1. Approval of Agenda

2. Approval of Minutes (pgs. 3-5)

3. Vice Provost report and discussion
   - Accreditation Self-Study and Open Forums
   - Assessment SharePoint site: [https://ir-reports.uaa.alaska.edu/Assessment/Pages/Default.aspx](https://ir-reports.uaa.alaska.edu/Assessment/Pages/Default.aspx)
   - Annual Academic Assessment Survey Report (pgs. 6-16)

4. Assessment Plan Reviews
   Assessment plans attached for your review. Links to the curriculum provided below.
   - 11:00: Refrigeration and Heating Technology AAS/UC, Residential and Light Commercial Heating & Ventilation OEC, and Commercial Refrigeration Systems OEC, Program Representatives: Dan Mielke, Assistant Professor of Refrigeration and Heating; Johnny Kirby, Assistant Professor of Refrigeration and Heating (pgs. 17-39) [https://nextcatalog.uaa.alaska.edu/programadmin/?code=RHV-OECERT](https://nextcatalog.uaa.alaska.edu/programadmin/?code=RHV-OECERT) [https://nextcatalog.uaa.alaska.edu/programadmin/?code=CRS-OECERT](https://nextcatalog.uaa.alaska.edu/programadmin/?code=CRS-OECERT)
   - 11:30: General Program AA, Program Representatives: Bill Myers, Professor of History and AA Assessment Plan Committee (AAAPC) co-chair; Sheri Denison, MSC Associate Professor of English and AAAPC co-chair; Casey Rudkin, KPC Assistant Professor of English (all AAAPC members were invited to attend if available) (pgs. 40-52) [https://nextcatalog.uaa.alaska.edu/programadmin/?code=GENP-AA](https://nextcatalog.uaa.alaska.edu/programadmin/?code=GENP-AA)

5. Information Items
   - Mat-Su College Assessment Workshop – Friday, March 31st, 9:00-12:00, available by distance via Collaborate
   - Annual Academic Assessment Survey (April 1st – June 15th)
   - Informational Changes
   - Upcoming Assessment Plans
     - Civil Engineering MS
     - Human Services AAS/BHS
     - Culinary Arts AAS
   - Institutional Self-Study Open Forums
Chapter 4 Draft Open Forum (Standard 4: Effectiveness and Improvement) – Friday, February 24th, 9:00-11:00 in LIB 307 and by distance Register

Full Report Draft Open Forum – Friday, April 7th, in Commons 107 and by distance (time TBD)

- General Education Assessment Workshops
  - Curriculum Mapping & Shared Assessment Workshop #1 – Friday, February 10th, 10:00-11:30 in LIB 307 and by distance Register

Committee Members

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<td>Bill Myers, CAS</td>
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<td>Christina McDowell, CBPP</td>
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Academic Year 2017 schedule: 1st & 3rd Fridays unless otherwise noted
UAA Faculty Senate Academic Assessment Committee
Minutes: January 20, 2017
11:00 am - 12:30 pm, ADM 204

Skype for Business: Join online at https://meet.uaa.alaska.edu/macarlson/I6FZBWQ
or Call 786-6755 and enter Conference ID 642461 (note distance instructions have changed)

1. Approval of Agenda
   - Approved

2. Approval of Minutes (p. 3-4)
   - Approved

3. Assessment Plan Reviews
   - Assessment plans attached for your review. Links to the curriculum provided below.
   - 11:00: Dental Hygiene AAS, Program Representative: Sandra Pence (p. 5-42)
     https://nextcatalog.uaa.alaska.edu/courseleaf/courseleaf.cgi?page=/programadmin/149/index.html&step=tcadiff
     - This is an update to an existing plan with minor changes to the outcomes, which also identifies related instruction, outcomes and assessment.
       i. The Related instruction outcomes do not need to be in catalog copy, but do need to be in assessment plan.
       ii. Some of the Program Student Learning Outcomes, for example #2, has several outcomes included within one SLO (e.g., quadrupled barreled). Might consider this, but program feels their discussions tease this out.

   - 11:30: Applied Geological Sciences MS, Program Representatives: Simon Kattenhorn, LeeAnn Munk, Jennifer Aschoff (p. 43-65)
     - Simon Kattenhorn presented this plan for a proposed program which is intended to begin in Fall 2017 or Spring 2018, following approvals. Geology programs do not have specialized accreditation.
       i. Table 1 – Course level assessment measures should align with table 2. Be consistent. I
       ii. Table 2 – question about rubric headings – is there enough specificity – will they provide meaningful information? Program will revise if data obtained does not provide meaningful feedback.
       iii. Good start in this initial plan.

4. Vice Provost report and discussion
   - Accreditation Self-Study and Open Forums
     https://www.uaa.alaska.edu/academics/office-of-academic-affairs/institutional-self-study/index.cshtml
The Self-Study effort is now in the writing phase, and will be considering final takeaways. The final draft will be discussed at an open forum on April 7th. In addition to the Self-Study, UAA is also focused on preparing for the visit in Fall 2017. The AAC should be thinking about its role and how it contributes to the institution’s continuous improvement cycle and mission fulfillment.

- Assessment SharePoint site: https://ir-reports.uaa.alaska.edu/Assessment/Pages/Default.aspx

Assessment reports and assessment plans are now posted on the SharePoint site. Programs delivered across multiple campuses have been working on developing a shared common assessment plan and process. The AAC will begin seeing those plans for review in March.

5. Information Items
   - Informational Changes
     i. Nursing AAS (p. 66-88)
        Academic Affairs is checking plans as programs come through the curriculum process and working with the co-chairs to determine if changes are informational to the AAC or if they should be reviewed.

- Upcoming Assessment Plans
  o February 3rd: Refrigeration and Heating Technology AAS/UC, Residential and Light Commercial Heating & Ventilation OEC, Commercial Refrigeration Systems OEC (one plan)
  
- Annual Academic Assessment Survey (April 1st – June 15th)

The committee had agreed to keep the annual assessment survey questions consistent through the rest of the accreditation cycle. If there are any questions in updating the survey for AY17, they will be brought to the committee.

- Institutional Self-Study Open Forums
  o **Standard 4 (Core Theme Analysis and Mission Fulfillment) Report Draft Open Forum** – Friday, February 24th, 9:00-11:00 in LIB 307 and by distance [Register](#)
  o **Full Report Draft Open Forum** – Late March or April (TBD)

- General Education Assessment Workshops
  Dan Kline will be continuing to host a series of GER assessment workshops in the Spring semester.

### Committee Members

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### Scheduled Meeting Dates Academic Year 2017

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*Academic Year 2017 schedule: 1st & 3rd Fridays unless otherwise noted*
UAA's academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey. Out of 149 active programs, 148 completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Each UAA academic program develops its own annual assessment process and timeline based on the program’s unique needs. As of July 2016, 9% of programs that completed the survey are in the planning and implementation stages of the assessment process, 54% are in the data collection stage, and 15% are in the discussion stage. Twenty-two percent of responding programs have made recommendations for improvements.

**Total % of surveys completed as of July 2016:**
99%

**Total % of programs which indicated making changes as a result of their assessment efforts:**
80%

**Total # of programs which indicated making improvements to their assessment plan this year:**
40

### Types of Program Improvements Resulting from Assessment Data

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 80% of programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

**Institutional Assessment Spotlight:**

**General Education Requirements Assessment**

“Building upon the work of the GER Assessment Committee, the GER Pilot Assessment involved 300 faculty from across disciplines to map curriculum and create an outcomes rubric for Written Communication, Oral Communication, and Information Literacy. This culminated with a faculty group who assessed nearly 100 student assignments in 11 GER and non-GER classes from the 100- to 400-levels.”

-Dan Kline
Professor and Director of English
Director of General Education
UAA's academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for the College of Arts and Sciences (CAS). All 26 CAS programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Each UAA academic program develops its own annual assessment process and timeline based on the program's unique needs. As of July 2016, 4% of CAS programs that completed the survey are in the planning and implementation stages, 42% are in the data collection stage, and 31% are in the discussion stage. Twenty-three percent of responding programs have made recommendations for improvement.

**Types of Program Improvements Resulting from Assessment Data**

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 77% of CAS programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

**Program Improvement Spotlight:**

**Theatre and Dance**

“The Theatre program’s assessment reports from the last several years showed that students needed to strengthen their literary and script analysis skills. As a result, we created a class called “Script Analysis” and restructured our Representative Plays class. This had a direct and immediate impact as now students are showing vastly improved analysis ability.”

- Dan Anteau
Associate Professor
Theatre and Dance
UAA’s academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for the College of Business & Public Policy (CBPP). All 16 CBPP programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

**Types of Program Improvements Resulting from Assessment Data**

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 81% of CBPP programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

- Course Curriculum Changes, 17%
- Degree Course Sequencing, 15%
- Degree Requirement Changes, 2%
- Changes to Program Student Learning Outcomes (PSLOs), 2%
- Faculty, Staff, Student Development, 2%
- College-wide Initiatives, 17%
- Personnel Decisions, 13%
- Course Prerequisite Changes, 11%
- Changes in Teaching Methods, 18%
- Other, 3%
- Degree Requirement Changes, 2%

Each UAA academic program develops its own annual assessment process and timeline based on the program’s unique needs. As of July 2016, 6% of CBPP programs that completed the survey are in the planning and implementation stages, 63% are in the data collection stage, and 13% are in the discussion stage. Nineteen percent of responding programs have made recommendations for improvement.

**Program Assessment Spotlight:**

**Business Administration**

“Based on several years of assessment information the faculty reduced the number of comprehensive learning goals and objectives for the Bachelors of Business Administration degree. The goal is to provide our students with a clearer understanding of the expected learning outcomes they are working to achieve during their course of study.”

- Christina McDowell
  Assistant Professor Management & Marketing
UAA’s academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for the College of Education (COE). Twelve out of 13 COE programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Types of Program Improvements Resulting from Assessment Data

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 92% of COE programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

Each UAA academic program develops its own annual assessment process and timeline based on the program’s unique needs. As of July 2016, 25% of COE programs that completed the survey are in the data collection stage and 33% are in the discussion stage. Forty-two percent of responding programs have made recommendations for improvement.

Program Assessment Spotlight: Educational Leadership

“The Educational Leadership Program utilized assessment data to better align the principal certification program with the Educational Leadership Constituent Council, Cultural Proficiency and the International Society of Technology in Education standards. The results were an increased emphasis on the development of dispositions, an integrated and sequential curriculum, and clearly defined goals and outcomes of the internship.”

-Ginger Blackmon
Assistant Professor
Educational Leadership
UAA's academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for the College of Engineering (CoEng). All 10 CoEng programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

**Types of Program Improvements Resulting from Assessment Data**

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 89% of CoEng programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

Each UAA academic program develops its own annual assessment process and timeline based on the program's unique needs. As of July 2016, 20% of CoEng programs that completed the survey are in the planning and implementation stages of the assessment process, and 50% are in the data collection stage. Thirty percent of responding programs have made recommendations for improvement.

**Program Assessment Spotlight: Mechanical Engineering**

“We had success using the free online teaming tool CATME in one of our classes and plan to expand use of that tool. It allows students and instructors to easily assess self, peer, and team activities. An algorithm can create teams by factoring in student schedules and communication preferences. Students reported that they preferred the teams assembled by the algorithm.”

-Jennifer Brock
Associate Professor
Mechanical Engineering
UAA’s academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for the College of Health (COH). All 32 COH programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Total % of COH surveys completed as of July 2016: 100%
Total % of COH programs which indicated making changes as a result of their assessment efforts: 94%
Total # of COH programs which indicated making improvements to their assessment plan this year: 11

Types of Program Improvements Resulting from Assessment Data
The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 94% of COH programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

Program Assessment Spotlight: Medical Laboratory Science
“Students did not meet the goal: ‘Demonstrate a commitment to the laboratory profession through active involvement in professional organizations.’ To rectify this, the program purchased students’ membership in local and national professional organizations and encouraged them to actively participate in the organizations. Exposure to continuing education and career opportunities provided by the organizations may result in more graduates becoming actively involved.”

- Heidi Mannion
Professor Medical Laboratory Science
UAA’s academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for the Community & Technical College (CTC). All 22 CTC programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Total % of CTC surveys completed as of July 2016: 100%
Total % of CTC programs which indicated making changes as a result of their assessment efforts: 86%
Total # of CTC programs which indicated making improvements to their assessment plan this year: 7

Each UAA academic program develops its own annual assessment process and timeline based on the program’s unique needs. As of July 2016, 91% of CTC programs that completed the survey are in the data collection stage. Nine percent of responding programs have made recommendations for improvement.

Types of Program Improvements Resulting from Assessment

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 86% of CTC programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

Program Assessment Spotlight:
Occupational Safety & Health
“As the Occupational Safety and Health faculty developed a new BS program, they updated the existing AAS to be a stackable credential within the framework of the four-year degree and aligned the program student learning outcomes with ABET specialized accreditation requirements. Guided by their participation in the UAA GER curriculum mapping workshops, the faculty mapped the curriculum to the learning outcomes and selected data points for assessment using that map.”

Lee Henrikson
Instructional Designer
Community & Technical College

Visit the Academic Assessment Committee's Website at www.uaa.alaska.edu/about/governance/academic-assessment-committee/index.csh.html
AAC Agenda 2/3/17

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UAA's academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for Kenai Peninsula College (KPC). All seven KPC programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Total % of KPC surveys completed as of July 2016: 100%

Total % of KPC programs which indicated making changes as a result of their assessment efforts: 43%

Types of Program Improvements Resulting from Assessment Data

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 43% of KPC programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

Program Assessment Spotlight: Process Technology

“Process Technology used assessment results to refine its course sequencing. Faculty believe this positively impacted recent graduates and it increased employers’ satisfaction. According to one employer, ‘[i]n all my years of interviewing candidates, I have never seen this caliber of applicants.’”

-Jeffrey Laube
Assistant Professor
Process Technology

Visit the Academic Assessment Committee’s Website at www.uaa.alaska.edu/about/governanceacademic-assessment-committee/index.csh.html
UAA’s academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for Kodiak College (KOD). All seven KOD programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Each UAA academic program develops its own annual assessment process and timeline based on the program’s unique needs. As of July 2016, 14% of KOD programs that completed the survey are in the planning and implementation stages of the assessment process, 29% are in the data collection stage and 29% are in the discussion stage. Twenty-eight percent of responding programs have made recommendations for improvement.

Types of Program Improvements Resulting from Assessment Data

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 71% of Kodiak College programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

Program Assessment Spotlight: Business and Accounting

“The Kodiak Business and Accounting departments regularly collaborate with local businesses to identify and offer service learning opportunities that allow for the assessment of students in the workplace. Community participation and assessment of these programs has helped to further develop training of students in the skills that are highly sought-after in the workplace.”

-Kathrynn Hollis-Buchanan
Assistant Professor
Business and Accounting
UAA’s academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for Matanuska-Susitna College (MSC). All 11 MSC programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Each UAA academic program develops its own annual assessment process and timeline based on the program’s unique needs. As of July 2016, 45% of MSC programs that completed the survey are in the planning and implementation stages, 27% are in the data collection stage and 9% are in the discussion stage. Eighteen percent of responding programs have made recommendations for improvement.

Types of Program Improvements Resulting from Assessment Data

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 45% of Matanuska-Susitna College programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

Program Assessment Spotlight:

“All programs delivered on the MSC campus worked through the curriculum mapping process, leading to increased conversations about assessment and student learning. In addition, Mat-Su faculty actively engaged in the cross-campus conversations about transitioning to collaborative assessment plans and processes for programs delivered at multiple locations.”

-Rachel Graham
Assistant Professor
Mathematics

Visit the Academic Assessment Committee’s Website at www.uaa.alaska.edu/about/governance/academic-assessment-committee/index.csh.html

AAC Agenda 2/3/17

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UAA’s academic programs conduct continuous assessment of their programs, with the ultimate goal of providing evidence-based information that contributes to program improvement processes. Assessment coordinators for each program complete the Annual Academic Assessment Survey, which enables UAA to highlight student achievement of program student learning outcomes and to recognize faculty efforts toward improving their programs. This report shows the results as of July 2016 of the 2016 survey for Prince William Sound College (PWSC). All five PWSC programs completed the survey. Suspended programs are not included in this report. For the purposes of this report, “program” may refer to a group of programs which are assessed together and which submit only one report.

Each UAA academic program develops its own annual assessment process and timeline based on the program’s unique needs. As of July 2016, 40% of PWSC programs that completed the survey are in the planning and implementation stages and 60% are in the data collection stage.

Types of Program Improvements Resulting from Assessment Data

The ultimate goal of academic assessment at UAA is to serve as a resource for improving teaching and learning. This past year, 20% of Prince William Sound College programs that completed the survey indicated making changes as a result of their assessment efforts. The graph below shows the various areas in which changes were made.

!”The Outdoor Leadership program's required capstone internship provides an opportunity for in-depth assessment of student learning including: self-evaluation (e.g. reflective journal), instructor evaluation, and third-party evaluation by the internship site supervisor. An exit interview also sheds light on the positive impact of the experiential learning experience.”

- Sharry Miller
  Assistant Professor
  Outdoor Leadership
Associate of Applied Science
REFRIGERATION AND HEATING TECHNOLOGY

Educational Effectiveness

Assessment Plan

Adopted by

The R&H faculty: November 29, 2012
Updated December 8, 2016

Reviewed by the FS Academic Assessment Committee: February 3, 2017
Submitted as an information item to the Faculty Senate: March 3, 2017
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Summary

The purpose of this document is to outline a series of steps for determining the academic effectiveness of the Matanuska Susitna College Refrigeration and Heating (R&H) Program.

Skill standards establish a clear set of performance expectations that help both educators and trainers. They assist in the design, development, and delivery of student recruiting strategies, appropriate curriculum, and training consistent with industry standards. This plan has been developed to meet the guidelines of the Heating, Air-Conditioning, and Refrigeration Technician National Skill Standards. The plan was developed to provide some means for demonstrating the effectiveness of the program.

This document identifies measures that are used to evaluate the effectiveness of the R&H Program.
Mission Statement

The mission of the Refrigeration and Heating Technology program is to deliver high quality instruction to Alaskans through a sequence of hands-on coursework, applying current technologies and integrating academics to prepare students for employment in residential and commercial heating, ventilating, air conditioning, and refrigeration (HVACR) industries.

Program Introduction

Matanuska-Susitna College (MSC) is an extended college of the University of Alaska Anchorage (UAA). MSC is accredited through the University of Alaska Anchorage and the Northwest Commission on Colleges and Universities (NWCCU).

Two Occupational Endorsement Certificates, one Undergraduate Certificate, and an Associate of Applied Science degree in Refrigeration and Heating are available. Satisfactory completion of 51 credits of technical courses will qualify a student for the Undergraduate Certificate in Refrigeration and Heating Technology. The A.A.S. degree may be earned by obtaining the Undergraduate Certificate in Refrigeration and Heating Technology and successfully completing the General University and General Course Requirements for an Associate degree. A student satisfactorily completing the requirements for a certificate or the degree will possess a background in heating, air conditioning, applied physics, mathematics, and electricity; the student will also possess the technical skills required to diagnose and repair modern commercial and residential heating, refrigeration, air-conditioning, and ventilation systems. The faculty place heavy emphasis on student preparation for job entry-level skills. Professional tests related to the industry are administered as part of this program. If possible, additional training may take place on the job to provide a student with work-related experience. The Refrigeration and Heating Technology program is offered only through MSC.
Program Requirements

OEC in RESIDENTIAL AND LIGHT COMMERCIAL HEATING & VENTILATION
1. Complete the following certificate requirements (16 credits):
   RH A203 HVAC/R Basic Controls (3)
   RH A225 Heating Fundamentals & Forced Air Heat (4)
   RH A226 Commercial HVAC/R Systems (4)
   RH A228 Advanced Hydronic Heat Systems (4)
   RH A211 Customer Relations & Job Etiquette (1)
2. A total of 16 credits is required for the Occupational Endorsement Certificate.

OEC in COMMERCIAL REFRIGERATION SYSTEMS
1. Complete the following certificate requirements (17 credits):
   RH A101 Refrigeration & Air Conditioning Fundamentals (4)
   RH A105 Electrical Circuits for R&H I (3)
   RH A122 Refrigeration & Air Conditioning (4)
   RH A126 Electrical Circuits for R&H II (3)
   RH A132 Troubleshooting HVAC/R Systems
2. A total of 17 credits is required for the Occupational Endorsement Certificate.

UNDERGRADUATE CERTIFICATE REFRIGERATION AND HEATING TECHNOLOGY

CERTIFICATE REQUIREMENTS (51 credits)
First Year, First Semester (Fall)
   RH A101 Refrigeration & Air Conditioning Fundamentals (4)
   RH A103 Technical Math for Industrial Trades (3)
   RH A105 Electrical Circuits for R & H I (3)
   RH A109 Principles of Thermodynamics (3)
First Year, Second Semester (Spring)
   RH A122 Refrigeration & Air Conditioning (4)
   RH A126 Electrical Circuits for R & H II (3)
   RH A132 Troubleshooting HVAC/R Systems (3)
Second Year, First Semester (Fall)
   RH A201 Commercial & Ammonia Refrigeration (4)
   RH A203 HVAC/R Basic Controls (3)
   RH A209 Codes for HVAC/R (2)
   RH A211 Customer Relations & Job Etiquette (1)
   RH A225 Heating Fundamentals & Forced Air Heat (4)
Second Year, Second Semester (Spring)
   RH A226 Commercial HVAC/R Systems (4)
ASSOCIATE OF APPLIED REFRIGERATION AND HEATING TECHNOLOGY

AAS DEGREE REQUIREMENTS
1. Complete the General University Requirements for Associate of Applied Science Degrees.

2. Complete the following core courses:

**First Year, First Semester (Fall)**
RH A101 Refrigeration & Air Conditioning Fundamentals (4)
RH A103 Technical Math for Industrial Trades (3)
RH A105 Electrical Circuits for R & H I (3)
RH A109 Principles of Thermodynamics (3)

**First Year, Second Semester (Spring)**
RH A122 Refrigeration & Air Conditioning (4)
RH A126 Electrical Circuits for R & H II (3)
RH A132 Troubleshooting HVAC/R Systems (3)

**Second Year, First Semester (Fall)**
RH A201 Commercial & Ammonia Refrigeration (4)
RH A203 HVAC/R Basic Controls (3)
RH A209 Codes for HVAC/R (2)
RH A211 Customer Relations & Job Etiquette (1)
RH A225 Heating Fundamentals & Forced Air Heat (4)

**Second Year, Second Semester (Spring)**
RH A226 Commercial HVAC/R Systems (4)
RH A228 Advanced Hydronic Heat Systems (4)
RH A229 HVAC/R Control Systems (3)
RH A232 HVAC/R Sheet Metal (3)
Program Objectives/Outcomes

Students graduating with an Occupational Endorsement Certificate in Residential and Light Commercial Heating and Ventilation will be able to:

- Apply the fundamental laws of physics to heating, ventilation, and air conditioning (HVAC) systems.
- Use mathematical skills required to succeed in HVAC trades.
- Describe the function of individual components that make up HVAC systems.
- Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and materials associated with HVAC work.
- Follow work practices that are environmentally responsible.
- Obtain employment as an entry-level HVAC technician and be able to advance professionally.
- Work effectively with customers, employers, and co-workers.
- Systematically troubleshoot HVAC systems.
- Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation, and maintenance of HVAC systems.

Students graduating with an Occupational Endorsement Certificate in Commercial Refrigeration Systems will be able to:

1. Apply the fundamental laws of physics related to the refrigeration industry.
2. Use mathematical skills required to succeed in the refrigeration trade.
3. Understand and describe the function of individual components that make up refrigeration systems.
4. Work safely with tools, torches, electricity, refrigerants, and other equipment and materials associated with refrigeration work.
5. Follow work practices that are environmentally responsible.
6. Obtain employment as an entry-level refrigeration technician and be able to advance professionally.
7. Work effectively with customers, employers, and co-workers.
8. Systematically troubleshoot refrigeration systems.
9. Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation, and maintenance of refrigeration systems.

The educational objectives of the R&H Undergraduate Certificate and AAS Degree are to produce graduates who:

1. Apply the fundamental laws of physics related to the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) industry.
2. Use mathematical skills required to succeed in HVAC/R trades.
3. Understand and describe the function of individual components that make up HVAC/R systems.
4. Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and material associated with HVAC/R work.
5. Follow work practices that are environmentally responsible.
6. Obtain employment as an entry level HVAC/R technician and be able to advance professionally.
7. Work effectively with customers, employers, and co-workers.
8. Systematically troubleshoot HVAC/R systems.
9. Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation, and maintenance of HVAC/R systems.
Assessment Tools

A summary description of the tools used in the assessment of the program objectives and outcomes and their implementation can be found in Table 1. The tools and their relationships to the program objectives are listed in Table 2.

There is a separate appendix for each tool describing the factors that affect the results and giving examples of the tools and how they are implemented.

Table 1
Program Objectives/Outcomes Assessment Tools and Administration

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
<th>Frequency/Start Date</th>
<th>Collection Method</th>
<th>Administered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Project</td>
<td>Hands-on project completed by the student</td>
<td>Annual upon inception or alternately with pre/post tests</td>
<td>Manual</td>
<td>Faculty</td>
</tr>
<tr>
<td>Course Level Exams</td>
<td>Pre and Post Test</td>
<td>Annual upon inception or alternately with laboratory projects</td>
<td>Manual test</td>
<td>Faculty</td>
</tr>
<tr>
<td>EPA Certification</td>
<td>Environmental Protection Agency Refrigerant Handling Certification required for Employment in the trade</td>
<td>Annual upon inception</td>
<td>EPA results</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>Industrial Competency</td>
<td>The ARI Industry Competency Certification</td>
<td>Annual upon inception</td>
<td>ICE exam results</td>
<td>Industry trade association</td>
</tr>
</tbody>
</table>
Table 2
Association of Assessment Tools to Program Objectives/Outcomes

<table>
<thead>
<tr>
<th>Objective</th>
<th>Laboratory project</th>
<th>Pre/Post tests</th>
<th>EPA Certification</th>
<th>ICE exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply the fundamental laws of physics related to the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) industry.</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Use mathematical skills required to succeed in HVAC/R trades.</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Understand and describe the function of individual components that make up HVAC/R systems.</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and material associated with HVAC/R work.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Follow work practices that are environmentally responsible.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Work effectively with customers, employers, and co-workers.</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Systematically troubleshoot HVAC/R systems.</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation and maintenance of HVAC/R systems.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

0 = Tool is not used to measure the associated objective.
1 = Tool is used to measure the associated objective.
Assessment Implementation & Analysis for Program Improvement

**General Implementation Strategy**

Annually, as soon as the results of the assessment tools are available, the faculty of the R&H program will meet to analyze the data and determine if programmatic changes are in order. After determining what changes, if any, are required, R&H faculty will initiate the process to implement those changes.

**Method of Data Analysis and Formulation of Recommendations for Program Improvement**

Program Faculty will meet at least once a year to review the data collected using the assessment tools. If the data indicates changes are needed in an area, faculty will make recommendations for program changes that are designed to enhance performance relative to the program’s objectives and outcomes. The results of the data collection, an interpretation of the results, and the recommended programmatic changes are to be collected and analyzed by the end of May each year. A plan for implementing the recommended changes is also to be completed at this meeting.

The proposed programmatic changes may be any action or change in policy that the faculty deems necessary to improve performance relative to the program’s objectives and outcomes. Recommended changes should also consider workload (faculty, staff, and students), budgetary, facilities, and other relevant constraints.

**Goals for Student Success Rates**

It is the goal of MSC R&H Faculty that an average of 80% of students will meet or exceed the student learning outcomes.

**Modification of the Assessment Plan**

The faculty, after reviewing the collected data and the processes used to collect it, may decide to alter the assessment plan. If assessment tools are ineffective, they may be discarded, and if deemed beneficial, additional assessment tools may be implemented. Changes may be made to any component of the plan, including the objectives, outcomes, assessment tools, or any other aspect of the plan. The changes are to be approved by the faculty of the program and follow the required institutional procedures to make such changes. The modified assessment plan is to be forwarded to the MSC Director’s Office and the Office of Academic Affairs.
APPENDIX A: Laboratory project

Tool Description:

Classes containing a lab component will be assessed annually. The faculty member may choose either a pre/post test or a graded laboratory project as the assessment tool. To use a laboratory project, the project will be photographed and compiled with the student’s name and the instructor’s evaluation. The evaluation should include a statement indicating if the student’s work:

- Exceeds expectations for the project
- Meets expectations for the project
- Fails to meet expectations for the project

To meet the expectation for the project, the student will receive a B or C grade for the project (a score in the range of 69.5% to 89.5%). To exceed the expectation the student must achieve an A grade (a score above 89.5%). Any grade below 69.5% indicates a failure to meet the expectations for the project.

It is recommended that different tools be used in classes that combine academic and lab components on different assessment cycles. For instance, a pre/post test may be used on alternate years to with a lab project evaluation to provide better diversity in the evaluation process.

The lab evaluation will be reviewed by Refrigeration and Heating Faculty to determine if it is relevant to the outcomes and objectives for the course and trends in the HVACR industry. Any changes deemed necessary to the assessment tool will be discussed by the full-time faculty.

Factors that could affect the collected data:

Several factors may have some bearing on the results of the data collected by this tool:

- Previous experience with similar technology
- A student’s physical limitations
- The amount of time and effort expended preparing for and completing the project
- Attendance
- Student’s enthusiasm for the project
*How to interpret the data:*

Care should be taken in evaluating results of the tool and extrapolating the data for program performance. At the program level, results should be compared with other data sources in order to gain the proper perspective needed for a meaningful evaluation. The results of both of the nationally administered certification tests should be considered in conjunction with the laboratory project results for an appropriate assessment.
APPENDIX B: Pre and Post tests

Tool Description:

A test consisting of 6 to 10 questions, representative of material covered in each course, will be issued at the beginning of the semester. The same test will be administered at the end of the semester. A comparative analysis will be made of each student’s results to determine the effectiveness of the teaching approach. The assessment tool will be written by faculty teaching the course. The test will be reviewed by Refrigeration and Heating Faculty periodically to determine relevance to the course content and trends in the HVACR industry. Any changes deemed necessary to the assessment tool will be discussed by the full-time faculty.

Factors that could affect the collected data:

Several factors may have some bearing on synthesizing the collected data for use in program assessment:
- The student’s level of preparedness for college level academic coursework at the time of entry to the course
- Other time commitments, e.g. employment, family, commuting, etc.
- Was there a strong student leader in this cohort? If so, how did this affect overall grades during his or her academic tenure?
- Overall commitment or energy level of this cohort of students (Was the attendance record good? Did students show enthusiasm for accomplishments in the lab projects?) A student cohort with an overall positive attitude and strong work ethic will generally have a higher average grade than a less motivated class, even if the presentation of the program is identical in all respects.

How to interpret the data:

Care should be taken in evaluating results of the tool and extrapolating the data for program performance. At the program level, results should be compared with other data sources in order to gain the proper perspective needed for a meaningful evaluation. The results of both of the nationally administered certification test should be considered in conjunction with the pre/post test results for an appropriate assessment.
Appendix C: EPA Certification

**Tool Description:**

The Environmental Protection Agency (EPA) requires that anyone buying refrigerants or servicing refrigerant systems be certified in proper refrigerant handling and containment. The exam is closed book, and consists of 100 questions, which are divided into four categories. At the end of the first year of the program, students are required to take the EPA certification exam. The percentage of R&H students obtaining certification is a good indicator of the effectiveness of the refrigeration training program.

**Factors that affect the collected data:**

After each testing session, the testing agency provides a summary sheet of the results on a student-by-student basis. This assures that we are able to collect 100% of the data. If, however, a student has previously passed an EPA certification exam, they are not required to test again, so those students would not be contributors to the data source.

**How to interpret the data:**

The EPA certification is nationally required, and the tests are nationally standardized. Therefore, our students’ success rate on the exam is a clear indicator of their comprehension of the required skills. National success rate data is available for the EPA certification exam, and the results of MSC students will be compared to the national average. Furthermore, the testing session result summary gives each student’s score for each of the four areas of the exam. This further refines the data so specific areas that may need improvement can be identified.

The testing sessions at the college are open to the public, so occasionally, a person who is not a student in the R&H program will join one of the testing sessions. As these certification candidates are not a reflection on the effectiveness of the R&H program, their results will not be compiled in the data bank.
APPENDIX D: INDUSTRY COMPETENCY EXAMS (ICE)

Tool Description:

The Industry Competency Exams (ICE) measure industry-agreed standards of basic competency. ICE is the only nationally recognized entry-level exam developed, supported, and validated by the major industry associations. More than 250 schools nationwide require ICE as a requirement of graduation. Students who are seeking either an AAS Degree in Refrigeration and Heating Technology or a Certificate in Heating and Refrigeration Technology at MSC are required to take at least two of these exams. The content of the exams is oriented toward one of three different applications: Residential A/C and Heating, Light Commercial A/C and Heating, and Commercial Refrigeration. Students are required to take the Commercial Refrigeration exam and at least one of the other exams. Each exam has 100 multiple-choice questions, and candidates have 2 hours in which to complete the exam. A Chief Examiner who is not an instructor with the R&H Program at MSC administers the examination. Exams are scored by an independent testing agency, and the results are reported to the R&H Faculty. These exams serve as a broad-based measuring tool for secondary and post-secondary HVAC/R programs.

Factors that affect the collected data:

Several factors may have some bearing on the collected data.

- A number of students obtain employment with HVAC/R firms before completing their studies. As a benefit of this exposure outside of the curriculum, these students can often be expected to perform better on the exams than do their peers without field experience.
- In a two-year program such as ours, some core fields are covered earlier in the curriculum sequence than are others. Experience has shown a correlation between exam performance in these areas and the time interval between when the topics were introduced and the time of the exam.
- These are rigorous exams and are administered in a rigid, formal format. This can result in a certain amount of intimidation and test anxiety for some candidates. Because of this, scores obtained on the national exam may differ overall from scores developed from the traditional rubric sources. ICE data is best evaluated in a broad-based context against nationally normalized standards.

How to interpret the data:

The ICE exams are nationally standardized and industry validated. The reports provide statistical information on how we measure up to the nationally expected norms. For this reason, they are used at numerous educational institutions for assessment purposes. Individual and program rankings on a national basis provide our program with a clear insight into the strengths and weaknesses of our efforts. It also provides focus for adjustments to the program as we work to achieve academic excellence. Care must be taken when evaluating this data as each class of students has its own dynamic and some groups will perform at a much higher level than other groups.
Appendix E: Sample Pre/Post Tests

Students:

This is a survey to help me assess the general level of knowledge you as a class are bringing into this course. Please answer the questions to the best of your knowledge, but do not be alarmed if you are not familiar with any of the subjects. This quiz will not be used in determining your grade, but helps me determine how best to start teaching.

Thank you,
Dan

RH 101 Fall Survey

Name_________________________

1) What is the primary function of a refrigeration system?
   A) To produce heat
   B) To produce cold
   C) To move heat from one location to another
   D) To destroy heat

2) What function does the compressor perform in a refrigerator?
   A) regulate the amount of refrigerant flowing in the system
   B) provide a location for heat to be discharged
   C) compress air
   D) produce a pressure difference and circulate refrigerant

3) Which part of a refrigerator gets cold?
   A) the compressor
   B) the condenser
   C) the evaporator
   D) the receiver

4) What is 5/12 times 2/3

5) What is 5/12 plus 2/3

6) Find the value of X

   \[ \frac{57}{120} = \frac{199.5}{X} \]

   \[ X = \_\_\_\_\_\_\_\_\_\]

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7) What maintenance if any is required on a household refrigerator equipped with automatic defrost?

8) What refrigerant is used in the air-conditioner on most new cars?
   A  R-11
   B  R-12
   C  R-22
   D  R-134a

9) To tighten a bolt, you should turn it
   A  Clockwise
   B  Counter-clockwise

10) What is a hermetic compressor?
    A  A compressor in which the electric motor and compressor are sealed together in a single housing.
    B  A compressor used for extremely high pressures.
    C  A compressor that lives alone in a cabin in the woods
    D  A compressor that is belt or gear driven

11) T  F   When servicing an air conditioner, the refrigerant (freon) must not be released to the atmosphere.

12) Give an example of heat transfer by convection.

13) What does HVAC stand for?

14) What does a thermostatic expansion valve do?
    A  controls the temperature of the freezer
    B  regulates the amount of refrigerant that moves through a system
    C  allows for the expansion of liquids as they freeze to prevent them from bursting pipes
    D  controls the temperature and duration of an automatic defrost

15) How would you join two pieces of copper tubing for a refrigeration system?
    A  solder
    B  braze
    C  weld
    D  adhesive compound
16) The most common reason an HVAC service technicians gets fired from their job is…
A  Lack of technical knowledge
B  Poor appearance and hygiene
C  Showing up to work drunk
D  Inability to get along with their employer and co-workers
E  Poor time management, including being late to work

17) What ingredient in some refrigerants is blamed for depleting the ozone?
A  Fluorine
B  Carbon
C  chlorine
D  bromine

18) What PPE (personal protective equipment) should you wear when adding refrigerant to a system?
RH A225 Fundamentals of Heat and Forced-air Heating Pre-test

Name: ______________________________ Date: ______________________________

1. Combustion is a chemical process that involves the rapid ________________ of a fuel.

2. Besides heat, what are the two byproducts of a hydrocarbon fuel when perfect combustion is achieved?

3. Assume that a forced-air furnace delivers 82,000 Btu/h of heat to the occupied space. If the temperature of the air leaving the furnace is 118°F, and the temperature of the air entering the furnace is 69°F, approximately how many CFM of air does this furnace circulate?

4. What type of pilot sensor is used on a standing pilot gas furnace?
   a. A mercury flames sensor
   b. A flame rod
   c. A hot surface igniter
   d. A thermocouple

5. Modern high-efficiency gas furnaces use a secondary heat exchanger called a ________________ coil to capture the latent heat of vaporization represented by moisture in the flue gas.

6. An induced draft blower, used in a non-condensing gas furnace,
   a. produces a positive pressure in the vent system when properly installed.
   b. produces a positive pressure in the heat exchanger.
   c. pulls the products of combustion from the heat exchanger and pushes them into the venting system.
   d. pushes the products of combustion into the heat exchanger then into the venting system.

7. List the three performance factors used to specify the correct nozzle for an oil-fired forced-air furnace.
8. To make combustion efficiency tests of an oil-fired furnace, a hole must be made in the flue on the (chimney / furnace) side of the draft regulator.

9. Central forced-air electric furnaces frequently use a ________________ to start multiple heating circuits in stages.

10. Where, in the refrigeration circuit, is the only permanent suction line for an air-to-air heat pump system located?
1. Electro-mechanical thermostats are __________________ _________________ switch devices.

2. Thermocouples are made by joining two ( similar / dissimilar ) metals together at one end.

3. T F High-pressure, gun-type oil burners use the hot surface ignition method to light the main burner flame.

4. How can a flame rod be used to detect the presence of a flame?
   A) The flame rod generates a small electrical voltage when it is in the flame
   B) The flame conducts a small electrical current from the flame rod to ground
   C) The flame heats the flame rod and the temperature increase is detected by the electronic burner control
   D) The flame is detected by the change in the resistance of the flame rod

5. How can the direction of rotation be changed in a split-phase motor?
   A) By changing the connections of either the run winding or the start winding
   B) By changing the connections of both the start and the run windings
   C) By changing any two of the three motor leads
   D) By removing the stator windings and turning them around
   E) None of the above.

6. T F A 120-volt heater that has a resistance of 10 ohms will consume more electrical power than a similar heater that has a resistance of 8 ohms.

7. What is an isolation transformer?

8. Describe the difference between a contactor and a motor starter.


Page 1 of 2

ELECTRICAL DIAGRAM TO BE ADDED HERE
10. Refer to the wiring diagrams in Figure 1 above. Assume that when the thermostat is set for cooling the blower motor operates normally. However, when the thermostat is set for heating the burner comes on but cycles back off after a short period of time and the blower fails to come on. When the leads of a voltmeter are applied to the connections at test point 9 [TP9] and the black terminal of the combination fan/main limit control 0 volts are indicated. When the leads are applied to test point 9 [TP9] and 5 [TP5], 115 volts are indicated. Which of the following faults might result in these readings?

A) Faulty door switch
B) Faulty blower relay
C) Faulty fan switch in the fan/main limit control
D) Faulty blower motor
Associate of Arts

Academic Assessment Plan

Adopted by

The UAA Associate of Arts Assessment Plan Committee: 12/7/16

Reviewed by the FS Academic Assessment Committee: February 3, 2017
Submitted as an information item to the Faculty Senate: March 3, 2017
I. Introduction:

A. Background:

Assessment of the AA PSLOs (Program Student Learning Outcomes) has been ongoing since 2006. The current AA assessment process was built around assessing each of the 7 AA PSLOs every year, attempting to gather data and analysis from every disciplinary category: written communication, oral communication, humanities, fine arts, social sciences, mathematics, and natural sciences. While this has generated a vast amount of data, it was hard to see the forest for the trees. Furthermore, each campus (Anchorage, Mat-Su, KPC, Kodiak, and PWSCC) developed their own AA assessment plans and processes. Responding to accreditation and institutional needs, an AA Assessment Plan Committee (AAAPC) was formed in February 2016 tasked with creating a simplified, yet unified approach to assessing a single AA program delivered across all the campuses. The following plan was drafted in the Spring of 2016 and put forward in November 2017 as the proposed AA assessment plan for UAA.

B. Recommendations:

Assessment of the AA at UAA currently focuses on seven student learning outcomes as well a very specific mission statement. When the outcomes and mission statement were created, they made sense for the processes and requirements then used for assessment. However, they are not fully connected to the General Education Requirement outcomes, which is problematic, especially for any students who believe they will be able to “transfer” their AA directly into a baccalaureate program at UAA. Additionally, most of the literature seems to suggest that having more measurable, flexible outcomes is important; the proposed new AA outcomes are broadly linked to the ACC&U LEAP initiative, and other national trends in AA and General Education student learning outcomes.

Based off these concerns, it is this committee’s recommendation that the mission, outcomes, and assessment process of the AA program be revised. As with all assessment processes, this plan is a work in progress. As data and analysis come forward, and as challenges arise, further changes or revisions may be made to this AA assessment plan. The committee’s overall goal is to create an assessment process that is simplified, unified, sustainable and meaningful, for both faculty and students.

C. Relation to General Education (GER):

The work toward a shared AA assessment plan should also be seen in relationship to the current GER assessment process, now in the second year of a three-year plan to assess the nine GER Student Learning Outcomes over three years (AY16-18). The two assessment processes work in tandem. The current GER assessment process builds upon the GER Assessment Committee’s AY15 efforts, and the shared AA assessment will draw upon the faculty-developed GER assessment rubrics. In turn, the simplified AA PLSOs provide a model for simultaneously simplifying and broadening the GER Student Learning Outcomes in the forthcoming GER revision. Ultimately, the goal is to bring the GER and AA into full alignment.

II. Mission Statement

A. Current AA Mission Statement as of May 2016:

The Associate of Arts (AA) degree provides a solid foundation in mathematics and written and oral communication, the natural and social sciences, the humanities, and the fine arts. The AA degree prepares students for career advancement and baccalaureate programs and to better understand their world.
B. Proposed New AA Mission Statement, December 2016:

The Associate of Arts (AA) degree provides an academic foundation for student success in multiple pathways including continued study, career preparation, and engaged citizenship for Alaska’s diverse peoples.

III. Program Student Learning Outcomes: Current and Proposed Changes

A. Current AA PSLOs as of May 2016:

Students graduating with an AA degree from UAA will be able to:

1. Communicate effectively with diverse audiences (individual, group, or public) using a variety of verbal and nonverbal communication strategies;
2. Respond effectively to writing assignments using appropriate genres and standard written English;
3. Use library and electronic research responsibly and appropriately;
4. Identify, describe, and evaluate the aesthetic, historical, and philosophical aspects of material culture, including artistic expressions, language, and texts;
5. Apply critical thinking skills to identify premises and conclusions of arguments, evaluate their soundness, and recognize common fallacies;
6. Use appropriate mathematical language and symbols to develop and communicate solutions and demonstrate quantitative and analytical skills and knowledge;
7. Articulate the fundamentals, developments, and impacts of one or more scientific disciplines and develop and analyze evidence-based conclusions about the natural and social world.

B. New AA PSLOs—December 2016:

Students graduating with an AA degree from UAA will be able to do the following at the introductory level:

1. Communicate Effectively
2. Think Critically
3. Evaluate Analytically
4. Reason Empirically

Table 1: Comparison of New PSLO’s vs Old PSLO’s

<table>
<thead>
<tr>
<th>NEW PSLO’s</th>
<th>OLD PSLO’s</th>
<th>GER / COURSE CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate Effectively</td>
<td>Communicate effectively with diverse audiences (individual, group, or public) using a variety of verbal and nonverbal communication strategies – (1)</td>
<td>ORAL MULTIPLE</td>
</tr>
<tr>
<td></td>
<td>Respond effectively to writing assignments using appropriate genres and standard written English - (2)</td>
<td>WRITTEN MULTIPLE</td>
</tr>
<tr>
<td>Think Critically</td>
<td>Use library and electronic research responsibly and appropriately (3)</td>
<td>MULTIPLE</td>
</tr>
<tr>
<td></td>
<td>Apply critical thinking skills to identify the premises and conclusions of arguments, evaluate their soundness, and recognize common fallacies (5)</td>
<td>MULTIPLE</td>
</tr>
</tbody>
</table>
Students graduating with an AA degree from UAA will be able to do the following at the introductory level:

<table>
<thead>
<tr>
<th>NEW PSLO’s</th>
<th>OLD PSLO’s</th>
<th>GER / COURSE CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate Analytically</td>
<td>Identify, describe, and evaluate the aesthetic, historical and philosophical aspects of material culture, including artistic expressions, language, and texts (4)</td>
<td>HUMANITIES ARTS</td>
</tr>
<tr>
<td>Reason Empirically</td>
<td>Use appropriate mathematical language and symbols to develop and communicate solutions and demonstrate quantitative and analytical skills and knowledge (6)</td>
<td>MATH</td>
</tr>
<tr>
<td></td>
<td>Articulate the fundamentals, developments, and impacts of one or more scientific disciplines and develop and analyze evidence-based conclusions about the natural and social world (7)</td>
<td>NAT SCI SOCIAL SCI</td>
</tr>
</tbody>
</table>

### IV. Measures

#### A. Common Rubrics:

Rubrics and assessment data collection sheets for the AA assessment are designed to allow useful and consistent data collection across multiple disciplines while also minimizing as much as possible the faculty burden of data collection. In addition, the rubrics share similar language and design as those used for the General Education Requirements (GER) to help align both programs. Rubrics largely have four main areas for each outcome, with another three open-ended areas that programs or campuses can add for specific data they are interested in recording. (See Appendix, Tables 3 & 4.)

#### B. Student Artifacts and Collection

Faculty may collect data of student artifacts in a number of ways. Suggested components to guide faculty collection practices include: specific AA PSLO being assessed; a description of the assignment (a copy of the assignment guidelines could also be used); a brief summary of the findings; and any faculty recommendations, concerns or actions taken based on the findings.

Compiling the artifacts and sending them with completed rubrics or other assessment tools would help for norming and archiving materials. Some artifacts—oral presentations are excellent examples—will be more difficult to compile. In this instance, rubric assessment might happen in the classroom, and a faculty workshop group could bring their individual class findings to the table for discussion. See the GERA report (Dan Kline) for the Summer 2016 GER assessment working group in regards to their approach to Oral communication artifact and rubric assessment.

#### C. Benchmarks:

An important part of assessment is faculty collaborating together to establish benchmarks for what is considered acceptable student learning for a particular outcome. For example, does an outcome meet expectations if 70% of students assessed either met or exceeded expectations? Or do we expect 80% of our students to meet or exceed expectations? Benchmarking may be used to gauge student success rates, and the AAAC will communicate back findings to faculty and departments. The Spring and Summer AA assessment working group will discuss and set initial benchmarks that will allow us to compare to previous data and information received.
V. Process

This revised AA Assessment plan calls for a simplified process for assessing the PSLOs. The goal is to ensure student success in meeting the SLOs, creating an aligned assessment process that draws on the energy of the respective campuses. The assessment process draws on the GER assessment principles of staggering outcome assessment and sampling campuses and courses. This approach allows a systematic look at student learning across the UAA system while at the same time making assessment more sustainable across a multitude of campuses and disciplines. It also encourages collaboration among different disciplines and campuses, allowing faculty to spot trends in student learning so that, when needed, changes can be made to curriculum. Finally, common assessment rubrics help faculty maintain consistency, especially since a variety of disciplinary assignments will be used in the assessment.

A. Assessment, by Outcome with Common Rubrics and Faculty working groups
   1. **Staggered AA SLO assessment:**
      AA SLOs would be assessed on a staggered basis. This method of data analysis and reporting will involve one SLO per year over a four year period (utilizing the 4 revised AA SLOs):
      - Year One: communicate effectively
      - Year Two: think critically
      - Year Three: evaluate analytically
      - Year Four: reason empirically

      The AAAC should coordinate with the scheduled GER assessment process so as to minimize redundancy and increase efficiency and shared assessment activities across all UAA campuses.

   2. **Course-embedded assignments assessment:**
      Each year, the AAAC will identify the sampling of courses that will be assessed for the chosen outcomes that year and ask for faculty to submit student artifacts.

      For example, for effective written communication, ENGL A111 and A212, might be identified, but other courses outside of English could also assessed for effective writing. HIST A101 and PHIL A201 could be identified for the evaluate analytically outcome; Sociology 101 and PSY 111 and PHIL 101 could be used for critical thinking; and BIO A102 and ENVI 211 could be used for empirical thinking. Additionally, while COMM courses would be identified for effective communication, any courses that routinely have presentations could also be part of the assessment. (See Table 1 in Appendix for example of scheduling.)

      As courses are identified for assessment of each SLO, members of the AAAC will need to coordinate with their campuses to arrange for data collection. Each campus will have a representative on the AAAC, and there should be a connection built between the campus representative and the campus assessment committee. Faculty who are collecting data and samples for assessment will give their material to their campus AAAC representative, who will then bring the data to the AAAC.

      It is important that there is enough flexibility for different campuses to meet their own needs, too. Thus, it should be very clearly explained that each campus or department should
feel free to add its own assessment needs to the rubrics (as can be seen in the AA/GER rubrics in Tables 3 & 4).

3. **Use of Common Assessment Rubrics:**
The AAAC would develop, distribute, and collect shared rubrics for assessing each outcome at the course level. These rubrics would be developed with faculty collaboration in the GER/AA assessment workshops held each Spring/Summer.

Specific rubrics will be filled out by course instructors based on a course embedded assignment(s) which seeks to build student skills in identified AA SLO/s. (See Tables 3 & 4 in Appendix for sample rubrics.) Instructors can also submit reports of student learning, creating a narrative of what happened and why it happened.

4. **Artifacts: AAAC would need to coordinate collection of student artifacts:**
Since different disciplines will use different artifacts (especially oral communications), some flexibility will be needed in collection. For example, we would not expect faculty to record all presentations and then provide the video. Some might do so while others might simply give the assignment guidelines and rubrics. Other artifacts collected would be essays, exams, lab reports and the like (particularly examples of artifacts meeting each of the rubric levels, such as “developing,” “proficient” and “mastery”).

5. **Cross Campus AA Assessment Workshops (see current GER assessment model):**
The AAAC will organize an annual Spring and/or Summer cross-campus working group to assess the student artifacts collected for that year’s targeted PSLOs. This working group will work with existing rubrics, or help develop and revise new ones, as needed. The AAAPC will report out on the findings and recommendations made by the annual AA assessment working group/s. The intent behind the working groups is both to assess student learning on defined outcomes, and to increase faculty discussion and collaboration on faculty instruction and student learning in the AA program across all the UAA campuses.

B. **AAAC Standing Committee:**
A standing UAA-wide Associate of Arts Assessment Committee, comprised of a small group of cross-campus representatives, will need to be created for to oversee and guide this AA assessment process.

1. **Membership:**
Each of the campuses would contribute at least one member; disciplinary representation is not as important as committee members being active, engaged, and experienced in AA assessment.

2. **Responsibilities:** The AAAC would:
- organize the AA assessment for each year, set up outcomes to be assessed (coordinating with GER assessment schedule), distribute the rubrics, collect student artifacts and instructor report outs, organize the annual AA PSLO faculty assessment working group/s, collate and analyze results, and draft annual assessment reports;
- coordinate assessment workshops and forums to assist in developing the AA cross-campus assessment process and discussion of its findings
• communicate findings and assessment activities with the UAA community, such as the Academic Assessment Committee and other curriculum bodies

3. Vision:

The AAAC would also act as initiator, liaison, and sounding board for cross-campus dialogue, reflection, and action on student achievement of SLOs for the AA degree at UAA. The overall intent is to encourage collaborative initiative and participation at each respective campus, all unified under a common AA assessment process for UAA as a whole. The end goal is to ensure improvement in student learning and continued excellence in faculty instruction in the AA program.
### Table 1: Specific course type separation which is categorized by distinct SLO’s (across the campuses).

<table>
<thead>
<tr>
<th>Student Learning Outcome: Students Will…</th>
<th>Anchorage Courses</th>
<th>MatSu Courses</th>
<th>KPC Courses</th>
<th>PWSC Courses</th>
<th>Kodiak Courses</th>
<th>AAAC Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communicate Effectively</td>
<td>ENG 111, 211, 212, 213, 214</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Old AA PSLOs 1 &amp; 2)</td>
<td>COMM 111, 235, 236, 241</td>
<td>HIST and PHIL courses</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. Think Critically</td>
<td>PHIL 101</td>
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</tr>
<tr>
<td>(Old AA PSLOs 3 &amp; 5)</td>
<td>ENG 120</td>
<td>HIST 101, 102, 131, 132</td>
<td>Social Science courses</td>
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<td></td>
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</tr>
<tr>
<td>3. Evaluate Analytically</td>
<td>HIST 101, 102, 131, 132, 121, 122</td>
<td>ART 160, 261, 262</td>
<td>PHIL 201</td>
<td>Social Sciences</td>
<td></td>
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<tr>
<td>(Old AA PSLO 4)</td>
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<tr>
<td>4. Reason Empirically</td>
<td>MATH 107, 115</td>
<td>BIOL 102, ENVI 211</td>
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<tr>
<td>(Old AA PSLO 6 &amp; 7)</td>
<td>PSY 111, ANTH 250</td>
<td>SOC 101, PS 102, CHEM, ASTR</td>
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</tr>
<tr>
<td>Student Learning Outcome: Students Will…</td>
<td>Faculty/Course Level Rubrics and Report outs</td>
<td>Cross Campus AA Assessment Workshop</td>
<td>Individual Campus AA Assessment Summits</td>
<td>AAAC Report</td>
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</tr>
<tr>
<td>1. Communicate Effectively (Old AA PSLOs 1 &amp; 2) Assessed AY 2017</td>
<td>Anchorage Courses</td>
<td>Spring/Summer of AY 2017</td>
<td>Anchorage: Fall</td>
<td>Annual report AY 2017, Fall</td>
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<tr>
<td></td>
<td>MatSu Courses</td>
<td></td>
<td>MatSu: Spring</td>
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<td></td>
<td>KPC Courses</td>
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<td>KPC: Spring</td>
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<td></td>
<td>PWSC &amp; Kodiak Courses</td>
<td></td>
<td>PWSC &amp; Kodiak: Spring</td>
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</tr>
<tr>
<td>2. Think Critically (Old AA PSLOs 3 &amp; 5) Assessed AY 2018</td>
<td>Anchorage Courses</td>
<td>Spring/Summer of AY 2018</td>
<td>Anchorage</td>
<td>Annual report AY 2018, Fall</td>
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<td></td>
<td>MatSu Courses</td>
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<td>MatSu</td>
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<td></td>
<td>KPC Courses</td>
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<td>KPC</td>
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<td></td>
<td>PWSC &amp; Kodiak Courses</td>
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<td>PWSC &amp; Kodiak</td>
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<tr>
<td>3. Evaluate Analytically (Old AA PSLO 4) Assessed AY 2019</td>
<td>Anchorage Courses</td>
<td>Spring/Summer of AY 2019</td>
<td>Anchorage</td>
<td>Annual report AY 2019, Fall</td>
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<tr>
<td></td>
<td>MatSu Courses</td>
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<td>MatSu</td>
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<td></td>
<td>KPC Courses</td>
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<td></td>
<td>PWSC &amp; Kodiak Courses</td>
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<td>PWSC &amp; Kodiak</td>
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<tr>
<td></td>
<td>MatSu Courses</td>
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<td>MatSu</td>
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<td></td>
<td>KPC Courses</td>
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<td></td>
<td>PWSC &amp; Kodiak Courses</td>
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<td>PWSC &amp; Kodiak</td>
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</tbody>
</table>
### Table 3: UAA GER / Program Outcomes Rubric / Fall 2016

#### Written Communication Outcome: Communicate effectively in a variety of contexts and formats

<table>
<thead>
<tr>
<th>GER Criteria</th>
<th>4 Mastery</th>
<th>3 Proficient</th>
<th>2 Developing</th>
<th>1 Beginning</th>
<th>0 Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Responds effectively to assignment</td>
<td></td>
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<tr>
<td>2. Demonstrates effective organization</td>
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<tr>
<td>3. Develops content adequately</td>
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<tr>
<td>4. Controls syntax and mechanics</td>
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</tbody>
</table>

**Course / Disciplinary / Programmatic Criteria**

1. 
2. 
3. 
4.

#### Oral Communication Outcome: Communicate effectively in a variety of contexts and formats

<table>
<thead>
<tr>
<th>GER Criteria</th>
<th>4 Mastery</th>
<th>3 Proficient</th>
<th>2 Developing</th>
<th>1 Beginning</th>
<th>0 Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrates clear and appropriate organization</td>
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<tr>
<td>2. Uses clear and suitable language</td>
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<tr>
<td>3. Incorporates appropriate verbal &amp; nonverbal cues</td>
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<td></td>
<td></td>
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<tr>
<td>4. Develops relevant and adequate content</td>
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</tr>
</tbody>
</table>

**Course / Disciplinary / Programmatic Criteria**

1. 
2. 
3. 
4.

#### Information Literacy Outcome: Locate/use relevant information to make appropriate decisions

<table>
<thead>
<tr>
<th>GER Criteria</th>
<th>4 Mastery</th>
<th>3 Proficient</th>
<th>2 Developing</th>
<th>1 Beginning</th>
<th>0 Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Determines information needs</td>
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<tr>
<td>2. Demonstrates relevant use of supporting evidence</td>
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<td>3. Evaluates information sources critically</td>
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<td>4. Follows appropriate documentation conventions</td>
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</tr>
</tbody>
</table>

**Course / Disciplinary / Programmatic Criteria**

1. 
2. 
3. 
4.

**Course Name ____________________________**

**Course Number __________________________**

- GER Totals
- Assignment Totals
- Combined Total
<table>
<thead>
<tr>
<th>LEAP Categories</th>
<th>UAA GER Criteria</th>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
<th>LEAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Comm</td>
<td>1. Responds effectively to assignment</td>
<td>Demonstrates a thorough understanding of context, audience, and purpose; and is responsive to the assigned task(s) and focuses all elements of the work.</td>
<td>Demonstrates adequate consideration of context, audience, and purpose; and a clear focus on the assigned task(s) (e.g., task aligns with audience, purpose, context).</td>
<td>Demonstrates awareness of context, audience, purpose, and to the assigned task(s) (e.g., begins to show awareness of audience's perceptions and assumptions).</td>
<td>Demonstrates minimal attention to context, audience, purpose, and to the assigned task(s) (e.g., expectation of instructor or self as audience).</td>
</tr>
<tr>
<td></td>
<td>2. Demonstrates effective organization</td>
<td>Demonstrates detailed attention to and successful execution of a wide range of content and writing tasks; and is skillful and makes the content of the presentation.</td>
<td>Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices.</td>
<td>Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation.</td>
<td>Attempts to use a consistent system for basic organization and presentation.</td>
</tr>
<tr>
<td></td>
<td>3. Develops content adequately</td>
<td>Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer’s understanding, and shaping the whole work.</td>
<td>Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.</td>
<td>Uses appropriate and relevant content to develop and explore ideas through most of the work.</td>
<td>Uses appropriate and relevant content to develop simple ideas in some parts of the work.</td>
</tr>
<tr>
<td></td>
<td>4. Controls syntax &amp; mechanics</td>
<td>Uses graceful language that skillfully communicates meaning to concepts or understandings, with clarity and fluency, and is virtually error-free.</td>
<td>Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.</td>
<td>Uses language that generally conveys meaning to readers, although writing may include some errors.</td>
<td>Uses language that sometimes impedes meaning because of errors in usage.</td>
</tr>
<tr>
<td>Oral Comm</td>
<td>1. Demonstrates clear &amp; appropriate organization</td>
<td>Organizational pattern (specific introduction and conclusion, sequential material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation.</td>
<td>Organizational pattern (specific introduction and conclusion, sequential material within the body, and transitions) is clearly and consistently observable within the presentation.</td>
<td>Organizational pattern (specific introduction and conclusion, sequential material within the body, and transitions) is not observable within the presentation.</td>
<td>Organizational pattern (specific introduction and conclusion, sequential material within the body, and transitions) is not observable within the presentation.</td>
</tr>
<tr>
<td></td>
<td>2. Uses clear &amp; suitable language</td>
<td>Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language is appropriate to audience.</td>
<td>Language choices are thoughtful and generally support the effectiveness of the presentation. Language is appropriate to audience.</td>
<td>Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language is appropriate to audience.</td>
<td>Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.</td>
</tr>
<tr>
<td></td>
<td>3. Incorporates appropriate verbal &amp; nonverbal cues</td>
<td>Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.</td>
<td>Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.</td>
<td>Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.</td>
<td>Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.</td>
</tr>
<tr>
<td></td>
<td>4. Develops relevant &amp; adequate content</td>
<td>A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter’s credibility/authority on the topic.</td>
<td>Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter’s credibility/authority on the topic.</td>
<td>Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter’s credibility/authority on the topic.</td>
<td>Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter’s credibility/authority on the topic.</td>
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<tr>
<td>Info Literacy</td>
<td>1. Determines information needs</td>
<td>Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to research question. Accesses information using effective, well-designed search strategies and most appropriate information sources.</td>
<td>Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question. Accesses information using variety of search strategies and some relevant information sources.</td>
<td>Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question. Accesses information using simple search strategies, retrieves information from limited and similar sources.</td>
<td>Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question. Accesses information randomly, retrieves information that lacks relevance and quality.</td>
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<td>2. Demonstrates relevant use of evidence</td>
<td>Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth.</td>
<td>Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.</td>
<td>Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.</td>
<td>Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.</td>
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<td>3. Uses information sources critically</td>
<td>Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources after considering the importance (to the researched topic) of the multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view).</td>
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<td>Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources using multiple criteria (such as relevance to the research question, currency, and authority).</td>
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<td></td>
<td>Chooses a variety of information sources. Selects sources using basic criteria (such as relevance to the research question and currency).</td>
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<td>Chooses a few information sources. Selects sources using limited criteria (such as relevance to the research question).</td>
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<td>4. Follows appropriate documentation conventions</td>
<td>Students use correctly all of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.</td>
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<td>Students use correctly three of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.</td>
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<td>Students use correctly two of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.</td>
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<td>Students use correctly one of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.</td>
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<td>(5) Info Used Legally &amp; Ethically</td>
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<td>Written Communication – Communicate effectively in a variety of contexts and formats</td>
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<td>5. Responds effectively to assignment</td>
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<td>6. Demonstrates effective organization</td>
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<td>7. Develops content adequately</td>
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<td>8. Controls syntax &amp; mechanics</td>
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<tr>
<th>Oral Communication - Communicate effectively in a variety of contexts and formats</th>
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<td>Student Number</td>
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<tr>
<td>5. Demonstrates clear &amp; appropriate organization</td>
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<td>6. Uses clear &amp; suitable language</td>
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<td>7. Incorporates appropriate verbal &amp; nonverbal cues</td>
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<td>8. Develops relevant &amp; adequate content</td>
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<thead>
<tr>
<th>Information Literacy – Locate and use relevant information to make appropriate personal and professional decisions</th>
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<td>Student Number</td>
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Course Number: _____________________________  Semester: _____________________________
Course Name: _____________________________  Assessor: _____________________________