I. Roll
( ) Alberta Harder (FS)  ( ) Vacant (CBPP)  ( ) Kevin Keating (LIB)
( ) Utpal Dutta (FS)  ( ) Vacant (COH)  ( ) Rick Adams (KPC)
( ) Francisco Miranda (CAS, Chair)  ( ) Vacant (COH)  ( ) Sheri Denison (Mat-su)
( ) Barbara Harville (CAS)  ( ) Irasema Ortega (COE)  ( ) Jared Griffin (Kod)
( ) Vacant (CAS)  ( ) Carrie King (CTC)  ( ) Christina Stuive (ADV)
( ) Vacant (CAS)  ( ) Jeff Hoffman (SOE)

Ex-Officio Members
( ) Susan Kalina
( ) Lora Volden
( ) Scheduling and Publications

II. Approval of the Agenda (pg. 1)

III. Approval of Meeting Summary (pg. 2-3)

IV. Administrative Report
A. Vice Provost for Undergraduate Academic Affairs Susan Kalina
B. University Registrar Lora Volden

V. Chair’s Report
A. UAB Chair- Francisco Miranda
B. GERC

VI. Program/Course Action Request- Second Readings
Chg BIOL A481 Marine Biology (GER)(3 cr)(3+0)(pg. 4-8)
Chg BIOL A489 Population Genetics and Evolutionary Processes (GER)(3 cr)(3+0)(pg. 9-12)

VII. Program/Course Action Request- First Readings
Chg CIS A345 Managing Data Communications and Computer Networks (3 cr)(3+0)(pg. 13-16)
Chg CIS A365 Object-Oriented Programming (3 cr)(3+0)(pg. 17-22)
Chg CIS A390 Selected Topics in Management Information Systems (1-6 cr)(1-6+0)(pg. 23-26)
Chg PRPE A108 Introduction to College Writing (3 cr)(3+0)(pg. 27-33)
Chg Associate of Applied Science, Process Technology (pg. 34-43)

VIII. Old Business

IX. New Business

X. Informational Items and Adjournment
Undergraduate Academic Board
Summary

October 24, 2014
2:00-5:00
ADM 204

I. Roll
(x) Alberta Harder (FS)
(x) Utpal Dutta (FS)
(x) Francisco Miranda (CAS, Chair)
(x) Barbara Harville (CAS)
( ) Vacant (CAS)
( ) Vacant (CAS)
( ) Vacant (CBPP)
( ) Vacant (COH)
( ) Vacant (COH)
(x) Irasema Ortega (COE)
(x) Carrie King (CTC)
(x) Vacant (CAS)
(x) Jeff Hoffman (SOE)
(x) Irasema Ortega (COE)
(x) Carrie King (CTC)
(x) Vacant (CAS)
(x) Jeff Hoffman (SOE)

Ex-Officio Members
( ) Susan Kalina
( ) Lora Volden
( ) Scheduling and Publications

II. Approval of the Agenda (pg. 1)
Approved

III. Approval of Meeting Summary (pg. 2-3)
Approved

IV. Administrative Report
A. Vice Provost for Undergraduate Academic Affairs Susan Kalina
B. University Registrar Lora Volden

Spring courses become viewable on Monday, October 27th

V. Chair’s Report
A. UAB Chair- Francisco Miranda
B. GERC

VI. Program/Course Action Request- Second Readings

VII. Program/Course Action Request- First Readings
Add FIRE A231 Firefighter II (4 cr)(2+6)(pg. 4-9)
Waive first, approve for second

Add ME A451 Aerodynamics (stacked with ME A651)(3 cr)(3+0)(pg. 10-14)
Waive first, approve for second

Add ACCT A422 Justice for Fraud Victims (3 cr)(3+0)(pg. 15-19)
Waive first, approve for second

Chg CIS A345 Managing Data Communications and Computer Networks (3 cr)(3+0)(pg. 20-23)
Chg CIS A365 Object-Oriented Programming (3 cr)(3+0)(pg. 24-29)
Chg CIS A390 Selected Topics in Management Information Systems (1-6 cr)(1-6+0)(pg. 30-33)

VIII. Old Business
IX. New Business
A. General University Requirement related to catalog year (pg. 34)
The UAB unanimously approved this proposal.
X. Informational Items and Adjournment

A. Memo re: JPC Contact Hour Catalogue Edits (pg. 35)
   The UAB unanimously approved this proposal.

B. Faculty Alliance Motion 2014-01: Statewide Minimum Admissions Standards for Baccalaureate Programs (pg. 36-37)
   Third paragraph change to Registrar
1a. School or College  
AS CAS

1b. Division  
AMSC Division of Math Science

1c. Department  
Biological Sciences

2. Course Prefix  
BIOL

3. Course Number  
A481

4. Previous Course Prefix & Number  
BIOL A378

5a. Credits/CEUs  
3

5b. Contact Hours (Lecture + Lab)  
(3+0)

6. Complete Course Title  
Marine Biology

7. Type of Course  
☑ Academic  
☐ Preparatory/Development  
☐ Non-credit  
☐ CEU  
☐ Professional Development

8. Type of Action:  
☐ Add  
☑ Change  
☐ Delete

9. Repeat Status No  
# of Repeats  
Max Credits

10. Grading Basis  
☑ A-F  
☐ P/NP  
☐ NG

11. Implementation Date  
semester/year

12. Cross Listed with  
☐ Stacked with

13a. Impacted Courses or Programs:  List any programs or college requirements that require this course.

1. Environment and Society, BA  
Date: 6Jan14

2. Environment and Society, BS  
Date: 6Jan14

3.  

13b. Coordination Email  
Date: 6Jan14

13c. Coordination with Library Liaison  
Date: 6Jan14

14. General Education Requirement

☐ Oral Communication  
☐ Written Communication  
☑ Quantitative Skills  
□ Humanities  
☐ Fine Arts  
☐ Social Sciences  
☐ Natural Sciences  
☐ Integrative Capstone

15. Course Description (suggested length 20 to 50 words)

Examines marine biology with a focus on understanding the pathways and transformation of energy and matter in coastal, pelagic, and benthic, waters, particularly those in Alaska. Studies the influence of the physical environment, climate change, and human activities on marine species diversity, food webs, and tropho-dynamics.

16a. Course Prerequisite(s) (list prefix and number or test code and score)  
[BIOL A271 or ENVI A211] with minimum grade of C

16b. Co-requisite(s) (concurrent enrollment required)  

16c. Automatic Restriction(s)  
☐ College  
□ Major  
☐ Class  
☑ Level

16d. Registration Restriction(s) (non-codable)  
Completion of all GER Tier 1 courses is required

17. ☐ Mark if course has fees

18. ☐ Mark if course is a selected topic course

19. Justification for Action  
Renumbering course to comply with revision to BIOL undergraduate curricula; prerequisites revised to reflect changes to ENVI curricula (ENVI 202 no longer exists)

Initiator (faculty only)  
Khrys Duddleston  
Initiator Signed Initials: _________  Date:________________

 Initiate (TYPE NAME)  
☑ Approved  
☐ Disapproved  
Dean/Director of School/College  
Date

☑ Approved  
☐ Disapproved  
Undergraduate/Graduate Academic Coordinator  
Date

☑ Approved  
☐ Disapproved  
Board Chair  
Date

☑ Approved  
☐ Disapproved  
Provost or Designee  
Date
University of Alaska Anchorage  
College of Arts and Sciences  
Course Content Guide

I. Date of Initiation: Spring 2014

II. Curriculum Action Request
A. College: College of Arts and Sciences  
B. Course Prefix: BIOL  
C. Course Number: A481  
D. Number of Credits: 3  
E. Contact Hours: 3+0  
F. Course Title: Marine Biology  
G. Grading Basis: A-F  
H. Implementation Date: Fall 2015  
I. Cross-listed/Stacked: N/A  
J. Course Description: Examines marine biology with a focus on understanding the pathways and transformation of energy and matter in coastal, pelagic, and benthic, waters, particularly those in Alaska. Studies the influence of the physical environment, climate change, and human activities on marine species diversity, food webs, and tropho-dynamics.  
K. Course Prerequisites: [BIOL A271 or ENVI A211] with minimum grade of C.  
L. Course Co-requisites: N/A  
M. Other Restrictions: N/A  
N. Registration Restrictions: Completion of all GER Tier 1 courses is required.  
O. Course Fees: No

III. Instructional Goals and Student Learning Outcomes
A. Instructional Goals. The instructor will:  
   1. Provide a basic description of the physical, chemical, and geological properties of the ocean, and the different ocean habitats  
   2. Build on this conceptual framework to describe how physical and biological ocean systems are impacted by changing climate and human activities  
   3. Link physical features of the ocean habitat (pre- and post- human impact) to ocean trophic dynamics and food webs.  
   4. Emphasize the extent and historical/geographic patterns of human impacts on the marine environment, and describe how these impacts are mediated by and through biological and physical processes.  
   5. Provide detailed examples of how the physiological traits of organisms are uniquely linked to their habitat, and how changes in that habitat may influence species diversity and abundance through impacts on physiological properties  
   6. Relate current issues in Alaskan marine ecosystems and resources with a focus on balancing the many values represented in our environment.  
   7. Teach students how to evaluate and integrate information from a variety of different sources and perspectives.  

B. Student Learning Outcomes and Assessment Measures
<table>
<thead>
<tr>
<th>Student Learning Outcomes: Upon completion of this course, the student will be able to:</th>
<th>Graded Assessment Measures</th>
<th>Integrative Capstone Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify and assess the linkages between the chemistry and physiology of living organisms and the physical and biological aspects of the marine environment.</td>
<td>Written reviews of scientific literature, in class team based learning exercises, examinations</td>
<td>Knowledge integration, critical thinking, effective communication</td>
</tr>
<tr>
<td>2. Integrate knowledge from scientific articles, lecture, and textbook assignments to evaluate the scientific accuracy of popular press (TV, newspaper, magazine, web) reports on marine issues.</td>
<td>Examinations, written case studies, in class reports and/or presentations</td>
<td>Effective communication, information literacy, critical thinking, knowledge integration</td>
</tr>
<tr>
<td>3. Communicate to peers an understanding of the marine ecosystem, and the direct and indirect impacts that humans are having on the system.</td>
<td>In-class presentations and team based learning exercises</td>
<td>Effective communication, information literacy, critical thinking</td>
</tr>
<tr>
<td>4. Analyze, assess, and evaluate the impact that humans are having on the marine system through in depth study of current 'hot topics' such as global warming, fisheries collapse etc.</td>
<td>Project report, examination</td>
<td>Effective communication, quantitative perspectives, information literacy, knowledge integration</td>
</tr>
</tbody>
</table>

**IV. Course Level Justification**

This course builds on concepts presented in 200 level courses. Students are required to learn and integrate information from a variety of scientific disciplines as it relates to marine ecosystems; to read, understand, and apply ideas conveyed by primary scientific literature; to synthesize biological knowledge and social considerations; and to apply course materials to current problems.

**V. Topical Course Outline**

A. Basic Principles of Physical Oceanography
   1. Properties of water, salt, temperature, light
   2. Coriolis effect and tides
   3. Wind-driven and thermohaline circulation
B. Major Ocean Currents and Domains
   1. Global circulation patterns
   2. Alaskan circulation patterns
   3. Thermoclines, fronts, gyres, eddies
C. Ocean Climates & Impact of Global Warming
   1. Seasonal patterns of heat flux
   2. Impact of ice on currents
3. Feedback loops

D. Ecology of the Open Ocean
   1. Sources of organic and inorganic nutrients
   2. Phytoplankton diversity & adaptations
   3. Factors influencing primary productivity

E. Pelagic food webs
   1. Zooplankton and methods for exploiting phytoplankton
   2. Necton and foraging adaptations

F. Trophic dynamics and foods webs
   1. Fisheries and their ecological and social impacts
   2. Major fisheries species & locations

G. Methods of resource exploitation
   1. Impact of overfishing on ecosystem
   2. Management methods and legislation
   3. Impact of different management regimes on fishers

H. Ecology of the coastal zones
   1. Physical challenges and adaptations
   2. Nutrients and tropho-dynamics in various marine environments

I. Coastal polar ecosystems

J. Impacts of coastal development and use
   1. On physical habitat
   2. On biological habitats
   3. On health of the ecosystem
   4. Potential solutions / remediation

VI. Suggested Texts


VII. Bibliography


*Seminal works
Course Action Request
University of Alaska Anchorage
Proposal to Initiate, Add, Change, or Delete a Course

1a. School or College  
AS CAS
1b. Division  
AMSC Division of Math Science
1c. Department  
Biological Sciences

<table>
<thead>
<tr>
<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>A489</td>
<td>N/A</td>
<td>3</td>
<td>(3+0)</td>
</tr>
</tbody>
</table>

6. Complete Course Title  
Population Genetics and Evolutionary Processes  
Popn Genetics Evol Processes

7. Type of Course  
☒ Academic  ☐ Preparatory/Development  ☐ Non-credit  ☐ CEU  ☐ Professional Development

8. Type of Action:  
☐ Add  ☒ Change  ☐ Delete

9. Repeat Status No  # of Repeats  Max Credits

10. Grading Basis  
☒ A-F  ☐ P/NP  ☐ NG

11. Implementation Date  
From: Fall/2015  To: Fall /9999

12. ☒ Cross Listed with  ☐ Stacked with  Cross-Listed Coordination Signature

13a. Impacted Courses or Programs:  List any programs or college requirements that require this course.
Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at www.uaa.alaska.edu/governance.

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initiator Name (typied): Khrys Duddleston  Initiator Signed Initials: _________  Date:________________

13b. Coordination Email  
Date: 6Jan14
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison  
Date: 6Jan14

14. General Education Requirement  
Mark appropriate box:
☐ Oral Communication  ☐ Written Communication  ☐ Quantitative Skills  ☐ Humanities
☐ Fine Arts  ☐ Social Sciences  ☐ Natural Sciences  ☒ Integrative Capstone

15. Course Description (suggested length 20 to 50 words)
Examines the primary forces and processes involved in shaping genetic variation in natural populations. Evaluates and applies methods of measuring genetic variation in nature.

16a. Course Prerequisite(s) (list prefix and number or test code and score)
[BIOL A252 or BIOL A288] with minimum grade of C

16b. Co-requisite(s) (concurrent enrollment required)

16c. Automatic Restriction(s)  
☒ College  ☐ Major  ☐ Class  ☒ Level

16d. Registration Restriction(s) (non-codable)
Senior standing. Completion of all GER Tier 1 courses is required.

17. ☐ Mark if course has fees  
18. ☐ Mark if course is a selected topic course

19. Justification for Action  
One of the prerequisites (BIOL A288) has been renumbered through departmental curriculum revisions.

Initiator (faculty only)  
Khrys Duddleston
Initiator (TYPE NAME)  

☐ Approved  ☐ Disapproved  Dean/Director of School/College  Date

☐ Approved  ☐ Disapproved  Undergraduate/Graduate Academic  Date

☐ Approved  ☐ Disapproved  Board Chair  Date

☐ Approved  ☐ Disapproved  Provost or Designee  Date

Date
University of Alaska Anchorage
College of Arts and Sciences
Course Content Guide

I. Date of Initiation:
   Spring 2014

II. Curriculum Action Request
A. College: College of Arts and Sciences
B. Course Prefix: BIOL
C. Course Number: A489
D. Number of Credits: 3
E. Contact Hours: 3+0
F. Course Title: Population Genetics and Evolutionary Processes
G. Grading Basis: A-F
H. Implementation Date: Fall 2015
I. Cross-listed/Stacked: N/A
J. Course Description: Examines the primary forces and processes involved in shaping genetic variation in natural populations. Evaluates and applies methods of measuring genetic variation in nature.
K. Course Prerequisites: BIOL A252 or BIOL A288 with minimum grade of C.
L. Course Co-requisites: N/A
M. Other Restrictions: N/A
N. Registration Restrictions: Senior Standing
O. Course Fees: No

III. Instructional Goals and Student Learning Outcomes
A. Instructional Goals. The instructor will:
   1. Provide a basic description of evolutionary theory and concepts
   2. Build on the conceptual framework to describe how evolutionary process results in evolutionary pattern
   3. Link current research on microevolutionary processes relate to observed responses to environmental and climate change
   4. Emphasize the underlying quantitative processes that structure the living world, and enable students to undertake analyses and conceptualization of processes on their own
   5. Provide detailed examples of modern evolutionary analysis and theory as mechanisms of biotic change and diversification
   6. Relate all of the above to current issues in local and national debate on endangered populations, relevance of evolution thought to modern life (evolutionary medicine, emerging disease and virulence, endangered species, etc.)
   7. Teach students to evaluate and integrate information from a variety of sources and perspectives.

B. Student Learning Outcomes and Assessment Measures

<table>
<thead>
<tr>
<th>Students will be able to</th>
<th>Graded Assessment Measures</th>
<th>Integrative Capstone Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Integrate knowledge from</td>
<td>Exams, written</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>
scientific articles, lecture, and textbook to evaluate the scientific accuracy of reports from the popular. assignments, in-class presentations. integration, critical thinking, information literacy

2. Demonstrate an in-depth understanding microevolution mechanisms and macroevolutionary patterns. Exams and written assignments Information literacy, quantitative perspectives

3. Analyze and explain current controversies surrounding evolution and evolutionary processes Written assignments, in-class presentations. Effective communication, critical thinking

4. Demonstrate critical understanding of evolutionary processes through generation and interpret scientific data in graphic and tabular form Written assignments, exams Critical thinking, quantitative perspectives

IV. Course Level Justification
   Students are required to learn and integrate information from a variety of scientific disciplines as it relates to applied genetics, advanced evolutionary analysis, and microevolutionary processes; to read, understand, and apply ideas conveyed by primary scientific literature; to synthesize current biological knowledge and evolutionary theory; and to apply course materials to current problems

V. Topical Course Outline
   A. Population Structure
      1. Hardy Weinberg Equilibrium
      2. Systems of Mating
      3. Demographics
      4. Genetic Drift
      5. Neutrality and Molecular Evolution
      6. Coalescence
      7. Gene Flow & Subdivision
      8. Founders and Survivors
      9. mtDNA, Y-DNA: Separating History from Gene Flow

   B. Genotype and Phenotype
      1. Quantitative Genetics: Means
      2. Quantitative Genetics: Variances
      3. The Unmeasured Genotype Approach
      4. The Measured Genotype Approach

   C. Selection
      1. Measures of Fitness
      2. Constant Fitness Models
      3. Selection on Quantitative Traits and Fisher’s Fundamental Theorem of Natural Selection (FFTNS)
4. Pleiotropy and Developmental Constraints
5. The Shifting Balance Theory

D. Units and Targets of Selection
   1. The Unit of Selection
   2. Meiotic and Molecular Drive
   3. Sexual, Frequency and Density Dependent Selection
   4. Asexual Selection, Lateral Gene Transfer

E. Ecological Genetics
   1. Environmental Heterogeneity
   2. Niche and Mimicry
   3. Coevolution and Host-parasite Systems
   4. Life History Evolution

F. Human Evolution and Sociobiology
   1. Hominid Evolution
   2. Altruism and Group Selection
   3. Cultural Evolution

VI. Suggested Texts


VII. Bibliography


*Seminal Works
**Course Action Request**

**University of Alaska Anchorage**

**Proposal to Initiate, Add, Change, or Delete a Course**

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>CB CBPP</th>
<th>1b. Division</th>
<th>ADBP Division of Business Programs</th>
<th>1c. Department</th>
<th>CIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Course Prefix</td>
<td>CIS</td>
<td>3. Course Number</td>
<td>A345</td>
<td>4. Previous Course Prefix &amp; Number</td>
<td>N/A</td>
</tr>
<tr>
<td>5a. Credits/CEUs</td>
<td>3</td>
<td>5b. Contact Hours (Lecture + Lab)</td>
<td>(3+0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 6. Complete Course Title

**Managing Data Communications and Computer Networks**

**Managing Data Comm's & Networks**

Abbreviated Title for Transcript (30 characters)

### 7. Type of Course

- [ ] Academic
- [ ] Preparatory/Development
- [ ] Non-credit
- [ ] CEU
- [ ] Professional Development

### 8. Type of Action:

- [ ] Add
- [ ] Change
- [ ] Delete

If a change, mark appropriate boxes:

- [ ] Prefix
- [ ] Credits
- [ ] Title
- [ ] Contact Hours
- [ ] Repeat Status
- [ ] Grading Basis
- [ ] Cross-Listed/Stacked
- [ ] Course Description
- [ ] Course Prerequisites
- [ ] Test Score Prerequisites
- [ ] Automatic Restrictions
- [ ] Registration Restrictions
- [ ] General Education Requirement
- [ ] College
- [ ] Level
- [ ] Major
- [ ] Other Update CCG (please specify)

### 9. Repeat Status No

- [ ] # of Repeats
- [ ] Max Credits

- [ ] Grading Basis
  - [ ] A-F
  - [ ] P/NP
  - [ ] NG

- [ ] Implementation Date
  - [ ] semester/year
  - [ ] From: Fall/2015
  - [ ] To: /9999

### 10. Grading Basis

- [ ] Cross Listed with
  - [ ] Stacked with
  - [ ] Cross-Listed Coordination Signature

### 13a. Impacted Courses or Programs:

List any programs or college requirements that require this course.

Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at [www.uaa.alaska.edu/governance](http://www.uaa.alaska.edu/governance).

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. CIS A345</td>
<td>11/17/2014</td>
<td>Minnie Yen</td>
</tr>
</tbody>
</table>

Initiator Name (typed): Yosito Kanamori  Initiator Signed Initials: Date:

### 13b. Coordination Email

Date: 02/07/2014

submitted to Faculty Listserv: [uaa-faculty@lists.uaa.alaska.edu](mailto:uaa-faculty@lists.uaa.alaska.edu)

### 13c. Coordination with Library Liaison

Date: 02/07/2014

### 14. General Education Requirement

Mark appropriate box:

- [ ] Oral Communication
- [ ] Written Communication
- [ ] Quantitative Skills
- [ ] Humanities
- [ ] Social Sciences
- [ ] Natural Sciences
- [ ] Integrative Capstone

**Course Description** (suggested length 20 to 50 words)

Introduces the rapidly changing environment of data communications over local area networks and over switched and private voice lines. Focuses on the control and management of data in a distributed environment, the technology issues associated with data communications, and current trends in the industry.

### 16a. Course Prerequisite(s) (list prefix and number or test code and score)

CIS A110 with a minimum grade of C

### 16b. Co-requisite(s) (concurrent enrollment required)

N/A

### 16c. Automatic Restriction(s)

- [ ] College
- [ ] Major
- [ ] Class
- [ ] Level

### 16d. Registration Restriction(s) (non-codable)

College of Business and Public Policy majors must be admitted to upper-division standing.

### 17. Mark if course has fees Standard CBPP computer lab fee

### 18. Mark if course is a selected topic course

### 19. Justification for Action

Change of prerequisite. Update of outline, textbooks, and bibliography.

<table>
<thead>
<tr>
<th>Initiator (faculty only)</th>
<th>Yosito Kanamori</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiator (TYPE NAME)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approved</th>
<th>Disapproved</th>
<th>Date</th>
<th>Approved</th>
<th>Disapproved</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Approved by: Dean/Director of School/College]

[Approved by: Undergraduate/Graduate Academic]

[Approved by: Provost or Designee]
I. Date Initiated
January 17, 2014

II. Course Information
College/School: College of Business and Public Policy
Department: Computer Information Systems
Program: Bachelor of Business Administration, Management Information Systems; Associate of Applied Science, Business Computer Information Systems
Course Title: Managing Data Communications and Computer Networks
Course Number: CIS A345
Credits: 3
Contact Hours: 3 per week x 15 weeks = 45 hours
0 lab hours
Approximately 6 to 10 hours outside of class per week x 15 weeks = 90 to 150 hours
Grading Basis: A-F
Course Description: Introduces the rapidly changing environment of data communications over local area networks and over switched and private voice lines. Focuses on the control and management of data in a distributed environment, the technology issues associated with data communications, and current trends in the industry.
Course Prerequisites: CIS A110 with a minimum grade of C
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Fees: Standard CBPP computer lab fee

III. Course Activities
A. Lectures
B. Lab assignments
C. Project assignments

IV. Course Level Justification
Students are expected to be familiar with computer concepts, including operating systems and computer hardware/software basics, and are expected to integrate this knowledge to understand how the computers exchange data.
V. Outline

A. Historical Perspective on Communications, Information Systems and Data Networks
B. TCP/IP Layer Model – Five Layers
C. Support Services for Local Area Networks
   1. DHCP
   2. NAT/NAPT
   3. ARP
   4. DNS
D. Subnetting
E. Routing
F. Wide Area Networks
G. Wireless Networks
H. Phone Networks
I. Network Security
J. Management Issues

VI. Instructional Goals and Student Learning Outcomes

| A. Instructional Goals.                                                                 |
| The instructor will:                                                                   |
| 1. Present technical requirements and justification of telecommunications networks based upon their business requirements. Present an analysis of the business implications of each technical concept. |
| 2. Describe communications protocols focusing on the roles of standards and layered models. |
| 3. Explain the differences between analog and digital formats including signal modulation formats and flow control. |
| 4. Describe the architecture and the protocols supporting data networks of local through wide area types for both wired and wireless technologies. |
| 5. Present the need and the methods for securing access to networks.                    |
| 6. Discuss purposes and implications of network design and management.                  |
| 7. Engage students in understanding the business and technical implications of emerging topics. |
### B. Student Learning Outcomes.

**Students will be able to:**

<table>
<thead>
<tr>
<th></th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Evaluate technical requirements of telecommunications networks and be able to justify them based upon business requirements.</td>
<td>Exams &amp; Quizzes</td>
</tr>
<tr>
<td>2. Identify the need for communications protocols and identify standards and network layers where the protocols operate.</td>
<td>Lab assignments</td>
</tr>
<tr>
<td>3. Explain why and where analog and digital formats are used in existing communications systems.</td>
<td>Exams &amp; Quizzes</td>
</tr>
<tr>
<td>4. Describe the architecture and the protocols supporting data networks of local through wide area types, including both wired and wireless technologies. Be able to install, configure, and debug a small local area network.</td>
<td>Exams &amp; Quizzes &amp; Lab assignments</td>
</tr>
<tr>
<td>5. Identify the security needs of an organization and suggest the means for securing access to networks.</td>
<td>Exams &amp; Quizzes</td>
</tr>
<tr>
<td>6. Design a small local area network and be able to justify the architectural and technology choices.</td>
<td>Exams &amp; Quizzes</td>
</tr>
</tbody>
</table>

### VII. Suggested Text


### VIII. Bibliography


Course Action Request  
University of Alaska Anchorage  
Proposal to Initiate, Add, Change, or Delete a Course

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB CBPP</td>
<td>ADBP Division of Business Programs</td>
<td>CIS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS</td>
<td>A365</td>
<td>N/A</td>
<td>3</td>
<td>(3+0)</td>
</tr>
</tbody>
</table>

6. Complete Course Title  
Object-Oriented Programming

7. Type of Course  
- [x] Academic  
- [ ] Preparatory/Development  
- [ ] Non-credit  
- [ ] CEU  
- [ ] Professional Development

8. Type of Action:  
- [ ] Add  
- [ ] Change  
- [x] Delete

If a change, mark appropriate boxes:
- Prefix  
- Credits  
- Title  
- Grading Basis  
- Course Description  
- Test Score Prerequisites  
- Automatic Restrictions  
- Other Update CCG (please specify)

9. Repeat Status No  
- [ ] # of Repeats  
- [x] Max Credits

10. Grading Basis  
- [x] A-F  
- [ ] P/NC  
- [ ] NG

11. Implementation Date  
- From: Fall/2015  
- To: 9/999

12. Cross Listed with  
- [ ] Stacked  
- [ ] Cross-Listed Coordination Signature

13a. Impacted Courses or Programs:  
List any programs or college requirements that require this course.  
Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at [www.uaa.alaska.edu/governance](http://www.uaa.alaska.edu/governance).

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Management Information Systems, BBA</td>
<td>01/17/2014</td>
<td>Minnie Yen</td>
</tr>
<tr>
<td>2. Management Information Systems, Minor</td>
<td>01/17/2014</td>
<td>Minnie Yen</td>
</tr>
<tr>
<td>3. CIS A489</td>
<td>01/17/2014</td>
<td>Minnie Yen</td>
</tr>
</tbody>
</table>

Initiator Name (typed): Yoshito Kanamori  
Initiator Signed Initials:  
Date:  

13b. Coordination Email  
[www.faculty@lists.uaa.alaska.edu](http://www.faculty@lists.uaa.alaska.edu)

Date: 02/07/2014

13c. Coordination with Library Liaison  
Date: 02/07/2014

14. General Education Requirement  
Mark appropriate box:
- [ ] Oral Communication  
- [ ] Written Communication  
- [ ] Quantitative Skills  
- [ ] Humanities  
- [ ] Fine Arts  
- [ ] Social Sciences  
- [ ] Natural Sciences  
- [ ] Integrative Capstone

15. Course Description (suggested length 20 to 50 words)  
Covers basic concepts of Object-Oriented (OO) programming languages. Some of the recent relevant developments and applications will be discussed. The OO programming languages such as C++ or Java will be used as a vehicle for illustrating the concepts discussed in the course. OO programming design and programming development patterns will be covered. Students will analyze and solve business problems and practice writing programs for business applications using a chosen programming language.

16a. Course Prerequisite(s) (list prefix and number or test code and score)  
CIS A361 with a minimum grade of C

16b. Co-requisite(s) (concurrent enrollment required)  
N/A

16c. Automatic Restriction(s)  
- [ ] College  
- [ ] Major  
- [ ] Class  
- [ ] Level

16d. Registration Restriction(s) (non-codable)  
College of Business and Public Policy majors must be admitted to upper-division standing.

17. Mark if course has fees  
Standard CBPP computer lab fee

18. Mark if course is a selected topic course

19. Justification for Action  
Changed prerequisite and update textbooks and bibliography.
<table>
<thead>
<tr>
<th>Role</th>
<th>Approved</th>
<th>Disapproved</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiator (faculty only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yoshito Kanamori</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiator (TYPE NAME)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dean/Director of School/College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Chair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate/Graduate Academic Board Chair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College/School Curriculum Committee Chair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provost or Designee</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I. Date Initiated: January 17, 2014

II. Course Information
   College/School: College of Business and Public Policy
   Department: Computer Information Systems
   Program: Bachelor of Business Administration, Management Information Systems; Minor, Computer Information Systems
   Course Title: Object-Oriented Programming
   Course Number: CIS A365
   Credits: 3
   Contact Hours: 3 per week x 15 weeks = 45 hours
   0 lab hours
   6 hours outside of class per week x 15 weeks = 90 hours
   Grading Basis: A-F
   Course Description:
   Covers basic concepts of Object-Oriented (OO) programming languages. Some of the recent relevant developments and applications will be discussed. The OO programming languages such as C++ or Java will be used as a vehicle for illustrating the concepts discussed in the course. OO programming design and programming development patterns will be covered. Students will analyze and solve business problems and practice writing programs for business applications using a chosen OO programming language.
   Course Prerequisites: CIS A361 with a minimum grade of C
   Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
   Fees: Standard CBPP computer lab fee

III. Course Activities
   A. Lectures
   B. Discussions
   C. Programming analysis exercises

IV. Course Level Justification
   Course requires CIS A361 as a prerequisite. CIS A365 is a MIS major elective course that provides more depth than basic programming principles.
V. **Outline**

A. The Object-Oriented Paradigm
   1. Introduction
   2. Processing Modeling and the Unified Modeling Language (UML)
   3. OO program design patterns

B. Designing Object-Oriented Applications to Solve Organizational Problems

C. Developing Object-Oriented Applications in OO Programming Language
   1. Designing classes
   2. Using I/O streams
   3. Structured elements
   4. Arrays
   5. Strings
   6. Overloading
   7. Inheritance and polymorphism

D. Exploring Development Environment Available for OO Programming Languages

E. Object-Oriented Program Development in a Client/Server Environment with Database Connectivity

VI. **Instructional Goals and Student Learning Outcomes**

<table>
<thead>
<tr>
<th>A. Instructional Goals.</th>
<th>The instructor will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1. Explain the concepts of</td>
<td>Explain the concepts of analysis, design and implementation for OO programs.</td>
</tr>
<tr>
<td>analysis, design and</td>
<td></td>
</tr>
<tr>
<td>implementation for OO</td>
<td></td>
</tr>
<tr>
<td>programs.</td>
<td></td>
</tr>
<tr>
<td>2. Provide additional</td>
<td>Provide additional in-depth information on new developments in the field of OO</td>
</tr>
<tr>
<td>in-depth information on</td>
<td>programming.</td>
</tr>
<tr>
<td>new developments in the</td>
<td></td>
</tr>
<tr>
<td>field of OO programming.</td>
<td></td>
</tr>
<tr>
<td>3. Provide an introduction</td>
<td>Provide an introduction to OO programming techniques and their development</td>
</tr>
<tr>
<td>to OO programming techniques</td>
<td>environment.</td>
</tr>
<tr>
<td>and their development</td>
<td></td>
</tr>
<tr>
<td>environment.</td>
<td></td>
</tr>
<tr>
<td>4. Demonstrate OO program</td>
<td>Demonstrate OO program development with database connectivity in a client/server</td>
</tr>
<tr>
<td>development with database</td>
<td>environment.</td>
</tr>
<tr>
<td>connectivity in a client/</td>
<td></td>
</tr>
<tr>
<td>server environment.</td>
<td></td>
</tr>
<tr>
<td>5. Explain basic design</td>
<td>Explain basic design patterns in OO programming by using the chosen OO programming</td>
</tr>
<tr>
<td>patterns in OO programming</td>
<td>language.</td>
</tr>
<tr>
<td>by using the chosen OO</td>
<td></td>
</tr>
<tr>
<td>programming language.</td>
<td></td>
</tr>
<tr>
<td>6. Guide students in</td>
<td>Guide students in individual projects and team projects that require the application</td>
</tr>
<tr>
<td>individual projects and</td>
<td>of advanced business analysis tools to develop and test computer application</td>
</tr>
<tr>
<td>team projects that require</td>
<td>programs to solve business problems.</td>
</tr>
<tr>
<td>the application of</td>
<td></td>
</tr>
<tr>
<td>advanced business analysis</td>
<td></td>
</tr>
<tr>
<td>tools to develop and test</td>
<td></td>
</tr>
<tr>
<td>computer application</td>
<td></td>
</tr>
<tr>
<td>programs to solve business</td>
<td></td>
</tr>
<tr>
<td>problems.</td>
<td></td>
</tr>
</tbody>
</table>
### B. Student Learning Outcomes.

**Students will be able to:**

<table>
<thead>
<tr>
<th>1. Articulate basic issues involved in object-oriented systems.</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>In-class activities</td>
</tr>
<tr>
<td>Quizzes</td>
<td>Programs</td>
</tr>
<tr>
<td>Programs</td>
<td>Final Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Develop an object-oriented model for a business system of medium complexity.</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>In-class activities</td>
</tr>
<tr>
<td>Quizzes</td>
<td>Programs</td>
</tr>
<tr>
<td>Programs</td>
<td>Final Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Build working object-oriented programs in an OO programming language.</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>In-class activities</td>
</tr>
<tr>
<td>Quizzes</td>
<td>Programs</td>
</tr>
<tr>
<td>Programs</td>
<td>Final Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Develop OO programs connected with database in a client/server environment.</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>In-class activities</td>
</tr>
<tr>
<td>Quizzes</td>
<td>Programs</td>
</tr>
<tr>
<td>Programs</td>
<td>Final Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Demonstrate understanding of basic design patterns used in OO programming.</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>In-class activities</td>
</tr>
<tr>
<td>Quizzes</td>
<td>Programs</td>
</tr>
<tr>
<td>Programs</td>
<td>Final Project</td>
</tr>
</tbody>
</table>

### VII. Suggested Text


### VIII. Bibliography


**Course Action Request**

**University of Alaska Anchorage**  
Proposal to Initiate, Add, Change, or Delete a Course

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>CB CBPP</th>
<th>1b. Division</th>
<th>ADBP Division of Business Programs</th>
<th>1c. Department</th>
<th>CIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Course Prefix</td>
<td>CIS</td>
<td>3. Course Number</td>
<td>A390</td>
<td>4. Previous Course Prefix &amp; Number</td>
<td>N/A</td>
</tr>
<tr>
<td>5a. Credits/CEUs</td>
<td>1-6</td>
<td>5b. Contact Hours</td>
<td>(Lecture + Lab)</td>
<td>(1-6+0)</td>
<td></td>
</tr>
</tbody>
</table>

6. Complete Course Title  
**Selected Topics in Management Information Systems**  
**Selected Topics in MIS**  
Abbreviated Title for Transcript (30 character)  

7. Type of Course  
☑ Academic  
☐ Preparatory/Development  
☐ Non-credit  
☐ CEU  
☐ Professional Development

8. Type of Action:  
☐ Add  
☑ Change  
☐ Delete  

If a change, mark appropriate boxes:  
☐ Prefix  
☐ Credits  
☐ Title  
☐ Grading Basis  
☐ Cross-Listed/Stacked  
☐ Course Description  
☐ Course Prerequisites  
☐ Test Score Prerequisites  
☐ Co-requisites  
☐ Automatic Restrictions  
☐ Registration Restrictions  
☐ Contact Hours  
☐ Repeat Status  
☐ Contact Coordinator  
☐ Contact Department Chair  
☐ Other Update CCG (please specify)

9. Repeat Status Yes  
☐ No  
☐ Yes  
☐ # of Repeats  
☐ Max Credits  
☐ 9

10. Grading Basis  
☐ A-F  
☐ P/NP  
☐ NG  
☐ N/A

11. Implementation Date  
☐ Semester/year  
☐ From: Fall/2015  
☐ To: /9999

12. Cross Listed with  
☐ Stacked  
☐ Cross-Listed Coordinating Program

13a. Impacted Courses or Programs:  
List any programs or college requirements that require this course.  
Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at www.uaa.alaska.edu/governance.

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initiator (typed): Yoshito Kanamori  
Initiator Signed Initials:  
Date:

13b. Coordination Email  
Date:  
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison  
Date:

14. General Education Requirement  
Mark appropriate box:  
☐ Oral Communication  
☐ Written Communication  
☐ Quantitative Skills  
☐ Social Sciences  
☐ Natural Sciences  
☐ Humanities  
☐ Integrative Capstone

15. Course Description (suggested length 20 to 50 words)  
Study of specific current issues, topics, and trends in Management Information Systems (MIS)  
Special note: May be repeated with change of subtitle/topic. Maximum of 9 elective credits may be used for the BBA MIS degree. Prerequisites vary with topic. Check course schedule for specific titles being offered.

16a. Course Prerequisite(s) (list prefix and number or test code and score)  
N/A

16b. Co-requisite(s) (concurrent enrollment required)  
N/A

16c. Automatic Restriction(s)  
☐ College  
☐ Major  
☐ Class  
☐ Level

16d. Registration Restriction(s) (non-codable)  
College of Business and Public Policy majors must be admitted to upper-division standing.

17. Mark if course has fees  
☐ Standard CBPP computer lab fee

18. ☑ Mark if course is a selected topic course

19. Justification for Action  
Changed prerequisite. Updated textbooks and bibliography.

Initiator (faculty only)  
Yoshito Kanamori  
Initiator (TYPE NAME)

☑ Approved  
☐ Disapproved  
Date  
Dean/Director of School/College  
Date

☑ Approved  
☐ Disapproved  
Date  
Undergraduate/Graduate Academic  
Board Chair  
Date

☑ Approved  
☐ Disapproved  
Date  
Provost or Designee  
Date
I. Date Initiated

January 17, 2014

II. Course Information

College/School: College of Business and Public Policy
Department: Computer Information Systems
Program: Bachelor of Business Administration in Management Information Systems
Course Title: Selected Topics in Management Information Systems
Course Number: CIS A390
Credits: 1-6
Contact Hours: 1 hour per week x 15 weeks = 15 hours for each lecture hour
0 lab hours
4 hours outside of class per week x 15 for each lecture hour
Grading Basis: A-F
Course Description:
Study of specific current issues, techniques, and trends in Management Information Systems (MIS)
Special note: May be repeated with change of subtitle/topic. Maximum of 9 elective credits may be used for the BBA MIS degree. Prerequisites vary with topic. Check course schedule for specific titles being offered.
Course Prerequisites: N/A
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Fees: Standard CBPP computer lab fee

III. Course Activities

A. Lectures
B. Discussions
C. Guest speakers
D. In-class exercises
E. Analysis of case studies
F. Simulations

IV. Course Level Justification

The course requires prerequisites that may vary with topic and the student is expected to have appropriate background in problem solving techniques related to business environment.
V. **Course Outline**  
Course outline varies with topics.

Example from previously taught course (Information Security Assurance)  
A. Introduction to Information Security  
B. The Need for Security  
C. Legal, Ethical, and Professional Issues in Information Security  
D. Security Analysis  
E. Planning for Continuity  
F. Security Technology  
G. Physical Security  
H. Implementing Security  
I. Information Security Maintenance  

VI. **Suggested Texts**  
Vary according to topic.  
Example from previously taught course (Information Security Assurance)  

VII. **Bibliography**  
Vary according to topic.  
Example from previously taught course (Information Security Assurance)  

VIII. **Instructional Goals and Student Learning Outcomes**  
Vary according to topic.  
Example from previously taught course (Information Security Assurance)  

<table>
<thead>
<tr>
<th>A. <strong>Instructional Goals.</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The instructor will:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Demonstrate the integration of security, software, people, data, and telecommunications components in Information Systems (IS).</td>
<td></td>
</tr>
<tr>
<td>2. Engage students in classroom debates on the implications of emerging global threats to IS data.</td>
<td></td>
</tr>
<tr>
<td>3. Empower students to be able to perform customer investigation of security faults and protection of IS resources.</td>
<td></td>
</tr>
</tbody>
</table>
4. Guide students in developing analysis and database tools to support quantitative decision making related to security risk assessment and use of forensic tools to solve security problems.

5. Challenge students in identifying societal and business implications of information systems security risks and protection policies.

### B. Student Learning Outcomes.

**Students will be able to:**

| 1. Apply the ethical legislative and regulatory issues of information security, as well as the role of public policy in shaping a global digital economy. | Homework  
Quizzes  
Exams |
|---|---|
| 2. Investigate the role of computer forensics. | Homework  
Exams |
| 3. Create suitable information assurance policies for a variety of systems. | Homework |
| 4. Explain the basic theories, principles and concepts of computer security. | Homework  
Quizzes  
Exams |
| 5. Analyze Information Security practices across a variety of business environments. | Homework  
Quizzes |
| 6. Describe the issues and tasks surrounding the implementation and operation of an Information Assurance program. | Homework  
Quizzes |
| 7. Define various information security processes and discuss their tangible and intangible benefits. | Homework  
Quizzes  
Exams |
| 8. Describe the various security technologies including: firewalls, dial-up protection, access control. | Homework  
Quizzes  
Exams |
| 9. Describe the various concepts of cryptography including types of ciphers, cryptographic algorithms. | In-class activities  
Quizzes  
Exams |
| 10. Describe and design physical security measures. | Homework  
Exams |
| 11. Develop an Information Assurance plan. | Project |
# Course Action Request

**University of Alaska Anchorage**

Proposal to Initiate, Add, Change, or Delete a Course

---

### 1a. School or College

CT CTC

### 1b. Division

APRS Division of Preparatory Study

### 1c. Department

DEVL

---

### 2. Course Prefix

PRPE

### 3. Course Number

A108

### 4. Previous Course Prefix & Number

N/A

### 5a. Credits/CEUs

3 cr.

### 5b. Contact Hours

(Lecture + Lab) (3+0)

---

### 6. Complete Course Title

Introduction to College Writing

Intro to College Writing

Abbreviated Title for Transcript (30 character)

---

### 7. Type of Course

☐ Academic  ☐ Preparatory/Development  ☐ Non-credit  ☐ CEU  ☐ Professional Development

---

### 8. Type of Action:

☐ Add  ☑ Change  ☐ Delete

If a change, mark appropriate boxes:

☐ Prefix  ☐ Course Number  ☐ Credits  ☐ Contact Hours  ☐ Title  ☐ Repeat Status

☐ Grading Basis  ☐ Cross-Listed/Stacked  ☐ Course Description  ☐ Course Prerequisites

☐ Test Score Prerequisites  ☐ Co-requisites  ☐ Other CCG outline and bibliography (please specify)

---

### 9. Repeat Status No  # of Repeats  Max Credits

---

### 10. Grading Basis

☒ A-F  ☐ P/NP  ☐ NG

---

### 11. Implementation Date

From: Fall/2015  To: 9/999

---

### 12. Cross Listed with

☐ Stacked with

Cross-Listed Coordination Signature

---

### 13a. Impacted Courses or Programs: List any programs or college requirements that require this course.

Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at [www.uaa.alaska.edu/governance](http://www.uaa.alaska.edu/governance).

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. See attached coordination table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initiator Name (typed): Shannon Gramse  Initiator Signed Initials: _________  Date: __________________

---

### 13b. Coordination Email

Date: 9/25/14

submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

---

### 13c. Coordination with Library Liaison

Date: 9/25/13

---

### 14. General Education Requirement

Mark appropriate box:

☐ Oral Communication  ☐ Written Communication  ☐ Quantitative Skills  ☐ Humanities

☐ Fine Arts  ☐ Social Sciences  ☐ Natural Sciences  ☐ Integrative Capstone

---

### 15. Course Description (suggested length 20 to 50 words)

Preparation for ENGL A111 and alternative to ENGL A109. Introduces composition of multi-paragraph essays that conform to Standard American English for college writing. Includes critical reading skills to enhance students' writing. Continues intensive practice in punctuation, sentence combining, revising, and editing.

---

### 16a. Course Prerequisite(s) (list prefix and number or test code and score)

Appropriate score on placement test or a C or better in PRPE A086.

---

### 16b. Co-requisite(s) (concurent enrollment required)

---

### 16c. Automatic Restriction(s)

☐ College  ☑ Major  ☐ Class  ☐ Level

---

### 16d. Registration Restriction(s) (non-codable)

---

### 17. Mark if course has fees

---

### 18. Mark if course is a selected topic course

---

### 19. Justification for Action

Change in prerequisite reflects integration of reading and writing courses. Content reflects evolution of writing pedagogy.

---

Initiator Name (faculty only)  Date  Approval

Shannon Gramse

Initiator (TYPE NAME)  Date  Approval

☐ Approved  ☐ Disapproved

Dean/Director of School/College  Date  Approval

Undergraduate/Graduate Academic Board Chair  Date  Approval

Provost or Designee  Date  Approval

---

27
I. Revision Date: September 19, 2014

II. Course Information
A. College: Community and Technical College
B. Course Title: Introduction to College Writing
C. Course Subject/Number: PRPE A108
D. Credit Hours: 3.0 Credits
E. Contact Time: 3+0 Contact Time
F. Grading Information: A-F
G. Course Description: Prepares students for ENGL A111 and alternative to ENGL A109. Introduces composition of multi-paragraph essays that conform to Standard American English for college writing. Includes critical reading skills to enhance students’ writing. Continues intensive practice in punctuation, sentence combining, revising, and editing.
H. Status of Course: Successful completion of this course leads directly to ENGL A111, a university General Education Requirement.
I. Lab Fees: No
J. Coordination: Yes
K. Course Prerequisites: Appropriate score on placement test or a C or better in PRPE 086.

III. Course Activities
Lecture, discussion, group work, exams and quizzes, exercises, and editing and writing assignments.

IV. Evaluation
Course is graded; evaluation procedures are at the discretion of the instructor and will be discussed at the first class meeting of the semester. Students will be evaluated on some or all of the following: peer reviews and drafts, essays, exercises, reading discussions and activities, quizzes and exams, and attendance and participation.

V. Course Level Justification
This course is at the 100-level because it is designed to develop basic composition skills needed for successful completion of ENGL A111.
VI. Outline

A. Safety
   1. Campus
   2. Classroom

B. Multi-Paragraph Essay Development
   1. Recursive writing processes
   2. Assessing a rhetorical situation: context, audience, and purpose
   3. Developing a topic
   4. Formulating a thesis
   5. Generating details
   6. Crafting introductions and conclusions
   7. Revising for coherence and focus
   8. Editing and proofreading

C. Elements of Academic Writing
   1. Summary
   2. Response
   3. Exposition
   4. Analysis
   5. Synthesis
   6. Comparison
   7. Persuasion
   8. Bibliography
   9. Peer Review

D. Elements of Editing
   1. Conventional punctuation
   2. Standard usage
   3. Sentence patterns
   4. Correction of common errors
   5. Editing for style

E. Elements of College Reading
   1. Academic reading processes
   2. Annotating texts
   3. Identifying main ideas and supporting details
   4. Critical reading
F. Using and Documenting Sources
   1. Basic research strategies
   2. Evaluating sources for academic purposes
   3. Integrating paraphrases and quotations into essays
   4. Introduction to documentation and citation

G. College Writing Resources
   1. Dictionaries, thesauri, handbooks
   2. Library and digital databases
   3. Tutoring and other consultation services (online and face-to-face)
   4. Internet usage for college composition

VII. Instructional Goals and Student Learning Outcomes

A. Instructional Outcomes. The instructor will:
   1. Introduce elements of academic writing generated by specific purpose, including summary and response, explanatory, analytical, and persuasive writing.
   2. Demonstrate effective revision strategies.
   3. Review basic sentence patterns, grammar rules, and usage conventions.
   4. Introduce academic reading processes for writing purposes.
   5. Introduce basic research strategies and using sources for the purpose of developing and supporting ideas in essays.
   6. Explain the purpose of and appropriate use of resources available to support students’ writing development.

B. Student Learning Outcomes and Assessment Measures

<table>
<thead>
<tr>
<th>Upon successful course completion, the student will be able to:</th>
<th>This outcome will be assessed by one or more of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write brief (2-4 pages) academic essays shaped by effective writing processes and appropriately supported by texts to achieve specific purposes.</td>
<td>Writing exercises and writing assignments</td>
</tr>
<tr>
<td>Revise drafts to develop ideas, bring coherence and focus to essays, and accomplish intended purposes.</td>
<td>Peer reviews, drafts, writing exercises and assignments</td>
</tr>
<tr>
<td>Identify patterns of errors and edit for correctness.</td>
<td>Writing exercises, writing assignments, quizzes</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Apply critical reading skills and appropriate reading processes to assigned readings and individualized research for use in basic academic essays.</td>
<td>Reading activities, exercises, writing assignments</td>
</tr>
<tr>
<td>Effectively integrate and appropriately document basic research in essays.</td>
<td>Writing assignments</td>
</tr>
<tr>
<td>Employ available resources to improve writing.</td>
<td>Writing assignments and activities</td>
</tr>
</tbody>
</table>

VIII. Suggested Texts


IX. Bibliography


*Denotes classic text
TO: Elisha Baker, Provost and Vice Chancellor of Academic Affairs
THRU: Chairperson, Undergraduate Academic Board
THRU: Gary Turner, Director, Kenai Peninsula College
THRU: Jane Fuerstenau, Chairperson, Academic Review Board, KPC
FROM: Henry W. Haney, Co-Chair, Business & Industry Department, KPC
DATE: September 3, 2014
RE: Program Action Request (PAR) – AAS Process Technology

Provost Baker;

I am initiating a Program Action Request to establish a Pre-Major for the Associate of Applied Science Process Technology degree offered through the Kenai Peninsula Community College.

This is being done for the following reasons:

1. In response to enrollment pressure;
2. In response to an inadequate and/or inconsistent knowledge base necessary for program success;
3. In response to students who are being placed in “pending status” for admission due to low test scores or academic standing, and are as a consequence denied financial aid.

The Pre-Major will identify required pre-requisites, set minimum grade parameters for those pre-requisites, establish requirements for full program admission status, and allow students who are pursuing the AAS-PRT to receive financial aid while they are qualifying for full admission to the PRT program. The following is a justification for this action.

Henry

+------------------------------------------------------------------------------------------------------------------+

The following changes are proposed to establish a Pre-Major for AAS Process Technology

Proposed Program Admission Requirements:

1. **Unchanged** → Satisfy the Application and Admission Requirements for Associate Degree Programs
2. **Add** → Completion of an advising session with PRT faculty advisor

  **Rationale** → The advising session as presently listed in the current catalog, is not a part of the overall requirements for admission. The advising session specifically requires students to meet with a faculty advisor in the Process Technology program prior to registering for Process Technology courses. With the Pre-Major, the advising session would become one of the overall admission requirements. Students would be required to meet with a faculty advisor in the Process Technology program prior to application for admission in pre-major or major status. This will facilitate the following:

  a. Assignment of a PRT advisor
  b. Review of students academic record
  c. Overview of proposed academic strategy and what is necessary for student success to complete an AAS Process Technology degree
3. **Add** The following courses must be completed with a grade of “C” or better
   a. ENGLISH 111, or a higher level ENGL, or placement at a higher level
   b. MATH 105, or a higher level MATH, or placement at a higher level
   c. PRT A101 Introduction to Process Technology
   d. PHYS A115/L Physical Science, or PHYS A123/L Basic Physics I or completion of higher level Physics

**Rational** Current English pre-requisite for admission is listed as “Placement for reading at the ENGL A111 level or above.” This current pre-requisite is weak and does not consider necessary foundational writing knowledge and skills. Such training is especially important with consideration given to the increasing complexity of such written material as safety and environmental instructions and reports, equipment operating instructions, and incident investigations. Accurate understandable writing skills are becoming increasingly important in the Process Industry. A pre-major requirement of “completion of ENGL 111, with a minimum grade of C or better” would establish a student knowledge base necessary for the second required English course, and the required PRT core courses.

**Rational** The current Math pre-requisite for admission is “Placement at the MATH A105 level or above, equivalent course, or appropriate ACT/SAT scores.” Requiring as a minimum only placement at the MATH 105 level is not as strong as it should be for a pre-requisite. It is necessary for students to have completed MATH 105 with a “C” or better grade so as to verify experiential base knowledge and computational ability. This especially becomes important when recognizing that Math concepts permeate Process Technology at all levels, and that proven Math knowledge and ability is assumed by instructors when teaching Process Technology core classes. A pre-major requirement of “completion of MATH 105, or a higher level MATH, or placement at a higher level” would establish a solid student knowledge base necessary for demonstrated success when taking the required PRT core courses.

**Rational** Introduction to Process Technology provides a basic broad overview of what Process Technology is. This course shows students what PRT is, and what they are entering into. Completion of this course will enable students to decide if they are going to continue pursuing the AAS-PRT degree.

**Rational** The Pre-major requirement of Physical Science, or Basic Physics would provide the foundational scientific concepts necessary for students who will be entering into PRT core courses. These concepts are a necessity for a student to achieve success in the PRT field of study. The majority of students entering the PRT program demonstrate a weakness in Physics and Physics concepts. This is universal whether a student is recently graduated or is returning to school in middle-age. Physics consequently can be intimidating and is frequently avoided and not taken until the very last semester of a student’s course of study. This needs to be rectified especially with consideration that Physics concepts are in all aspects of Process Technology. A pre-major requirement of “completion of PHYS A115/L Physical Science, or PHYS A123/L Basic Physics I or completion of higher level Physics” will insure students are adequately prepared to learn the core concepts of PRT

4. **Add** (required form) Completion of Change of Major from Pre-Major to Major status signed by PRT faculty advisor
Below is a very basic example of a typical schedule incorporating the proposed Pre-Major. Note: additional semester(s) would be necessary for students who are unable to meet placement requirements for ENG 111 or MATH 105.

**Admission to Pre-Major status program**

On an as needed basis – requiring one or more semesters
Selected courses PRPE 82, PRPE 86, PRPE 108 to obtain placement into ENG 111
Selected courses MATH 054 and MATH 055 to obtain placement into Math 105

1st year Fall Semester
MATH A105 Intermediate Algebra with a minimum of grade of “C” (3 credits)
ENGL A111 Methods of Written Communication with a minimum of grade of “C” (3 credits)
PRT A101 Introduction to Process Technology with a minimum of grade of “C” (3 credits)
PHYS A115/L Physical Science or PHYS A123/L Basic Physics I with a minimum of grade of “C” (4 credits)
PRT A110 – Intro to Occupational Safety, Health & Environmental Awareness (3 credits)
Total - 16 credits

**Admission to Major status program**

1st year Spring Semester
ENGL A212 - Technical Writing (3 credits)
PRT A130 – Process Technology I: Equipment (4 credits)
CIS A105 (or A110) Introduction to PC Computers Applications (3 credits)
PRT A140 – Industrial Process Instrumentation I (3 credits)
Applied Elective (3 credits)
Total - 16 credits

2nd year Fall Semester
COMM A111 - Fundamentals of Oral Communication (3 credits)
PRT A144 - Industrial Process Instrumentation II (3 credits)
PRT A230/L – Process Technology II: Systems + Lab (4 credits)
CHEM A103/L – Survey of Chemistry + Lab (4 credits)
Applied Elective (3 credits)
Total - 17 credits

2nd year Spring Semester
PRT A231/L – Process Technology III: Operations (4 credits)
PRT A250 - Process Troubleshooting (3 credits)
PRT A255 – Quality Concepts for the Process Industry (1 credit)
Applied Elective (3 credits)
Social Science Elective (3 credits)
Total - 14 credits
# Program/Prefix Action Request

**University of Alaska Anchorage**  
Proposal to Initiate, Add, Change, or Delete a Program of Study or Prefix

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>1b. Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP KPC</td>
<td>Business and Industry</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Complete Program Title/Prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Technology AAS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Type of Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one from the appropriate drop down menu:</td>
</tr>
<tr>
<td>Undergraduate: or Graduate: Associate of Applied Science</td>
</tr>
<tr>
<td>CHOOSE ONE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Type of Action:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROGRAM</td>
</tr>
<tr>
<td>☐ Add</td>
</tr>
<tr>
<td>☑ Change</td>
</tr>
<tr>
<td>☐ Delete</td>
</tr>
<tr>
<td>PREFIX</td>
</tr>
<tr>
<td>☐ Add</td>
</tr>
<tr>
<td>☐ Change</td>
</tr>
<tr>
<td>☐ Inactivate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Implementation Date (semester/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From: <strong>Spring 2015</strong> To: 9-999</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6a. Coordination with Affected Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department, School, or College: CTC and UAF CTC</td>
</tr>
<tr>
<td>Initiator Name (typed): Henry W Haney</td>
</tr>
<tr>
<td>Initiator Signed Initials: _____</td>
</tr>
<tr>
<td>Date: 9-3-14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6b. Coordination Email submitted to Faculty Listserv (<a href="mailto:uac-faculty@lists.uac.alaska.edu">uac-faculty@lists.uac.alaska.edu</a>)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: 9-3-14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6c. Coordination with Library Liaison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: 9-3-14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Title and Program Description - Please attach the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Cover Memo</td>
</tr>
<tr>
<td>☑ Catalog Copy in Word using the track changes function</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Justification for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>To manage admissions and improve student success rate in program.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initiator (faculty only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henry W Haney</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Approved</th>
<th>Disapproved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Dean/Director of School/College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Approved</th>
<th>Disapproved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Department Chair</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Approved</th>
<th>Disapproved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Undergraduate/Graduate Academic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Approved</th>
<th>Disapproved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Provost or Designee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date</td>
</tr>
</tbody>
</table>


PROCESS TECHNOLOGY

Kenai Peninsula College (KPC), KRC (Kenai River Campus)
156 College Road, Soldotna, Alaska 99669, (907) 262-0300, (877) 262-0330
www.kpc.alaska.edu

Anchorage Extension Site (AES)
University Center (UC), Room 118, 3901 Old Seward Highway
Anchorage, AK 99503, (907) 786-6413

Advising for this program is only available from the Process Technology faculty at Kenai Peninsula College. For the Kenai River Campus, please call (907) 262-0344 or (877) 262-0330 for more information. For the KPC Anchorage Extension Site, call 786-6413.

The Associate of Applied Science degree in Process Technology is coordinated by Kenai Peninsula College and is delivered collaboratively through UAA and UAF.

This degree is designed to provide education/training that will enable individuals to obtain employment in the industries that use and control mechanical, physical or chemical processes to produce a final product. In Alaska this includes the process industries of oil and gas production, chemical manufacturing, petroleum refining; power generation and utilities, water and wastewater treatment, and seafood and other food processing.

Associate of Applied Science, Process Technology

The Process Technology program is offered only at Kenai Peninsula College KRC (Kenai River Campus) and AES (Anchorage Extension site).

The graduates of the UAA Process Technology program will have the ability to:

1. Maintain a safe work area: enforce safety regulations, follow safe operating procedures, maintain effective communications with personnel and identify workplace hazards.
2. Monitor area operations: to monitor equipment for efficiency and integrity, identify process problems and perform trend analyses.
3. Maintain process parameters: perform process adjustments, start up process equipment, shut down process equipment.
5. Maintain regulatory compliance: to report recordable incidents, record discharge reports, record regulatory data, maintain current licensing, participate in internal/external audits and comply with HAZCOM requirements.
6. Coordinate maintenance activities: generate work requests, develop safe out procedures, schedule maintenance activities, prepare equipment for maintenance activity and issue work permits.
7. Perform administrative activities: produce required reports, record logbook entries and perform personnel evaluations.
8. Assess and recognize the need for continued professional development: participate in job related training and utilize self-study resources.

Admission Requirements

Students who apply to the Process Technology AAS are admitted in a pre-major status. The process for advancement to major status requires completion of the following steps:

1. Complete an advising session with a PRT faculty advisor.
2. Complete the following courses with a grade of “C” or better:
   a. ENGL A111 Introduction to Composition (3)
   b. MATH A105 Intermediate Algebra (3) or any higher level mathematics.
   c. PRT A101 Introduction to Process Technology (3)
   d. PHYS A115/L Physical Science with Lab (4) or PHYS A123/L Basic Physics I with Lab (4)
3. Completion of Change of Major Form from Pre-Major to Major status, signed by PRT faculty advisor.
Advising

Students are encouraged to meet with a faculty advisor in the Process Technology program prior to registering for Process Technology courses. Advising is required to move to major status and to complete the AAS in Process Technology.

Graduation Requirement

In order to receive the AAS in Process Technology, students must achieve a grade of “C” or better in all courses required for the degree.

General University Requirements

Complete the General University and the Associate of Applied Science Degree Course Requirements located at the beginning of this chapter.

Communication and General Requirements

1. Oral Communications Skills: (One of the following) 3
   - COMM A111 Fundamentals of Oral Communication (3)
   - COMM A235 Small Group Communication (3)
   - COMM A237 Interpersonal Communication (3)
   - COMM A241 Public Speaking (3)
2. Written Communication Skills: 6
   - ENGL A111 Introduction to Composition (3)
     and one of the following:
   - ENGL A211 Academic Writing About Literature (3)
   - ENGL A212 Technical Writing (3)
   - ENGL A213 Writing in the Social and Natural Sciences (3)
   - ENGL A214 Persuasive Writing (3)
   - CIOS A260A Business Communications (3)
3. Math: 3-4
   - MATH A105* Intermediate Algebra (3)
   - MATH A107* College Algebra (4)
   - *Or any MATH course for which MATH A105 or MATH A107 is a prerequisite.
4. Computer Literacy: 3
   - CIS A105 Introduction to Personal Computers and Application Software (3)
   - CIS A110 Computer Concepts in Business (3)
5. Chemistry: 4
   - CHEM A103/L Survey of Chemistry (or higher level chemistry) with laboratory (4)
6. Physics: 4
   - PHYS A115/L Physical Science with Laboratory (4)
   - PHYS A123/L Basic Physics I with Laboratory (4)
7. Social Sciences or Humanities: 3
   - Elective (3)
Major Requirements

1. Complete the following courses (28 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRT A101</td>
<td>Introduction to Process Technology</td>
<td>3</td>
</tr>
<tr>
<td>PRT A110</td>
<td>Introduction to Process Safety, Health and Environmental Awareness</td>
<td>3</td>
</tr>
<tr>
<td>PRT A130</td>
<td>Process Technology I: Equipment</td>
<td>4</td>
</tr>
<tr>
<td>PRT A140</td>
<td>Industrial Process Instrumentation I</td>
<td>3</td>
</tr>
<tr>
<td>PRT A144</td>
<td>Industrial Process Instrumentation II</td>
<td>3</td>
</tr>
<tr>
<td>PRT A230</td>
<td>Process Technology II: Systems</td>
<td>4</td>
</tr>
<tr>
<td>PRT A231</td>
<td>Process Technology III: Operations</td>
<td>4</td>
</tr>
<tr>
<td>PRT A250</td>
<td>Process Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>PRT A255</td>
<td>Quality Concepts for the Process Industry</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Approved Applied Technology Electives: 9 credits

All 9 credits must be chosen with advisor approval. For example, they may be chosen from:

- Electronics
- Environmental Technology
- Industrial Technology
- Industrial Instrumentation
- Mining Technology
- Occupational Safety and Health
- Petroleum Technology
- Process Technology
- Power Generation
- Wastewater Technology
- Technical Internship

3. A total of 63 credits is required for the degree.

FACULTY

Rick Adams, Assistant Professor, rhamms@kpc.alaska.edu
Henry Haney, Assistant Professor, hwhaney@kpc.alaska.edu
Jeff Laube, Assistant Professor, jdlauke@kpc.alaska.edu
Darrell Ellis, Assistant Professor, drellis@kpc.alaska.edu
Tammy Farrell, Assistant Professor, tfarrel3@kpc.alaska.edu
Rich Kochis, Assistant Professor, rkochis@kpc.alaska.edu
PROCESS TECHNOLOGY

Kenai Peninsula College (KPC), KRC (Kenai River Campus)
156 College Road, Soldotna, Alaska 99669, (907) 262-0300, (877) 262-0330
www.kpc.alaska.edu

Anchorage Extension Site (AES)
University Center (UC), Room 118, 3901 Old Seward Highway
Anchorage, AK 99503, (907) 766-6413

Advising for this program is only available from the Process Technology faculty at Kenai Peninsula College. For the Kenai River Campus, please call (907) 262-0344 or (877) 262-0330 for more information. For the KPC Anchorage Extension Site, call 766-6413.

The Associate of Applied Science degree in Process Technology is coordinated by Kenai Peninsula College and is delivered collaboratively through UAA and UAF.

This degree is designed to provide education/training that will enable individuals to obtain employment in the industries that use and control mechanical, physical or chemical processes to produce a final product. In Alaska this includes the process industries of oil and gas production, chemical manufacturing, petroleum refining; power generation and utilities, water and wastewater treatment, and seafood and other food processing.

Associate of Applied Science, Process Technology

The Process Technology program is offered only at Kenai Peninsula College KRC (Kenai River Campus) and AES (Anchorage Extension site).

The graduates of the UAA Process Technology program will have the ability to:

1. Maintain a safe work area, enforce safety regulations, follow safe operating procedures, maintain effective communications with personnel and identify workplace hazards;
2. Monitor area operations; monitor equipment for efficiency and integrity, identify process problems and perform trend analyses;
3. Maintain process parameters: perform process adjustments, start up process equipment and shut down process equipment;
4. Maintain emergency response preparedness: respond to emergencies, effectively participate in emergency response drills and conduct periodic review of emergency response procedures;
5. Maintain regulatory compliance: report recordable incidents, record discharge reports, record regulatory data, maintain current licensing, participate in internal/external audits and comply with HAZCOM requirements;
6. Coordinate maintenance activities: generate work requests, develop safe out procedures, schedule maintenance activities, prepare equipment for maintenance activity and issue work permits;
7. Perform administrative activities; produce required reports, record logbook entries and perform personal evaluations;
8. Prepare for and understand Assess and recognize the need for continued professional development; participate in job related training and utilize self-study resources.

Admission Requirements

Students who apply to the Process Technology AAS are admitted in a pre-major status. The process for advancement to major status requires completion of the following steps:

1. Complete an advising session with a PRT faculty advisor;
2. Complete university, Admission Requirements for Associate’s Degrees found in Chapter 2
   the following courses with a grade of “C” or better:
   a. ENGL A111 Introduction to Composition (3)
   b. MATH A105 Intermediate Algebra (5), or any higher level mathematics
   c. PRT A101 Introduction to Process Technology (3)
Advising

Students must secure encouraged to meet with a faculty advisor in the Process Technology program prior to registering for Process Technology courses. Advising is required to move to major status and to complete the AAS in Process Technology.

Graduation Requirements

In order to receive the AAS in Process Technology, students must achieve a grade of “C” or better in all courses required for the degree.

General University Requirements

Complete the General University and the General Course Requirements for Associate of Applied Science Degree Course Requirements located at the beginning of this chapter.

Communication and General Requirements

1. Oral Communications Skills (One of the following)  3
   - COMM A111  Fundamentals of Oral Communication (3)
   - COMM A235  Small Group Communication (3)
   - COMM A237  Interpersonal Communication (3)
   - COMM A241  Public Speaking (3)

2. Written Communication Skills  6
   - ENGL A111  Introduction to Composition (3)
   - ENGL A211  Academic Writing About Literature (3)
   - ENGL A212  Technical Writing (3)
   - ENGL A213  Writing in the Social and Natural Sciences (3)
   - ENGL A214  Persuasive Writing (3)
   - CIS A260A  Business Communications (3)

3. Support Courses Math  3-4
   - MATH A105  Intermediate Algebra (3)
   - MATH A107  College Algebra (4)
   - MATH A106  Survey of College Mathematics (3)
   *Or any MATH course for which MATH A105 or MATH A107 is a prerequisite.

4. Computer Literacy:  3
   - CIS A105  Introduction to Personal Computers and Application Software (3)
   - CIS A110  Computer Concepts in Business (3)

5. Chemistry  4
   - CHEM A103/L  Survey of Chemistry (or higher level with laboratory) (4)

6. Physics  4
PHYS A115/L  Physical Science with Laboratory (for technicians) (4)
or
CHEM A103/L  Survey of Chemistry (or higher level) (4)
and
PHYS A123/L  Basic Physics I with Laboratory (4)

Social Sciences or Humanities 3

Elective (3)

Major Requirements

1. Complete the following courses (28 credits):
   - PRT A101  Introduction to Process Technology 3
   - PRT A110  Introduction to Process Safety, Health and Environmental Awareness 3
   - PRT A130  Process Technology I: Equipment 4
   - PRT A140  Industrial Process Instrumentation I 3
   - PRT A144  Industrial Process Instrumentation II 3
   - PRT A230  Process Technology II: Systems 4
   - PRT A231  Process Technology III: Operations 4
   - PRT A250  Process Troubleshooting 3
   - PRT A255  Quality Concepts for the Process Industry 1

2. Approved Applied Technology Electives 9
   
   All 9 credits must be chosen with advisor approval. For example, they may be chosen from:
   - Electronics
   - Environmental Technology (Wastewater), Mining Technology, Industrial Process Technology
   - Instrumentation
   - Mining Technology
   - Occupational Safety and Health
   - Petroleum Technology
   - Process Technology
   - Power Generation
   - Technical Internship
   - Wastewater
   - Petroleum Technology
   - Process Technology
   - Power Generation
   - Technical Internship

3. A total of 63 credits is required for the degree.

FACULTY

Rick Adams, Assistant Professor, rick.adams@kpc.alaska.edu
Allen Houtz, Professor, allen.houtz@kpc.alaska.edu
Henry Haney, Assistant Professor, henry.haney@kpc.alaska.edu
Jeff Laube, Assistant Professor, jeff.laube@kpc.alaska.edu
Jake Main, Assistant Professor, main.jake@kpc.alaska.edu
Darrell Ellis, Assistant Professor, darrell.ellis@kpc.alaska.edu
Tammy Farrell, Assistant Professor, tammy.farrell@kpc.alaska.edu
Rich Kochis, Assistant Professor, richard.kochis@kpc.alaska.edu

Formatted: Strikethrough