

In this section, please provide details about your department's emphasis for professional development during this year. Please limit your response to the space provided in the text box below.

The Applied Technology Department seeks professional development to improve technical and technical skills

Technical Professional Development

Faculty attend the HVAC conversion and one attended a C course for embedded controllers.

Instructional Professional Development

Four faculty members attended the TRENDS convention last fall.

Departmental Advising Plan & Outcomes

In this section, please describe your department's advising plan and outcomes for this year. Please limit your response to the space provided in the text boxes below.

Student advising is a continuous process by department faculty. The technology area faculty are the best advisors to our students since they know what will be required of the students in industry. Faculty advise students during their office hours as well as during class periods, where appropriate. The department advises during the first day of EL106, EL144 and HVA 110.



2016-17 Academic Department Annual Report

Program Accreditation Updates

In this section, please provide details regarding any program accreditation or re-accreditation that occurred this past year, if applicable. Please limit your response to the space provided in the text boxes below.

No Applicable

Perkins & Key Performance Indicators

In this section, please discuss Perkins and Key Performance Indicators for programs (total student enrollment, demographic profile, new students, student progress rate (transferred, graduated, enrolled), number of graduates, graduate employment rate, time to completion), if applicable. Please limit your response to the space provided in the text boxes below.

HVAC Programs (Certificate and Associate Degree)

1P1 Core Indicator: This indicator is not applicable

2P2: Core Indicator: The percentage of students completing the certificate or degree are above the 30.6% target.

3P1 Core Indicator: The percentage of students remaining in the degree program meets the target value of 71%. However the certificate is well below the target value.

4P1: The percentage of students employed in the field is 100%. Well above targets of 85%

5P1 & 5P2 Core Indicator: Underrepresented gender groups are well below targets.

Industrial Maintenance (Certificate and Associate Degree)

1P1 Core Indicator: This indicator is not applicable

2P2: Core Indicator: The percentage of students completing the degree are above the 30.6% target. Certificates are below target

3P1 Core Indicator: The percentage of students remaining in the degree program meets the target value of 71%. However the certificate is well below the target value.

4P1: The percentage of students employed in the field is 0%. This data is not accurate. All of our students are employed.

5P1 & 5P2 Core Indicator: Underrepresented gender groups are well below targets.

Electronics Technology (Certificate and Associate Degree)

1P1 Core Indicator: This indicator is not applicable

2P2: Core Indicator: The percentage of students completing the degree is below the 30.6% target. Certificates are above target

3P1 Core Indicator: The percentage of students remaining in the degree program meets the target value of 71%. However the certificate is well below the target value.

4P1: The percentage of students employed in the field is 100% Well above targets

5P1 & 5P2 Core Indicator: Underrepresented gender groups are well below targets.

Conclusions:

Overall the Perkins indicators are in good standing. We should investigate the 4p1 indicator for Industrial Maintenance. 0% employment is not accurate.

Learning Outcomes Assessment Data & Findings on Past Year's Projects

In this section, please summarize your department's assessment work for this year, outlining the Program Learning Outcomes (PLOs) or Institutional Learning Outcomes (ILOs) assessed, the assessment measure, the findings, and the improvements planned based on the findings. Please limit your response to the space provided in the text boxes below.

We continue to develop our assessments based on our departmental ILO maps.

This year we developed the following assessments:

HVAC

- Boiler Troubleshooting – Evaluation is complete
- Mechanical Codes – Evaluation is complete

EL

- Mechatronics Project Assessment – Evaluation is designed
- Microcontroller Project Assessment – Evaluation is complete

Data for the microcontrollers assessment is as follows:

Assessment	Student Initials							
	CS	CA	DE	JC	JS	NS	SC	TN
Demonstrate at least one digital or analog input. (transfer data)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demonstrate at least one output. (transfer data)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demonstrate some circuitry wiring	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Demonstrate over 200 lines of software.	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Demonstrate the internal timer. (math Instructions)	No	Yes	Yes	No	No	Yes	Yes	Yes
Demonstrate an IF-THEN-ELSE	Yes	No	Yes	Yes	No	Yes	No	Yes
Demonstrate at least one iterative loop. (math Instruction)	No	No	No	No	No	Yes	No	No
Demonstrate a Look Up Table	No	No	Yes	No	No	Yes	No	No
Demonstrate at least one subroutine.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demonstrate a working application (load and execute)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demonstrate Correct Software Comments	Yes	no	Yes	no	Yes	Yes	Yes	Yes
Results	8	7	10	7	6	11	6	9



2016-17 Academic Department Annual Report

Part II: Plan for Upcoming Year

Part II is intended to provide a guide for your department's plans for the upcoming year with regards to the following: Operational Goals and/or Plans, Curriculum Goals and/or Plans, Learning Outcomes Assessment Plans, and Advising Plans. When answering the questions or completing the sections below, please consider the main points/highlights of each category.

A. Operational Goals and/or Plans

What are your departmental goals and plans for 2017-18?

Our operational goals are as follows:

- Hire full time faculty member.
- Reduce course variety – From 24 EL courses to 21 EL courses.
- Prepare Holland for the Hermen-Miller Middle College Program.



2016-17 Academic Department Annual Report



2016-17 Academic Department Annual Report

What new information from external sources has influenced your planning for next year?

None

Are your goals targeting any Perkins or Key Performance indicators? If yes, please explain.

The Perkins indicators are stable. No tasks are specifically targeting Perkins.



2016-17 Academic Department Annual Report

What resources do you need to accomplish your departmental goals for the upcoming year?

The working to prepare for the Hermen-Miller Middle college program will continue thought out the 2017-2018 year. Student works will be required to continue construction the various trainers used in EL162 and EL163.

Do you need support from other departments to accomplish these goals? If yes, please explain.



2016-17 Academic Department Annual Report

Do you need professional development in order to accomplish these goals? If yes, please explain.

None

For each of your departmental goals/plans/projects, please list the name of the lead faculty member(s) involved.

Hermen-Miller Middle College: T. Street
Search Committee: Roger Kelley



2016-17 Academic Department Annual Report

For each of your departmental goals/plans/projects, please provide a brief timeline for completion.

Search Committee: Complete by July 1, 2017

Reduce EL variety: Complete by May 1, 2017

Middle College: Complete by May 1, 2017

B. Curriculum Goals and/or Plans

What are your departmental curriculum development goals and plans for 2017-18?

Course Work

- Update Prerequisites – The math prerequisite for EL 144 and EL 106 needs to be corrected.
- EL 161, EL262, EL263 to 4 credits - This year we would like to align our digital courses with Ferris. This will also eliminate EL261 for our program.

Review of Department's Curriculum Transferability

Please note: this section should be completed by all SAS Departments, Business, and CIS.

Using transferability data provided by Instructional Support, please summarize your perceptions of how courses in your department transfer to our four-year university partners and how this understanding will impact your curriculum goals for the upcoming year.



2016-17 Academic Department Annual Report



2016-17 Academic Department Annual Report

What new information from external sources has influenced your curriculum development planning for next year?

Are your curriculum development goals targeting any Perkins or Key Performance Indicators? If yes, please explain.

These goals are not specifically targeted to Perkins.



2016-17 Academic Department Annual Report

What resources do you need to accomplish these curriculum development goals?

Do you need support from other departments to accomplish these curriculum development goals? If yes, please explain.

No

For each of your departmental curriculum development goals/plans/projects, please list the name of the lead faculty member(s) involved.

Update Prerequisites: Roger Kelley
Update EL161, EL262 and EL263: T. Street

For each of your departmental curriculum development goals/plans/projects, please provide a brief timeline for completion.

Update Prerequisites: September 1, 2017
Update EL161, EL262 and EL263: May 1, 2017

C. Learning Outcomes Assessment Plan for 2017-18

In this section, please outline your department's plan for learning outcomes assessment work for the upcoming academic year, outlining the Program Learning Outcomes (PLOs) or Institutional Learning Outcomes (ILOs) that will be assessed as well as the assessment instruments/measure that will be used. Please limit your response to the space provided in the text boxes below.

We will continue developing the mechatronics assessments



2016-17 Academic Department Annual Report

D. Departmental Advising Plan for 2017-18

In this section, please outline your department's advising plan for the upcoming academic year. Please limit your response to the space provided in the text box below.

Advising

- We plan to update the Applied Tech website to better advise our students.
- Host advisory committees

Part III: 2016-17 Faculty & Staff Accomplishments/Awards

Part III is intended to provide a space to share the accomplishments, awards, and/or accolades achieved by faculty and staff in your department during the course of this past year.



2016-17 Academic Department Annual Report

Thank you for completing this report. Please submit to your Dean via email.