General Education Review Committee
Agenda

November 30, 2007
ADM 201
12:30 p.m. – 1:30 p.m.

I. Roll
( ) Erik Hirschman Mat-Su/UAB Natural Sciences
( ) Caedmon Liburd UAB
( ) Patricia Fagan CAS Humanities
( ) Bob Capuozzo COE
( ) Jack Pauli CBPP/UAB
( ) Jeane Breining CAS Written Communication
( ) Len Smiley CAS/UAB Quantitative Skills
( ) Suzanne Forster CAS
( ) Robin Wahto CTC/UAB
( ) Walter Olivares CAS Fine Arts
( ) Tom Miller OAA Guest
( ) Gail Holtzman CHSW/UAB Social Sciences
( ) Grant Baker SOENGR/UAB
( ) Barbara Harville CAS Oral Communication
( ) Karl Wing USUAA

II. Approval of Agenda (pg. 1-2)

III. Approval of Summary (pg. 3-4)

IV. Chair’s Report

V. Course Action Requests

Chg LING A101 The Nature of Language (3 cr) (3+0) No revisions received

Chg CHEM A103 Survey of Chemistry (3 cr) (3+0) (pg.5-12)

Chg CHEM A103L Survey of Chemistry Laboratory (1 cr) (0+3) (pg. 13-19)

Chg CHEM A104 Introduction to Organic Chemistry and Biochemistry (3 cr) (3+0) (pg. 20-26)

Chg CHEM A104L Introduction to Organic Chemistry and Biochemistry Laboratory (1 cr) (0+3) (pg. 27-33)

Chg CHEM A105 General Chemistry I (3 cr) (3+0) (pg. 34-40)

Chg CHEM A105L General Chemistry I Laboratory (1 cr) (0+3) (pg. 41-47)

Chg CHEM A106 General Chemistry II (3 cr) (3+0) (pg. 48-54)

Chg CHEM A106L General Chemistry II Laboratory (1 cr) (0+3) (pg. 55-61)

Chg HNRS A192 Honors Seminar: Enduring Books (3 cr) (3+0) (pg. 62-70)

Chg HNRS A292 Honors Seminar in Social Science (3 cr) (3+0) (pg. 71-78)
VI. Old Business

VII. New Business

VIII. Informational Items and Adjournment
I. Roll
(e) Erik Hirschman  Mat-Su/UAB  Natural Sciences
(e) Caedmon Liburd  UAB
(x) Patricia Fagan  CAS  Humanities
(e) Bob Capuozzo  COE
(x) Jack Pauli  CBPP/UAB
( ) Jeane Breining  CAS  Written Communication
(x) Len Smiley  CAS/UAB  Quantitative Skills
(x) Suzanne Forster  CAS
(x) Robin Wahto  CTC/UAB
(x) Walter Olivares  CAS  Fine Arts
(x) Tom Miller  OAA  Guest
(x) Gail Holtzman  CHSW/UAB  Social Sciences
( ) Grant Baker  SOENGR/UAB
(x) Barbara Harville  CAS  Oral Communication
( ) Karl Wing  USUAA

II. Approval of Agenda (pg. 1-2)

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V. Course Action Requests

Chg  MUS A121  Music Appreciation (3 cr) (3+0) (pg. 5-9)

Chg  MUS A221  History of Music I (3 cr) (3+0) (pg. 10-14)

Chg  MUS A222  History of Music II (3 cr) (3+0) (pg. 15-20)
Approved MUS A121, A221, and A222

Chg  MUS A331  Form and Analysis (3 cr) (3+0) (pg. 21-26)
Approved

Chg  GEOL A111  Physical Geology (4 cr) (3+3) (pg. 27-30)
Approved

Chg  GEOL A115  Environmental Geology (3 cr) (3+0) (pg. 31-33)
Approved

Chg  GEOL A115L  Environmental Geology Laboratory (1 cr) (0+3) (pg. 34-36)
Approved

Chg  HIST A131  History of United States I (3 cr) (3+0) (pg. 37-43)

Chg  HIST A132  History of United States II (3 cr) (3+0) (pg. 44-50)
Approved HIST A131 and HIST A132

Chg  LING A101  The Nature of Language (3 cr) (3+0) (pg. 51-56)
Tabled- will bring back revisions week
Chg ENGL A212 Technical Writing (3 cr) (3+0) (pg. 57-63)  
Approved

Chg ENGL A301 Literature of Britain I (3 cr) (3+0) (pg. 64-67)  
Approved

Chg ENGL A302 Literature of Britain II (3 cr) (3+0) (pg. 68-71)  
Approved

VI. Old Business

VII. New Business

A. CCG Models of Approval
   INTL A315 Canada: Nation and Identity and THR A411 History of Theater  
   Approved as models of approval

VIII. Informational Items and Adjournment

Meeting adjourned
<table>
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<tr>
<th>1a. School or College</th>
<th>AS CAS</th>
<th>1b. Division</th>
<th>AMSC Division of Math Science</th>
<th>1c. Department</th>
<th>CHEMISTRY</th>
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<tr>
<td>2. Course Prefix</td>
<td>CHEM</td>
<td>3. Course Number</td>
<td>A103</td>
<td>4. Previous Course Prefix &amp; Number</td>
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<td>5a. Credits/CEU</td>
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<td>☐ Program</td>
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<td>☐ Title</td>
<td>☐ Grading Basis</td>
<td>☐ Course Description</td>
<td>☐ Test Score Prerequisites</td>
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<td>☐ Course Number</td>
<td>☐ Contact Hours</td>
<td>☐ Repeat Status</td>
<td>☐ Cross-Listed/Stacked</td>
<td>☐ Course Prerequisites</td>
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<td>☐ P/NP</td>
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<td>☐ with</td>
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<td>13. List any programs or college requirements that require this course</td>
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<tr>
<td>CAS B.S.; B.S., Nursing Science; Associate of Applied Science, Computer Electronics; Associate of Applied Science, Medical Laboratory Technology; B.S., Medical Technology, Associate of Applied Science, Occupational Safety and Health; Associate of Applied Science, Process Technology; Associate of Applied Science, Technology; B.S., Health Science; MEDEX requirement; B.S., Construction Management.</td>
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<td>14. Coordinate with Affected Units: UAA Listserve email</td>
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<td>Date</td>
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<td>15. ☒ General Education Requirement</td>
<td>☐ Oral Communication</td>
<td>☐ Written Communication</td>
<td>☐ Social Sciences</td>
<td>☐ Quantitative Skills</td>
<td>☐ Humanities</td>
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<td>16. Course Description</td>
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<td>This course introduces a survey of topics including: matter, energy, units of measurement, the periodic table, atomic and molecular structure, chemical bonding, radioactivity, oxidation-reduction reactions, solutions involving acids, bases and buffers; and an introduction to organic chemistry with units on functional groups and the chemistry of alkanes, alkenes and alkynes. Special Note: This is an introductory course designed for health science majors and assumes prior knowledge of college preparatory high school chemistry and algebra.</td>
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<td>17d. Other Restriction(s)</td>
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<td>☐ Major</td>
<td>☐ Class</td>
<td>☐ Level</td>
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<td>17e. Registration Restriction(s) (non-codable)</td>
<td>CHEM A055 with a minimum grade of C or college preparatory high school chemistry with a minimum grade of C. If the Math A105 prerequisite is not satisfied, appropriate scores on the SAT or ACT tests or appropriate scores on a UAA approved placement test such as the Accuplacer Placement tes.</td>
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<td>18. ☐ Mark if course has fees</td>
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<td>19. Justification for Action</td>
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<td>Disapproved:</td>
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<td>Initiator (faculty only)</td>
<td>Date</td>
<td>Dean/Director of School/College</td>
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<tr>
<td>Curriculum Committee Chairperson</td>
<td>Date</td>
<td>Provost or Designee</td>
<td>Date</td>
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</tbody>
</table>
Course content update. Course description, course prerequisite and registration restriction clarification.

Initiator (faculty only)       Date

Approved
Disapproved:

Department Chairperson       Date

Approved
Disapproved:

Curriculum Committee Chairperson       Date

Approved
Disapproved:

Dean/Director of School/College       Date

Approved
Disapproved:

Undergraduate or Graduate       Date

Approved
Disapproved:

Academic Board Chairperson       Date

Approved
Disapproved:

Provost or Designee       Date
Course Content Guide for CHEM A103  
University of Alaska Anchorage  
College of Arts & Sciences

I. **Initiation Date:** April 3, 2007

II. **Course Information**

A. **College:** College of Arts & Sciences

B. **Course Subject:** CHEM

C. **Course Number:** A103

D. **Number of Credits:** 3

E. **Contact Hours:** 3 + 0

F. **Course Title:** Survey of Chemistry

G. **Grading Basis:** A-F

H. **Implementation Date:** Fall 2008

I. **Course Description:** This course introduces a survey of topics including: matter, energy, units of measurement, the periodic table, atomic and molecular structure, chemical bonding, radioactivity, oxidation-reduction reactions, solutions involving acids, bases and buffers; and an introduction to organic chemistry with units on functional groups and the chemistry of alkanes, alkenes and alkynes. Special Note: This is an introductory course designed for health science majors and assumes prior knowledge of college preparatory high school chemistry and algebra.

J. **Course Attributes:** GER in Natural Sciences

K. **Prerequisites:** MATH A105 with minimum grade of C;

L. **Test Scores:** N/A

M. **Corequisites:** N/A

N. **Registration Restrictions:** CHEM A055 with a minimum grade of C or college preparatory high school chemistry with a minimum grade of C. If the Math A105 prerequisite is not satisfied, appropriate scores on the SAT or ACT tests or appropriate scores on a UAA approved
placement test such as the Accuplacer Placement test.

O. **Course Fee:** No

III. **Instructional Goals and Student Outcomes**

A. **Course Activities:**

Students will have the opportunity to collaborate with their peers to explore concepts and solve problems relevant to current topics in chemistry. Activities provide students with chemical models and/or chemical data followed by questions to guide them through the learning cycle, building conceptual understanding in a process emulating the scientific method. The instructor will assist the learning process through a variety of methods that may include: lectures, facilitation of group discussions, student presentations, demonstrations, and/or open discussion with the entire class.

B. **Instructional Goals:**

This course is designed to fulfill the needs of general education requirements and to provide a foundation in general chemistry specifically for health science majors. It is intended to be a survey of general and organic chemistry with significant emphasis on health-related material. The periodic table, atomic and molecular structure, bonding, and chemical reactions, skills in measurements, balancing chemical equations and problem solving are emphasized.

The instructor will:

1. Present models of the periodic table, atomic and molecular structure, chemical bonding and reactions for development of observational skills and conceptual foundations in chemistry.
2. Present questions to initiate discussion, help students differentiate, link and integrate ideas and develop their own concepts, to articulate their thinking and explain models and solutions.
3. Provide multiple human health-related contexts for applying concepts and invite students to defend and verify their models and their solutions to problems.

C. **Student Outcomes:**

The student will be able to:

1. Recognize and interpret chemical models of the periodic table, atomic and molecular structure, bonding and chemical reactions.
2. Apply science methodology by exploring and verifying measurements and chemical equations in health-related problems rather than memorizing facts and answering “algorithmic” questions.
3. Demonstrate effective, efficient communication skills for discussing, chemistry concepts across multiple human-health related contexts.

D. Assessment Measures:

Various assessment tools can be used at the instructor’s discretion, including: quizzes, in-class presentations, short reports, take-home exams, creative work, homework, and a comprehensive standardized exam.

E. Guidelines for Evaluation:

Evaluation can be based on a variety of instruments such as: exams, in-class presentations, critical papers, in-class participation, and/or in-class activity reports.

IV. Course Level Justification

This course introduces students to chemistry concepts in atomic and molecular structure and in atomic and molecular interactions. Students learn basic skills in model exploration and verification for comprehension and retention of concepts and become acquainted with chemistry as a science discipline and how it pertains to the health sciences.

V. Topical Course Outline

1. Introduction to Units of Measurements
2. The Periodic Table
3. Chemical Equations
4. Atomic and Molecular Structure
5. Chemical Bonding
6. Radioactivity
7. Oxidation-Reduction Reactions
8. Solutions: Acid, Bases and Buffers
9. Introduction to Organic Functional Groups
10. Chemistry of Alkanes, Alkenes, and Alkynes

VI. Suggested Texts


VII. Bibliography


Library Resource Form

Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A. - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: Survey of Chemistry

1. Please identify the library liaison consulted in preparation of this proposal.
   Name: Daria O. Carle
   To see who your library liaison is at:
   UAA go to: http://www.lib.uaa.alaska.edu/webgroup/liaison.php3
   Kenai Peninsula College go to: http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
   Kodiak College go to: http://www.koc.alaska.edu/library/default.html
   Mat-Su College go to: http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support proposal.

Initiator signature
Curriculum Coordination Form

Notification Date: 4/03/2007

Initiating unit: Chemistry, CAS

Affected unit(s): Nursing, CHSW; Computer Electronics, CTC; Dental Hygiene, CTC; Industrial Process Instrumentation, CTC; Medical Laboratory Technology, CTC; Occupational Safety and Health, CTC; Process Technology, CTC; Technology, CTC

Also coordinating with: Deans and Directors of the Community and Technical College; College of Business and Public Policy; College of Education; College of Health and Social Welfare; School of Engineering; Chugiak/Eagle River Campus; Kenai Peninsula College; Kodiak College, Mat-Su College; Elmendorf Air Force Base; Fort Richardson Army Post; Department of Mathematical Sciences

Course Prefix and Number: CHEM A103   Previous Prefix and Number: N/A

Complete Course/Program Title: Survey of Chemistry

Previous Course/Program Title: N/A

Description of Action: Course content update.

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK 99508
### Curriculum Action Request

**University of Alaska Anchorage**

*Proposal to Initiate, Add, Change, or Delete a Course or Program of Study*

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
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<tbody>
<tr>
<td>AS CAS</td>
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<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5. Credits/CEU</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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<tr>
<td>Survey of Chemistry Laboratory</td>
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<tr>
<td>B.S., Nursing Science; Associate of Applied Science, Computer Electronics; Associate of Applied Science, Medical Laboratory Technology; B.S., Medical Technology; Associate of Applied Science, Occupational Safety and Health; Associate of Applied Science, Process Technology; Associate of Applied Science, Technology; B.S., CAS; B.S. Health Sciences.</td>
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<th>15. General Education Requirement</th>
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<td>Oral Communication</td>
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<th>16. Course Description</th>
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<td>An introductory chemistry laboratory course with experiments designed to introduce students to the basics of laboratory equipment, data collection, data analysis, and reporting; and to illustrate, augment and apply concepts covered in CHEM A103.</td>
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<th>19. Justification for Action</th>
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<tbody>
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<td>Course content update. Course description clarification.</td>
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Initiator (faculty only) | Date | Approved | Disapproved |
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Dean/Director of School/College | Date | Approved | Disapproved |
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Department Chairperson | Date | Approved | Disapproved |
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Undergraduate or Graduate Academic Board Chairperson | Date | Approved | Disapproved |
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Provost or Designee | Date | Approved | Disapproved |
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I. **Initiation Date:** April 3, 2007

II. **Course Information**

   A. **College:** College of Arts & Sciences
   B. **Course Subject:** CHEM
   C. **Course Number:** A103L
   D. **Number of Credits:** 1
   E. **Contact Hours:** 0 + 3
   F. **Course Title:** Survey of Chemistry Laboratory
   G. **Grading Basis:** A-F
   H. **Implementation Date:** Fall 2008
   I. **Course Description:** An introductory chemistry laboratory course with experiments designed to introduce students to the basics of laboratory equipment, data collection, data analysis, and reporting; and to illustrate, augment and apply concepts covered in CHEM A103.
   J. **Course Attributes:** GER in Natural Sciences Lab
   K. **Prerequisites:** CHEM A103 or concurrent enrollment
   L. **Test Scores:** N/A
   M. **Corequisites:** N/A
   N. **Registration Restrictions:** N/A
   O. **Course Fee:** Yes
III. Instructional Goals and Student Outcomes

A. Course Activities:

Students will have the opportunity to discuss and collaborate with their peers to explore concepts and solve problems. Exercises and experiments provide students with chemical models and/or chemical data followed by questions to guide them through the learning cycle, building conceptual understanding in a process emulating the scientific method. The instructor will assist the learning process through a variety of methods that may include: lecture, group discussions, demonstration and/or discussions with individuals, groups or to the entire class.

B. Instructional Goals:

This course is designed to fulfill the needs of general education requirements and to provide a foundation in general chemistry and the general chemistry laboratory, specifically for health science majors. It is intended to be an introduction to the chemistry laboratory. Safety in the laboratory environment, the proper use of glassware and equipment, and an integration of chemistry concepts, mathematics, technology, problem solving and kinestheses are emphasized.

The instructor will:
1. Provide students with a safe, supervised environment to encourage self confidence in lab.
2. Supply students with standard operating procedures for each experiment and examples of experimental setups to encourage proper lab technique.
3. Present models of the periodic table, atomic and molecular structure, chemical bonding and reactions for development of observational skills and conceptual foundations in chemistry.
4. Present questions to initiate discussion, help students differentiate, link and integrate ideas and develop their own concepts, to articulate their thinking and explain models and solutions.
5. Provide multiple human health-related contexts for applying concepts and invite students to defend and verify their models and their solutions to problems.

C. Student Outcomes:

The student will be able to:
1. Safely, correctly and confidently repeat previously covered skills in the chemistry laboratory.
2. Conduct laboratory work systematically by following procedures as outlined by the curriculum.
3. Recognize and interpret chemical models of the periodic table, atomic and molecular structure, bonding and chemical reactions.
4. Engage in science methodology by exploring and verifying measurements and chemical equations in health-related problems rather than memorizing facts and answering “algorithmic” questions.
5. Demonstrate effective, efficient communication skills for discussing, applying and verifying chemistry concepts across multiple human-health related contexts.

D. Assessment Measures:

Various assessment tools can be used, including, but not limited to quizzes, preparatory question sets, lab reports, homework, and comprehensive exams.

E. Guidelines for Evaluation:

Evaluation can be based on a variety of evaluation tools, including, but not limited to quizzes, preparatory question sets, lab reports, homework, and comprehensive exams.

IV. Course Level Justification

This course introduces students to chemistry laboratory concepts. Students develop basic laboratory skills through model exploration and verification for comprehension and retention of concepts and become acquainted with chemistry as a laboratory science discipline.

V. Topical Course Outline

1. Laboratory Safety and Orientation
2. Computers and Analytical Software Orientation
3. Mathematics in Chemistry
4. The Use of Volumetric Glassware
5. Synthesis
6. Analyzing Measured Data
7. Solutions and Electrolytes
8. Determination of Concentration Using Spectrophotometry
9. Solution Kinetics
10. Analysis of Vinegar by Titration
11. Determination of Buffer Capacity

VI. Suggested Texts


VII. **Bibliography**


Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A. - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: Survey of Chemistry Laboratory

1. Please identify the library liaison consulted in preparation of this proposal.

   Name: Daria O. Carle

   To see who your library liaison is at:
   UAA go to: http://www.lib.uaa.alaska.edu/webgroup/liaison.php3
   Kenai Peninsula College go to: http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
   Kodiak College go to: http://www.koc.alaska.edu/library/default.html
   Mat-Su College go to: http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support proposal.

   1. **Name**: Introduction to General, Organic & Biochemistry, 8th ed / **Author**: Bettelheim / **ISBN**: 978-0-495-01197-2 / **Publisher**: Thomson Publishers / **Date**: 2007.

   2. **Name**: Laboratory Experiments for General, Organic & Biochemistry, 8th ed / **Author**: Bettelheim / **ISBN**: 0-495-01504-0 / **Publisher**: Thomson Publishers / **Date**: 2007.


Initiator signature
Curriculum Coordination Form

Notification Date: 4/03/2007

Initiating unit: Chemistry, CAS

Affected unit(s): Nursing, CHSW; Computer Electronics, CTC; Industrial Process Instrumentation, CTC; Medical Laboratory Technology, CTC; Occupational Safety and Health, CTC; Process Technology, CTC; Technology, CTC

Also coordinating with: Deans and Directors of the Community and Technical College; College of Business and Public Policy; College of Education; College of Health and Social Welfare; School of Engineering; Chugiak/Eagle River Campus; Kenai Peninsula College; Kodiak College, Mat-Su College; Elmendorf Air Force Base; Fort Richardson Army Post; Department of Mathematical Sciences

Course Prefix and Number: CHEM A103L   Previous Prefix and Number: N/A

Complete Course/Program Title: Survey of Chemistry Laboratory

Previous Course/Program Title: N/A

Description of Action: Course content update.

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK 99508
Curriculum Action Request
University of Alaska Anchorage
Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

1a. School or College
   AS CAS

1b. Division
   AMSC Division of Math Science

1c. Department
   CHEMISTRY

2. Course Prefix
   CHEM

3. Course Number
   A104

4. Previous Course Prefix & Number

5a. Credits/CEU
   3

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

6. Complete Course/Program Title
   Introduction to Organic Chemistry and Biochemistry
   Intro to Organic Chem/Biochem
   Abbreviated Title for Transcript (30 character)

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

8. Type of Action
   ☒ Course
   ☐ Program

   ☐ Add
   ☒ Change
   (mark appropriate boxes)

   ☐ Delete

   ☐ Prefix
   ☐ Credits
   ☐ Title
   ☐ Grading Basis
   ☐ Course Description
   ☐ Test Score Prerequisites
   ☐ Other Restrictions
   ☐ Class
   ☐ Level
   ☐ College
   ☐ Major
   ☐ Other CCG

9. Repeat Status No
   # of Repeats
   Max Credits

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

11. Implementation Date
    From: FALL/2008
    To:       /9999

12. ☐ Cross Listed with

    ☐ Stacked
    with

    Cross-Listed Coordination Signature

13. List any programs or college requirements that require this course
    B.S., Nursing Science; Associate of Applied Science, Dental Hygiene; Associate of Applied Science, Medical Laboratory Technology; B.S., Medical Technology; B.S., Construction Management; MEDEX requirement; B.S., CAS.

14. Coordinate with Affected Units:
    UAA Listserve email
    Department, School, or College

    Initiator Signature
    Date

15. ☒ General Education Requirement
    ☐ Oral Communication
    ☐ Written Communication
    ☐ Quantitative Skills
    ☐ Humanities
    ☐ Fine Arts
    ☐ Social Sciences
    ☐ Natural Sciences
    ☒ Integrative Capstone

16. Course Description
    This is the second semester course in the sequence for health science majors. The course content includes: common nomenclature of organic compounds, organic functional group reactions, biochemical processes and pathways, biological macromolecules and metabolites. Special Note: CHEM A104L is the lab component of this course and requires a separate registration.

17a. Course Prerequisite(s) (list prefix and number)
    CHEM A103 with a minimum grade of C.

17b. Test Score(s)

17c. Co-requisite(s) (concurrent enrollment required)

17d. Other Restriction(s)

17e. Registration Restriction(s) (non-codable)

18. ☐ Mark if course has fees

19. Justification for Action
    Course content update. Course description and course prerequisite clarification.

---

Initiator (faculty only)
Date

Approved
Disapproved:
Dean/Director of School/College
Date

Approved
Disapproved:
Department Chairperson
Date

Approved
Disapproved:
Undergraduate or Graduate
Academic Board Chairperson
Date

Approved
Disapproved:
Provost or Designee
Date

20
I. **Initiation Date:** April 3, 2007

II. **Course Information**

A. **College:** College of Arts & Sciences

B. **Course Subject:** CHEM

C. **Course Number:** A104

D. **Number of Credits:** 3

E. **Contact Hours:** 3 + 0

F. **Course Title:** Introduction to Organic Chemistry and Biochemistry

G. **Grading Basis:** A-F

H. **Implementation Date:** Fall 2008

I. **Course Description:** This is the second semester course in the sequence for health science majors. The course content includes: common nomenclature of organic compounds, organic functional group reactions, biochemical processes and pathways, biological macromolecules and metabolites. Special Note: CHEM A104L is the lab component of this course and requires a separate registration.

J. **Course Attributes:** GER in Natural Sciences

K. **Prerequisites:** CHEM A103 with minimum grade of C

L. **Test Scores:** N/A

M. **Corequisites:** N/A

N. **Registration Restrictions:** N/A

O. **Course Fee:** No

III. **Instructional Goals and Student Outcomes**
A. Course Activities:

Students will have the opportunity to collaborate with their peers to explore concepts and solve problems relevant to current topics in chemistry. Activities provide students with chemical models and/or chemical data followed by questions to guide them through the learning cycle, building conceptual understanding in a process emulating the scientific method. The instructor will assist the learning process through a variety of methods that may include: lectures, facilitation of group discussions, student presentations, demonstrations, and/or open discussion with the entire class.

B. Instructional Goals:

This course is designed to fulfill the needs of general education requirements and to provide a foundation in chemistry specifically for health science majors. It is intended to be a survey of organic and biochemistry with a significant emphasis on health related material. Concepts in applying organic compound nomenclature rules, organic functional group reactions and reactivities, biochemical processes, biological macromolecules and metabolites are emphasized.

The instructor will:

1. Present basic nomenclature rules in organic chemistry and organic functional group reactivities and biological chemical reactions for investigation and development of observational skills and conceptual foundations in chemistry.
2. Present questions to initiate discussion, help students differentiate, link and integrate ideas and develop their own concepts, to articulate their thinking and explain models and solutions.
3. Provide multiple health-related contexts for applying concepts and invite students to defend and verify their models and their solutions to problems.

C. Student Outcomes:

The student will be able to:

1. Recognize and use appropriate organic compound nomenclature.
2. Explore and solve chemical problems relevant to current health science using organic functional group reactivities.
3. Engage in basic skills of recognizing biochemical processes involving biological macromolecules and metabolites and applying these skills to verify their models and solutions to health-related problems.
D. **Assessment Measures:**

Various assessment tools can be used at the instructor’s discretion, including: quizzes, in-class presentations, short reports, take-home exams, creative work, homework, and a comprehensive standardized exam.

E. **Guidelines for Evaluation:**

Evaluation can be based on a variety of instruments such as: exams, in-class presentations, critical papers, in-class participation, and/or in-class activity reports.

IV. **Course Level Justification**

This course introduces students to organic, and biochemistry concepts in atomic and molecular structure and in atomic and molecular interactions. Students learn basic skills in model exploration and verification for comprehension and retention of concepts and become acquainted with chemistry as a science discipline and how it pertains to the health sciences.

V. **Topical Course Outline**

1. Benzene derivatives
2. Aldehydes and Ketones
3. Alcohols, Ethers, Esters and Thiols
4. Carboxylic Acids
5. Chirality and Carbohydrates
6. Lipids
7. Proteins
8. Enzymes
9. Bioenergetics
10. Biochemical Pathways

VI. **Suggested Texts**


VII. Bibliography:


Library Resource Form

Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A. - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: Introduction to Organic and Biochemistry

1. Please identify the library liaison consulted in preparation of this proposal.

   Name: Daria O. Carle

   To see who your library liaison is at:
   UAA go to: http://www.lib.uaa.alaska.edu/webgroup/liaison.php3
   Kenai Peninsula College go to: http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
   Kodiak College go to: http://www.koc.alaska.edu/library/default.html
   Mat-Su College go to: http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support proposal.


Initiator signature
Curriculum Coordination Form

Notification Date: 4/03/2007

Initiating unit: Chemistry, CAS

Affected unit(s): Nursing, CHSW; Dental Hygiene, CTC; Medical Laboratory Technology, CTC

Also coordinating with: Deans and Directors of the Community and Technical College; College of Business and Public Policy; College of Education; College of Health and Social Welfare; School of Engineering; Chugiak/Eagle River Campus; Kenai Peninsula College; Kodiak College, Mat-Su College; Elmendorf Air Force Base; Fort Richardson Army Post; Department of Mathematical Sciences

Course Prefix and Number: CHEM A104  Previous Prefix and Number: N/A

Complete Course/Program Title: Introduction to Organic and Biochemistry

Previous Course/Program Title: N/A

Description of Action: Course content update.

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK  99508

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# Curriculum Action Request

## University of Alaska Anchorage

Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

### 1. School or College

- **AS CAS**

### 2. Course Prefix

- **CHEM**

### 3. Course Number

- **A104L**

### 4. Previous Course Prefix & Number

- **Course**

### 5. Credits/CEU

- **1**

### 6. Complete Course/Program Title

- **Introduction to Organic Chemistry and Biochemistry Laboratory**

### 7. Type of Course

- **Academic**

### 8. Type of Action

- **Course**

### 9. Repeat Status

- **No**

### 10. Grading Basis

- **A-F**

### 11. Implementation Date

- **From: FALL/2008**
- **To: /9999**

### 12. Cross Listed with

- **Stacked**

### 13. List any programs or college requirements that require this course

- **B.S., Nursing Science; B.S., Medical Technology; B.S., CAS.**

### 14. Coordinate with Affected Units

- **UAA Listserv email**

### 15. General Education Requirement

- **Oral Communication**
- **Written Communication**
- **Quantitative Skills**
- **Humanities**
- **Fine Arts**
- **Social Sciences**
- **Natural Sciences**
- **Integrative Capstone**

### 16. Course Description

The second semester of this introductory chemistry laboratory course sequence. Experiments are designed to reinforce concepts students have been exposed to regarding the basics of laboratory equipment, data collection, data analysis, and reporting. This course illustrates, augments and applies concepts covered in CHEM A104.

### 17. Course Prerequisite(s) (list prefix and number)

- **CHEM A103 with minimum grade of C**
- **and (CHEM A104 or concurrent enrollment)**

### 18. Mark if course has fees

### 19. Justification for Action

Course content update. Course description and course prerequisite clarification.

---

**Initiator (faculty only) Date**

**Disapproved:**

**Approved:**

**Dean/Director of School/College Date**

**Disapproved:**

**Approved:**

**Department Chairperson Date**

**Disapproved:**

**Approved:**

**Undergraduate or Graduate Academic Board Chairperson Date**

**Disapproved:**

**Approved:**

**Provost or Designee Date**
I. **Initiation Date:** April 3, 2007

II. **Course Information**

A. **College:** College of Arts & Sciences

B. **Course Subject:** CHEM

C. **Course Number:** A104L

D. **Number of Credits:** 1

E. **Contact Hours:** 0 + 3

F. **Course Title:** Introduction to Organic Chemistry and Biochemistry Laboratory

G. **Grading Basis:** A-F

H. **Implementation Date:** Fall 2008

I. **Course Description:** The second semester of this introductory chemistry laboratory course sequence. Experiments are designed to reinforce concepts students have been exposed to regarding the basics of laboratory equipment, data collection, data analysis, and reporting. This course illustrates, augments and applies concepts covered in CHEM A104.

J. **Course Attributes:** GER in Natural Sciences Lab

K. **Prerequisites:** CHEM A103 with minimum grade of C and (CHEM A104 or concurrent enrollment).

L. **Test Scores:** N/A

M. **Corequisites:** N/A

N. **Registration Restrictions:** N/A

O. **Course Fee:** Yes
III. **Instructional Goals and Student Outcomes**

A. **Course Activities:**

Students will have the opportunity to discuss and collaborate with their peers to explore concepts and solve problems. Exercises and experiments provide students with chemical models and/or chemical data followed by questions to guide them through the learning cycle, building conceptual understanding in a process emulating the scientific method. The instructor will assist the learning process through a variety of methods that may include: lecture, group discussions, demonstration and/or discussions with individuals, groups or to the entire class.

B. **Instructional Goals:**

This course is designed to fulfill the needs of general education requirements and to provide a foundation in the organic chemistry and biochemistry laboratory, specifically for health science majors. It is intended to be a further introduction to the chemistry laboratory. Safety in the laboratory environment, the proper use of glassware and equipment, and an integration of chemistry concepts, mathematics, technology, problem solving and kinestheses are emphasized.

The instructor will:

1. Provide students with a safe, supervised environment to encourage self confidence in lab.
2. Supply students with standard operating procedures for each experiment and examples of experimental setups to encourage proper lab technique.
3. Present models of the periodic table, atomic and molecular structure, chemical bonding and reactions for development of observational skills and conceptual foundations in chemistry.
4. Present questions to initiate discussion, help students differentiate, link and integrate ideas and develop their own concepts, to articulate their thinking and explain models and solutions.
5. Provide multiple human-health contexts for applying concepts and invite students to defend and verify their models and their solutions to problems.

C. **Student Outcomes:**

The student will be able to:

1. Safely, correctly and confidently repeat previously covered skills in the chemistry laboratory.
2. Conduct laboratory work systematically by following procedures as outlined by the curriculum.
3. Recognize and interpret chemical models of the periodic table, atomic and molecular structure, bonding and chemical reactions.
4. Engage in science methodology by exploring and verifying measurements and chemical equations in health-related problems rather than memorizing facts and answering “algorithmic” questions.
5. Demonstrate effective, efficient communication skills for discussing, applying and verifying chemistry concepts across multiple human-health related contexts.

D. Assessment Measures:

Various assessment tools can be used, including, but not limited to quizzes, preparatory question sets, lab reports, homework, and comprehensive exams.

E. Guidelines for Evaluation:

Evaluation can be based on a variety of evaluation tools, including, but not limited to quizzes, preparatory question sets, lab reports, homework, and comprehensive exams.

IV. Topical Course Outline

1. Laboratory Safety and Orientation
2. Nomenclature
3. Identification of Alcohols and Phenols
4. Preparation of Acetylsalicylic Acid
5. Using Molecular Models to Explore Organic Compound Structure
6. Stereochemistry
7. Identification of Aldehydes and Ketones
8. Properties of Carboxylic Acids and Esters
9. Preparation and Properties of Soap
10. Acid-base Properties of Amino Acids
11. Quantitative Analysis of Vitamin C

V. Course Level Justification

This course introduces students to chemistry laboratory concepts. Students develop basic laboratory skills through model exploration and verification for comprehension and retention of concepts and become acquainted with chemistry as a laboratory science discipline.

VI. Suggested Texts


VII. **Bibliography**


Library Resource Form

Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A. - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: Introduction to Organic and Biochemistry Lab

1. Please identify the library liaison consulted in preparation of this proposal.
   
   Name: Daria O. Carle

   To see who your library liaison is at:
   UAA go to: http://www.lib.uaa.alaska.edu/webgroup/liaison.php3
   Kenai Peninsula College go to: http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
   Kodiak College go to: http://www.koc.alaska.edu/library/default.html
   Mat-Su College go to: http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support proposal.

   1. **Name:** Introduction to General, Organic & Biochemistry, 8th ed / **Author:** Bettelheim / **ISBN:** 978-0-495-01197-2 / **Publisher:** Thomson Publishers / **Date:** 2007.

   2. **Name:** Laboratory Experiments for General, Organic & Biochemistry, 8th ed / **Author:** Bettelheim / **ISBN:** 0-495-01504-0 / **Publisher:** Thomson Publishers / **Date:** 2007.

   3. **Name:** Student Solution Manual for Introduction to General, Organic & Biochemistry, 8th ed / **Author:** Bettelheim / **ISBN:** 0-495-01421-4 / **Publisher:** Thomson Publishers / **Date:** 2007.

Initiator signature
Curriculum Coordination Form

Notification Date: 4/03/2007

Initiating unit: Chemistry, CAS

Affected unit(s): Nursing, CHSW; Medical Laboratory Technology, CTC

Also coordinating with: Deans and Directors of the Community and Technical College; College of Business and Public Policy; College of Education; College of Health and Social Welfare; School of Engineering; Chugiak/Eagle River Campus; Kenai Peninsula College; Kodiak College, Mat-Su College; Elmendorf Air Force Base; Fort Richardson Army Post; Department of Mathematical Sciences

Course Prefix and Number: CHEM A104L   Previous Prefix and Number: N/A

Complete Course/Program Title: Introduction to Organic and Biochemistry Laboratory

Previous Course/Program Title: N/A

Description of Action: Course content update.

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK 99508
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<th>1a. School or College</th>
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<th>1b. Division</th>
<th>AMSC Division of Math Science</th>
<th>1c. Department</th>
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<td>B.S., CAS; B.S., Chemistry; Chemistry Minor; B.S., Biological Sciences; B.A., Biological Sciences; B.S., Geological Sciences; B.S., Natural Sciences; B.S., Aviation Technology; Associate of Applied Science, Computer Electronics; Associate of Applied Science, Dental Hygiene; Associate of Applied Science, Industrial Process Instrumentation; B.S., Medical Technology; Associate of Applied Science, Technology; B.S., Civil Engineering; Computer Systems Engineering; Electrical Engineering; Mechanical Engineering; MEDEX requirement; B.S., Construction Management.</td>
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<td>☐ Written Communication</td>
<td>✏ Quantitative Skills</td>
<td>☐ Humanities</td>
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<td>✏ Fine Arts</td>
<td>☐ Social Sciences</td>
<td>☒ Natural Sciences</td>
<td>✏ Integrative Capstone</td>
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<td>16. Course Description</td>
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<tr>
<td>Introduction to general chemistry for science majors which includes topics in elements and compounds, the periodic table, atomic and subatomic theory and spectroscopy, bonding, various chemical reactions, thermodynamics, atomic and molecular interactions in gases, liquids, solids and solution chemistry. Special Note: Assumes prior knowledge of college preparatory high school chemistry and algebra.</td>
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<td>17a. Course Prerequisite(s) (list prefix and number)</td>
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<td>CHEM A055 with a minimum grade of C or college preparatory high school chemistry with a minimum grade of C. If the Math A105 prerequisite is not satisfied, appropriate scores on the SAT or ACT tests or appropriate scores on a UAA approved placement test such as the Accuplacer Placement test.</td>
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<td>18. ☐ Mark if course has fees</td>
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<td>Dean/Director of School/College</td>
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<td>☐ Approved</td>
<td>☐ Disapproved:</td>
<td>Undergraduate or Graduate Academic Board Chairperson</td>
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<td>☐ Disapproved:</td>
<td>Provost or Designee</td>
<td>Date</td>
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<td>Curriculum Committee Chairperson</td>
<td>Date</td>
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</table>
I. **Initiation Date:** April 3, 2007

II. **Course Information**

   A. **College:** College of Arts & Sciences

   B. **Course Subject:** CHEM

   C. **Course Number:** A105

   D. **Number of Credits:** 3

   E. **Contact Hours:** 3 + 0

   F. **Course Title:** General Chemistry I

   G. **Grading Basis:** A-F

   H. **Implementation Date:** Fall 2008

   I. **Course Description:** Introduction to general chemistry for science majors which includes topics in elements and compounds, the periodic table, atomic and subatomic theory and spectroscopy, bonding, various chemical reactions, thermodynamics, atomic and molecular interactions in gases, liquids, solids and solution chemistry. Special Note: Assumes prior knowledge of college preparatory high school chemistry and algebra calculations.

   J. **Course Attributes:** GER in Natural Sciences

   K. **Prerequisites:** MATH A105 with minimum grade of C.

   L. **Test Scores:** N/A

   M. **Corequisites:** N/A

   N. **Registration Restrictions:** CHEM A055 with a minimum grade of C or college preparatory high school chemistry with a minimum grade of C. If the Math A105 prerequisite is not satisfied, appropriate scores on the SAT or ACT tests or appropriate scores on a UAA approved placement test such as the Accuplacer Placement test.
III. Instructional Goals and Student Outcomes

A. Course Activities:

Students will have the opportunity to collaborate with their peers to explore concepts and solve problems relevant to current topics in chemistry. Activities provide students with chemical models and/or chemical data followed by questions to guide them through the learning cycle, building conceptual understanding in a process emulating the scientific method. The instructor will assist the learning process through a variety of methods that may include: lectures, facilitation of group discussions, student presentations, demonstrations, and/or open discussion with the entire class.

B. Instructional Goals:

This course is designed to fulfill the needs of general education requirements and to provide a foundation in general chemistry specifically for science and engineering majors. It involves a significantly more rigorous approach than CHEM A103/A104, and does not concentrate specifically on health related problems nor emphasize Organic or Biochemistry. Concepts in atomic and molecular structure, bonding, and chemical reactions, skills in model exploration, hypotheses building and testing using problem solving skills are emphasized.

The instructor will:
1. Present chemical models of atomic and molecular structure, bonding and chemical reactions for investigation and development of problem solving and observational skills on problems relevant to current issues and topics in chemistry.
2. Present convergent and divergent questions to initiate discussion on the relevance of current chemical models to observe and understand natural phenomena, help students differentiate, link and integrate ideas and develop their own concepts, to articulate their thinking and explain models and solutions.
3. Provide multiple historical, cultural and socially relevant contexts for applying concepts and quantitative skills and invite students to defend and verify their models and their solutions to problems relevant to these contexts.

C. Student Outcomes:

The student will be able to:
1. Recognize and interpret chemical models of atomic and molecular structure, bonding and chemical reactions and apply observation,
investigative and problem solving skills on problems relevant to
current issues and topics in chemistry.
2. Engage skills in science methodology such as exploring, selecting and
constructing appropriate models and verifying successful applications
of their models to natural phenomena.
3. Explain a working understanding to problem solving on current topics
rather than memorizing facts and answering “algorithmic” questions.
4. Communicate, defend and verify their models and their solutions to
problems across multiple contexts.

D. **Assessment Measures:**

Various assessment tools can be used at the instructor’s discretion,
including: quizzes, in-class presentations, short reports, take-home exams,
creative work, homework, and a comprehensive standardized exam.

E. **Guidelines for Evaluation:**

Evaluation can be based on a variety of instruments such as: exams, in-
class presentations, critical papers, in-class participation, and/or in-class
activity reports.

IV. **Course Level Justification**

This course introduces students to general chemistry concepts in atomic
and molecular structure and in atomic and molecular interactions.
Students learn basic skills in model exploration and verification for
comprehension and retention of concepts and to become acquainted with
chemistry as a science discipline.

V. **Topical Course Outline**

1. Atomic Shell model
2. Photoelectron spectroscopy and the shell model
3. Electron Configurations and the periodic table
4. Bonding and Molecular Structure, Shapes and Orbitals
5. Ionic and metallic bonding and the Bond-Type Triangle Model
6. Introduction to transition metal coordination
7. Inter and Intra-molecular forces in gases, liquids, solids and solutions
8. Stoichiometry, balancing chemical equations, and calculations
9. Enthalpy of atom combination
10. Enthalpy changes in chemical reactions
11. Gas laws
VI. **Suggested Texts**


VII. **Bibliography**


Library Resource Form

Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A. - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: General Chemistry I

1. Please identify the library liaison consulted in preparation of this proposal.

   Name: Daria O. Carle

   To see who your library liaison is at:
   UAA go to: [http://www.lib.uaa.alaska.edu/webgroup/liaison.php3](http://www.lib.uaa.alaska.edu/webgroup/liaison.php3)
   Kenai Peninsula College go to: [http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html](http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html)
   Kodiak College go to: [http://www.koc.alaska.edu/library/default.html](http://www.koc.alaska.edu/library/default.html)
   Mat-Su College go to: [http://www.matsu.alaska.edu/library/library_staff.htm](http://www.matsu.alaska.edu/library/library_staff.htm)

2. Please list any new library and information recommended to support proposal.

   1. **Name**: Chemistry: Structure and Dynamics, 3rd ed. / **Author**: Spencer
      **ISBN**: 0-471-65552-X / **Publisher**: Wiley / **Date**: 2006

   2. **Name**: Chemistry: A Guided Inquiry / **Author**: Moog, R.
      **ISBN**: 0-471-69941-1 / **Publisher**: Wiley / **Date**: 2006

   __________________________________________
   Initiator signature
Curriculum Coordination Form

Notification Date: 4/03/2007

Initiating unit: Chemistry, CAS

Affected unit(s): Biological Sciences, CAS; Geological Sciences, CAS; Natural Sciences, CAS; Aviation Technology, CTC; Computer Electronics, CTC; Dental Hygiene, CTC; Industrial Process Instrumentation, CTC; Medical Laboratory Technology, CTC; Technology, CTC; Civil Engineering, SOENGR; Engineering, SOENGR

Also coordinating with: Deans and Directors of the Community and Technical College; College of Business and Public Policy; College of Education; College of Health and Social Welfare; School of Engineering; Chugiak/Eagle River Campus; Kenai Peninsula College; Kodiak College, Mat-Su College; Elmendorf Air Force Base; Fort Richardson Army Post; Department of Mathematical Sciences

Course Prefix and Number: CHEM A105  Previous Prefix and Number: N/A

Complete Course/Program Title: General Chemistry I

Previous Course/Program Title: N/A

Description of Action: Course content update.

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
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<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
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<td>AMSC Division of Math Science</td>
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<td>General Chemistry I Laboratory</td>
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<th>15. General Education Requirement</th>
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<th>16. Course Description</th>
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<td>An introductory chemistry laboratory course with experiments designed to introduce students to the basics of laboratory equipment, data collection, data analysis, and reporting; and to illustrate, augment and apply concepts covered in CHEM A105.</td>
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Proposal to Initiate, Add, Change, or Delete a Course or Program of Study
I. **Initiation Date:** April 3, 2007

II. **Course Information**

   A. **College:** College of Arts & Sciences
   
   B. **Course Subject:** CHEM
   
   C. **Course Number:** A105L
   
   D. **Number of Credits:** 1
   
   E. **Contact Hours:** 0 + 3
   
   F. **Course Title:** General Chemistry I Laboratory
   
   G. **Grading Basis:** A-F
   
   H. **Implementation Date:** Fall 2008
   
   I. **Course Description:** An introductory chemistry laboratory course with experiments designed to introduce students to the basics of laboratory equipment, data collection, data analysis, and reporting; and to illustrate, augment and apply concepts covered in CHEM A105.
   
   J. **Course Attributes:** GER in Natural Sciences Lab
   
   K. **Prerequisites:** CHEM A105 or concurrent enrollment
   
   L. **Test Scores:** N/A
   
   M. **Corequisites:** N/A
   
   N. **Registration Restrictions:** N/A
   
   O. **Course Fee:** Yes
III. **Instructional Goals and Student Outcomes**

A. **Course Activities:**

Students will have the opportunity to discuss and collaborate with their peers to explore concepts and solve problems. Exercises and experiments provide students with chemical models and/or chemical data followed by questions to guide them through the learning cycle, building conceptual understanding in a process emulating the scientific method. The instructor will assist the learning process through a variety of methods that may include: lecture, group discussions, demonstration and/or short talk to individuals, groups or to the entire class.

B. **Instructional Goals:**

This course is designed to fulfill the needs of general education requirements and to provide a foundation in general chemistry and the general chemistry laboratory, specifically for science and engineering majors. It is intended to be an introduction to the chemistry laboratory. Safety in the laboratory environment, the proper use of glassware and equipment, and an integration of chemistry concepts, mathematics, technology, problem solving and kinestheses are emphasized.

The instructor will:

1. Provide students with a safe, supervised environment to encourage self confidence in lab.
2. Supply students with standard operating procedures for each experiment and examples of experimental setups to encourage proper lab technique.
3. Present models of the periodic table, atomic and molecular structure, chemical bonding and reactions for development of observational skills and conceptual foundations in chemistry.
4. Present questions to initiate discussion, help students differentiate, link and integrate ideas and develop their own concepts, to articulate their thinking and explain models and solutions.
5. Provide multiple current topic contexts for applying concepts and invite students to defend and verify their models and their solutions to problems.

C. **Student Outcomes:**

The student will be able to:

1. Safely, correctly and confidently repeat previously covered skills in the chemistry laboratory.
2. Conduct laboratory work systematically by following procedures as outlined by the curriculum.
3. Recognize and interpret chemical models of the periodic table, atomic and molecular structure, bonding and chemical reactions.
4. Engage in science methodology by exploring and verifying measurements and chemical equations rather than memorizing facts and answering “algorithmic” questions.
5. Demonstrate effective, efficient communication skills for discussing and applying chemistry concepts across multiple current topic contexts.

D. Assessment Measures:

Various assessment tools can be used, including, but not limited to quizzes, preparatory question sets, lab reports, homework, and comprehensive exams.

E. Guidelines for Evaluation:

Evaluation can be based on a variety of evaluation tools, including, but not limited to quizzes, preparatory question sets, lab reports, homework, and comprehensive exams.

IV. Course Level Justification

This course introduces students to chemistry laboratory concepts. Students develop basic laboratory skills through model exploration and verification for comprehension and retention of concepts and become acquainted with chemistry as a laboratory science discipline.

V. Topical Course Outline
1. Laboratory Safety and Orientation
2. Graphing Data by Hand
3. Mathematics in Chemistry
4. Exploring Stoichiometry Using Hardware Models
5. Computers and Analytical Software Orientation
6. The Use of Volumetric Glassware
7. Solutions Preparation and pH
8. Determination of Concentration Using Spectrophotometry
9. Determination of the Molar Volume of a Gas
10. Exploring Stoichiometry Using a Synthesis Reaction
11. Calorimetry and the Enthalpies of Neutralization

VI. Suggested Texts

Kennish, Riner, Dodds, Dodds and Schlabaugh. General Chemistry I Laboratory Manual. University of Alaska Anchorage, Chemistry Department. 2007.


VII. Bibliography


Curriculum Coordination Form

Notification Date: 4/03/2007

Initiating unit: Chemistry, CAS

Affected unit(s): Biological Sciences, CAS; Geological Sciences, CAS; Natural Sciences, CAS; Aviation Technology, CTC; Computer Electronics, CTC; Industrial Process Instrumentation, CTC; Medical Laboratory Technology, CTC; Technology, CTC; Civil Engineering, SOENGR; Engineering, SOENGR

Also coordinating with: Deans and Directors of the Community and Technical College; College of Business and Public Policy; College of Education; College of Health and Social Welfare; School of Engineering; Chugiak/Eagle River Campus; Kenai Peninsula College; Kodiak College, Mat-Su College; Elmendorf Air Force Base; Fort Richardson Army Post; Department of Mathematical Sciences

Course Prefix and Number: CHEM A105L   Previous Prefix and Number: N/A

Complete Course/Program Title: General Chemistry I Laboratory

Previous Course/Program Title: N/A

Description of Action: Course content update.

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK 99508
Library Resource Form

Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A. - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: General Chemistry I Laboratory

1. Please identify the library liaison consulted in preparation of this proposal.

   Name: Daria O. Carle

   To see who your library liaison is at:
   UAA go to: http://www.lib.uaa.alaska.edu/webgroup/liaison.php3
   Kenai Peninsula College go to: http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
   Kodiak College go to: http://www.koc.alaska.edu/library/default.html
   Mat-Su College go to: http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support proposal.

   1. Name: Chemistry: Structure and Dynamics, 3rd ed. / Author: Spencer
      ISBN: 0-471-65552-X / Publisher: Wiley / Date: 2006

   2. Name: Chemistry: A Guided Inquiry / Author: Moog, R.
      ISBN: 0-471-69941-1 / Publisher: Wiley / Date: 2006

________________________________________________________________________

Initiator signature
## Curriculum Action Request

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

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<th>1b. Division</th>
<th>1c. Department</th>
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**Initiator Signature**  
**Date**

---

**Dean/Director of School/College**  
**Date**

---

**Department Chairperson**  
**Date**

---

**Undergraduate or Graduate Academic Board Chairperson**  
**Date**

---

**Provost or Designee**  
**Date**
I. **Initiation Date:** April 3, 2007

II. **Course Information**

A. **College:** College of Arts & Sciences

B. **Course Subject:** CHEM

C. **Course Number:** A106

D. **Number of Credits:** 3

E. **Contact Hours:** 3 + 0

F. **Course Title:** General Chemistry II

G. **Grading Basis:** A-F

H. **Implementation Date:** Fall 2008

I. **Course Description:** The second semester in the general chemistry sequence for science majors. Topics include kinetics, equilibrium chemistry, acid-base chemistry, oxidation-reduction reactions, electrochemical cell chemistry, thermodynamics, nuclear chemistry, and chemical analysis methods.

J. **Course Attributes:** GER in Natural Sciences

K. **Prerequisites:** CHEM A105 with minimum grade of C

L. **Test Scores:** N/A

M. **Corequisites:** N/A

N. **Registration Restrictions:** N/A

O. **Course Fee:** No
III. Instructional Goals and Student Outcomes

A. Course Activities:

Students will have the opportunity to collaborate with their peers to explore concepts and solve problems relevant to current topics in chemistry. Activities provide students with chemical models and/or chemical data followed by questions to guide them through the learning cycle, building conceptual understanding in a process emulating the scientific method. The instructor will assist the learning process through a variety of methods that may include: lectures, facilitation of group discussions, student presentations, demonstrations, and/or open discussion with the entire class.

B. Instructional Goals:

This course is designed to fulfill the needs of general education requirements and to provide a foundation in general chemistry specifically for science and engineering majors. It involves a significantly more rigorous approach than CHEM A103/A104, and does not concentrate specifically on health related problems nor emphasize Organic or Biochemistry. Concepts in various types of chemical interactions and dynamics, development of chemical analysis methods, skills in model exploration, hypotheses building and testing using problem solving skills are emphasized.

The instructor will:

1. Present chemical models of atomic and molecular structure, bonding and chemical reactions for investigation and development of problem solving and observational skills on problems relevant to current issues and topics in chemistry.
2. Present convergent and divergent questions to initiate discussion on the relevance of current chemical models to observe and understand natural phenomena, help students differentiate, link and integrate ideas and develop their own concepts, to articulate their thinking and explain models and solutions.
3. Provide multiple historical, cultural and socially relevant contexts for applying concepts and quantitative skills and invite students to defend and verify their models and their solutions to problems relevant to these contexts.

C. Student Outcomes:

The student will be able to:

1. Recognize and interpret chemical models of atomic and molecular structure, bonding and chemical reactions and apply observation, investigative and problem solving skills on problems relevant to current issues and topics in chemistry.
2. Engage skills in science methodology such as exploring, selecting and constructing appropriate models and verifying successful applications of their models to natural phenomena.
3. Explain a working understanding to problem solving on current topics rather than memorizing facts and answering “algorithmic” questions.
4. Communicate, defend and verify their models and their solutions to problems across multiple contexts.

D. **Assessment Measures:**

Various assessment tools can be used at the instructor’s discretion, including: quizzes, in-class presentations, short reports, take-home exams, creative work, homework, and a comprehensive standardized exam.

E. **Guidelines for Evaluation:**

Evaluation can be based on a variety of instruments such as: exams, in-class presentations, critical papers, in-class participation, and/or in-class activity reports.

IV. **Course Level Justification**

This course introduces students to general chemistry concepts in molecular interactions, reaction dynamics and methods of analysis. Students learn basic skills in model exploration and verification for comprehension and retention of concepts and to become acquainted with chemistry as a science discipline.

V. **Topical Course Outline**

1. Equilibrium and the equilibrium constant
2. Reaction Quotient and solubility product
3. Acid –Base models, pH and buffers
4. Oxidation-Reduction reactions and oxidation numbers
5. Electrochemical Cell and Cell voltage
6. Entropy and thermodynamics
7. Kinetics and integrated rate laws
8. Nuclear Chemistry and radioactive decay kinetics
9. Transition metal coordination and reaction mechanism
10. Reaction mechanism and reaction rates
11. Activation energy and reaction mechanism

VI. **Suggested Texts**


VII. Bibliography


Notification Date: 4/03/2007

Initiating unit: Chemistry, CAS

Affected unit(s): Biological Sciences, CAS; Geological Sciences, CAS; Natural Sciences, CAS; Medical Laboratory Technology, CTC; Technology, CTC; Civil Engineering, SOENGR; Engineering, SOENGR

Also coordinating with: Deans and Directors of the Community and Technical College; College of Business and Public Policy; College of Education; College of Health and Social Welfare; School of Engineering; Chugiak/Eagle River Campus; Kenai Peninsula College; Kodiak College, Mat-Su College; Elmendorf Air Force Base; Fort Richardson Army Post; Department of Mathematical Sciences

Course Prefix and Number: CHEM A106

Previous Prefix and Number: N/A

Complete Course/Program Title: General Chemistry II

Previous Course/Program Title: N/A

Description of Action: Course content update.

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK 99508
Library Resource Form

Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A. - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: General Chemistry II

1. Please identify the library liaison consulted in preparation of this proposal.

   Name: Daria O. Carle

   To see who your library liaison is at:
   UAA go to: http://www.lib.uaa.alaska.edu/webgroup/liaison.php3
   Kenai Peninsula College go to: http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
   Kodiak College go to: http://www.koc.alaska.edu/library/default.html
   Mat-Su College go to: http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support proposal.

   1. Name: Chemistry: Structure and Dynamics, 3rd ed. / Author: Spencer
      ISBN: 0-471-65552-X / Publisher: Wiley / Date: 2006

   2. Name: Chemistry: A Guided Inquiry / Author: Moog, R.
      ISBN: 0-471-69941-1 / Publisher: Wiley / Date: 2006

Initiator signature
### Curriculum Action Request
University of Alaska Anchorage
Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

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<td>The second semester of this introductory chemistry laboratory course sequence. Experiments are designed to reinforce concepts students have been exposed to regarding the basics of laboratory equipment, data collection, data analysis, and reporting. This course illustrates, augments and applies concepts covered in CHEM A106.</td>
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I. **Initiation Date:** April 3, 2007

II. **Course Information**

A. **College:** College of Arts & Sciences

B. **Course Subject:** CHEM

C. **Course Number:** A106L

D. **Number of Credits:** 1

E. **Contact Hours:** 0 + 3

F. **Course Title:** General Chemistry II Laboratory

G. **Grading Basis:** A-F

H. **Implementation Date:** Fall 2008

I. **Course Description:** The second semester of this introductory chemistry laboratory course sequence. Experiments are designed to reinforce concepts students have been exposed to regarding the basics of laboratory equipment, data collection, data analysis, and reporting. This course illustrates, augments and applies concepts covered in CHEM A106.

J. **Course Attributes:** GER in Natural Sciences Lab

K. **Prerequisites:** CHEM A106 or concurrent enrollment and CHEM A105L.

L. **Test Scores:** N/A

M. **Corequisites:** N/A

N. **Registration Restrictions:** N/A

O. **Course Fee:** Yes
III. Instructional Goals and Student Outcomes

A. Course Activities:

Students will have the opportunity to discuss and collaborate with their peers to explore concepts and solve problems. Exercises and experiments provide students with chemical models and/or chemical data followed by questions to guide them through the learning cycle, building conceptual understanding in a process emulating the scientific method. The instructor will assist the learning process through a variety of methods that may include: lecture, group discussions, demonstration and/or short talk to individuals, groups or to the entire class.

B. Instructional Goals:

This course is designed to fulfill the needs of general education requirements and to provide a foundation in general chemistry and the general chemistry laboratory, specifically for science and engineering majors. It is intended to be an introduction to the chemistry laboratory. Safety in the laboratory environment, the proper use of glassware and equipment, and an integration of chemistry concepts, mathematics, technology, problem solving and kinestheses are emphasized.

The instructor will:

1. Provide students with a safe, supervised environment to encourage self-confidence in lab.
2. Supply students with standard operating procedures for each experiment and examples of experimental setups to encourage proper lab technique.
3. Present models of the periodic table, atomic and molecular structure, chemical bonding and reactions for development of observational skills and conceptual foundations in chemistry.
4. Present questions to initiate discussion, help students differentiate, link and integrate ideas and develop their own concepts, to articulate their thinking and explain models and solutions.
5. Provide multiple current topic contexts for applying concepts and invite students to defend and verify their models and their solutions to problems.

C. Student Outcomes:

The student will be able to:

1. Safely, correctly and confidently repeat previously covered skills in the chemistry laboratory.
2. Conduct laboratory work systematically by following procedures as outlined by the curriculum.
3. Recognize and interpret chemical models of the periodic table, atomic and molecular structure, bonding and chemical reactions.
4. Engage in science methodology by exploring and verifying measurements and chemical equations rather than memorizing facts and answering “algorithmic” questions.
5. Demonstrate effective, efficient communication skills for discussing and applying chemistry concepts across multiple current topic contexts.

D. **Assessment Measures:**

Various assessment tools can be used, including, but not limited to quizzes, preparatory question sets, lab reports, homework, and comprehensive exams.

E. **Guidelines for Evaluation:**

Evaluation can be based on a variety of evaluation tools, including, but not limited to quizzes, preparatory question sets, lab reports, homework, and comprehensive exams.

IV. **Course Level Justification**

This course introduces students to chemistry laboratory concepts. Students develop basic laboratory skills through model exploration and verification for comprehension and retention of concepts and become acquainted with chemistry as a laboratory science discipline.

V. **Topical Course Outline**

1. Laboratory Safety and Orientation
2. Mathematics in Chemistry and Computer Orientation
3. Chemical Equilibrium and the Equilibrium Constant
4. Determination of the Empirical Formula of a Coordination Complex
5. Determination of a Ksp Using Spectrophotometry
6. Analysis of Vinegar by Titration
7. Determination of Buffer Capacity
8. Spectrophotometric Determination of the pKa of a Color Indicator
9. Redox Titration
10. The Nernst Equation
11. Simultaneous Spectrophotometric Quantitation
12. Chemical Kinetics
VI. **Suggested Texts**

Kennish, Riner, Dodds, Dodds and Schlabaugh. *General Chemistry II Laboratory Manual*. University of Alaska Anchorage, Chemistry Department. 2007.


VII. **Bibliography**


Library Resource Form

Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: General Chemistry II Laboratory

1. Please identify the library liaison consulted in preparation of this proposal.

   Name: Daria O. Carle

   To see who your library liaison is at:
   UAA go to: http://www.lib.uaa.alaska.edu/webgroup/ liaison.php3
   Kenai Peninsula College go to: http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
   Kodiak College go to: http://www.koc.alaska.edu/library/default.html
   Mat-Su College go to: http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support proposal.

   1. Name: Chemistry: Structure and Dynamics, 3rd ed. / Author: Spencer
      ISBN: 0-471-65552-X / Publisher: Wiley / Date: 2006

   2. Name: Chemistry: A Guided Inquiry / Author: Moog, R.
      ISBN: 0-471-69941-1 / Publisher: Wiley / Date: 2006

Initiator signature
Curriculum Coordination Form

Notification Date: 4/03/2007

Initiating unit: Chemistry, CAS

Affected unit(s): Biological Sciences, CAS; Geological Sciences, CAS; Natural Sciences, CAS; Medical Laboratory Technology, CTC; Civil Engineering, SOENGR; Engineering, SOENGR

Also coordinating with: Deans and Directors of the Community and Technical College; College of Business and Public Policy; College of Education; College of Health and Social Welfare; School of Engineering; Chugiak/Eagle River Campus; Kenai Peninsula College; Kodiak College, Mat-Su College; Elmendorf Air Force Base; Fort Richardson Army Post; Department of Mathematical Sciences

Course Prefix and Number: CHEM A106L  Previous Prefix and Number: N/A

Complete Course/Program Title: General Chemistry II Laboratory

Previous Course/Program Title: N/A

Description of Action: Course content update.

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

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Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK  99508
## Curriculum Action Request

**University of Alaska Anchorage**

Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

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<th>1b. Division</th>
<th>1c. Department</th>
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### 6. Complete Course/Program Title

**Honors Seminar: Enduring Books**

Abbreviated Title for Transcript (30 character)

<table>
<thead>
<tr>
<th>7. Type of Course</th>
<th>8. Type of Action</th>
<th>9. Repeat Status</th>
<th># of Repeats</th>
<th>Max Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>Add</td>
<td>Yes</td>
<td>1</td>
<td>6</td>
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</table>

<table>
<thead>
<tr>
<th>10. Grading Basis</th>
<th>11. Implementation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-F</td>
<td>semester/year</td>
</tr>
<tr>
<td>P/NP</td>
<td>From: Fall/2008</td>
</tr>
<tr>
<td>NG</td>
<td>To: /9999</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Cross Listed with</th>
<th>Stacked with Cross-Listed Coordination Signature</th>
</tr>
</thead>
</table>

### 13. List any programs or college requirements that require this course

**University Honors College**

### 14. Coordinate with Affected Units:

Department, School, or College

Initiator Signature Date

### 15. General Education Requirement

- Oral Communication
- Written Communication
- Quantitative Skills
- Humanities
- Fine Arts
- Social Sciences
- Natural Sciences
- Integrative Capstone

### 16. Course Description

Honors seminar focusing on the directed reading of a single book of enduring significance. Special Note: May be repeated once for credit under a different subtitle. May be used only once for GER Humanities.

### 17a. Course Prerequisite(s) (list prefix and number)

none

### 17b. Test Score(s)


### 17c. Co-requisite(s) (concurrent enrollment required)


### 17d. Other Restriction(s)

<table>
<thead>
<tr>
<th>College</th>
<th>Major</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
</table>

### 17e. Registration Restriction(s) (non-codable)

Registration limited to students admitted to the University Honors College, and to student who have permission from the University Honors College to register.

### 18. Mark if course has fees

### 19. Justification for Action

Add this course to the GER Humanities list. Currently this course satisfies a GER in Humanities when taken with the Honors Foundation courses (HNRS A292 and HNRS A310 - see page 228 of the current catalog), but not independently.
I. Initiation Date: November 12, 2007

II. Course Information:

College: University Honors College

Course Subject/Number: HNRS A192

Credits and Contact Hours: 3.0 credits, 3+0 Contact Hours

Course Title: Honors Seminar: Enduring Books

Grading basis: A-F

Course Description: Honors seminar focusing on the directed reading of a single book of enduring significance.

Course attributes: UAA GER Humanities Requirement

Special Note: May be repeated once for credit under a different subtitle. Only 3 credits of HNRS A192 may be applied to GER Humanities.

Status of course relative to a degree or certificate program: required course for University Honors Students, and elective (on a space available basis) for other students

Prerequisites: none (enrollment is controlled by the registration restriction provided below)

Registration Restriction: Registration limited to students admitted to the University Honors College, and to student who have permission from the University Honors College to register.

Course fees: None

III. Instructional Goals

The instructor will:
1) Teach the skills of close reading,
2) Encourage critical thinking and teach students to analyze what they are reading and place it in a larger historical and cultural context;
3) Teach students to articulate the problems they encounter and provide assessments of their significance;
4) Help students to improve their writing style, and
5) Help students to develop their capacity for interactive discussion, including both listening and presentation skills.

IV. Student Outcomes and Evaluation Methods

<table>
<thead>
<tr>
<th>Student Outcomes</th>
<th>Evaluation and Assessment Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read closely and demonstrate comprehension of the readings</td>
<td>Short and long papers, class participation</td>
</tr>
</tbody>
</table>
Analyze what they are reading and place it in a larger historical and cultural context
Write expository papers making good use of evidence from the texts and using a suitable academic format
Articulate central problems and questions that the text presents, and provide reasoned assessments of their significance
Demonstrate a capacity for interactive discussion

| Analyze what they are reading and place it in a larger historical and cultural context | Short and long papers, class participation, examinations |
| Write expository papers making good use of evidence from the texts and using a suitable academic format | Short and long papers |
| Articulate central problems and questions that the text presents, and provide reasoned assessments of their significance | Short and long papers, class participation, oral presentation |
| Demonstrate a capacity for interactive discussion | Class participation, oral presentation |

V. Course Level Justification:

This course is designed as an umbrella course providing the introduction to the University Honors Program for first-year students. The seminar will focus on the art of reading a text closely and grappling with its significance while at the same time honing the student’s abilities in listening, writing, and speaking. Class discussion will be required, augmented by student presentations.

VI. Course Activities:

The course will meet as a small seminar for discussion of the reading. Students will prepare several short papers on the book(s) being read, and a major essay, a summary of which may be presented to the class as an oral presentation. There also may be occasional lectures by the instructor to explain concepts important to the understanding of the text, and there may be examinations given to test the students’ knowledge of concepts. The above are general guidelines of course activities; each professor teaching a section of the course based on a specific book will develop specific activities and evaluation criteria for that section.

VII. Course Outline

The course is an umbrella course under which specific content outlines will be developed to match the specific book being read.

The following sample outline is for a course on ethics centering around the reading of Aristotle’s Nicomachean Ethics:

I. Why Study Ethics? The Two Traditions in Ethics. The Issue of Moral Decline.
II. How should we live? Questions about the good life: Happiness, Flourishing, Prosperity, Success, Fame, Power
III. Video: Affluenza (in-class)
IV. Virtue and Vice: What are the good dispositions we should strive for and why?
V. The Virtues of Courage and Temperance; Temperance and pleasure
VI. The Virtue of Justice and Honesty
VII. To what extent are we responsible for our actions? How much can we control and correct our behavior? Responsibility, Moral Strength and Weakness
VIII. Case Study: The Exxon Valdez oil spill
IX. Are the Virtues sufficient for doing the right thing? How do we choose the right thing? The notion of Practical Wisdom
X. What is the Basis of Ethics? Hume’s answer: sentiment and utility.
XI. What is the Basis of Ethics? Kant’s answer: reason and principle
XII. Class Summary

The following sample outline is for a course focusing on the reading of Rachel Carson’s Silent Spring:

I. Introduction to Silent Spring
II. What issues do not receive enough attention?
III. Social & political developments following the publication of Silent Spring
IV. Advocacy & community-based science on contaminants in Alaska
V. Local government and pesticides
The following sample outline is for a course focusing on the reading of Ken Kesey’s *One Flew Over the Cuckoo’s Nest*:

I. Course Introduction, syllabus, group discussion of text & assumptions + groups assigned  
II. What do you know about Ken Kesey? Mental Health? The 1950s? The 1960s?  
III. Do we fear difference? What is deviant behavior?  
IV. Creativity and madness  
V. *Cuckoo’s Nest*: Part One + 1950s & 1960s  
VI. DSM, evaluation, standard practices  
VII. *Cuckoo’s Nest*: Part Two  
VIII. Group 1: Presentation & discussion on the Milgram experiments  
IX. *Cuckoo’s Nest*: Parts Three & Four  
X. Alaska Psychiatric Institute – Field Visit  
XI. Group 2: Presentation & discussion on Stanford experiments  
XII. Character development, symbols, archetypes, racism, sexism & other isms  
XIII. *The Yellow Wallpaper*  
XIV. Film: *One Flew Over the Cuckoo’s Nest*  
XV. *The Bell Jar* & Sylvia Plath: Poets/Writers & Madness  
XVI. Film: *Titicut Follies*  
XVII. *Girl, Interrupted* (novel)  
XVIII. Film: *Girl, Interrupted*  
XIX. Relationships & differences between *Cuckoo’s Nest, Bell Jar & Girl, Interrupted*  
XX. Writing styles & *Sailor Song*  
XXI. Ken Kesey’s favorite book + highlights of student writing + final discussion

**VIII. Suggested Texts**
The texts used for the course will vary depending on the book or books chosen as the course focus.

**For a course on Rachel Carson’s *Silent Spring*, the following texts might be used:**  

**For a course on Aristotle, the following texts might be used:**  


**For a course on Ken Kesey’s One Flew Over the Cuckoo’s Nest, the following texts might be used:**


**IX. Bibliography**

The bibliography, references, and reading list will vary according to the book chosen for the course selection.

**For a course on Silent Spring, the following references might be used:**


**For a course on Aristotle the following references might be used:**


**For a course on One Flew Over the Cuckoo’s Nest, the following references might be used:**

Library Resource Form

Excerpts from the Northwest Association of Schools and Colleges Accreditation Handbook 1999 Edition

Standard Five - Library And Information Resources
Standard 5.A - Purpose and Scope
The primary purpose for library and information resources is to support teaching, learning, and, if applicable, research in ways consistent with, and supportive of, the institution's mission and goals. Adequate library and information resources and services, at the appropriate level for degrees offered, are available to support the intellectual, cultural, and technical development of students enrolled in courses and programs wherever located and however delivered.

Standard Two - Educational Program And Its Effectiveness
Standard 2.A. - General Requirements
2.A.8 Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.

Program/Course Title: HNRS A192  Honors Freshman Seminar: Enduring Books

1. Please identify the library liaison consulted in preparation of this proposal.

   Name:  Daria O. Carle

   To see who your library liaison is at:
   UAA go to:  http://www.lib.uaa.alaska.edu/webgroup/liaison.php3
   Kenai Peninsula College go to:  http://www.uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
   Kodiak College go to:  http://www.koc.alaska.edu/library/default.html
   Mat-Su College go to:  http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support the proposal.

________________________________________
Initiator signature
Curriculum Coordination Form

Notification Date: 11/9/07

Initiating unit: University Honors College, Academic Affairs

Affected unit(s):

Course Prefix and Number: HNRS A192  Previous Prefix and Number: n/a

Complete Course/Program Title: Honors Freshman Seminar: Enduring Books

Previous Course/Program Title:

Description of Action: List HNRS 192 as a separate GER in Humanities

Supporting documentation of the proposal is attached.

Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK 99508

If no written comments are received by the UAB or GAB within ten (10) days of notification date shown above, it is assumed that there are no objections to the proposal.

Note: Acknowledgement of coordination does not mean approval, it is only meant to verify that coordination has occurred.
Resource Implication Form

1. School/College University Honors College

2. Program/Course Honors

3. Course Prefix HNRS

4. Course Number A192

5. Implementation Date Fall 2008

6. Type of Action and Category

   [ ] Course addition  [x] Course change  [ ] Program addition  [ ] Program change

7. Consequences of Actions and Costs: Check all appropriate categories and provide an explanation of how it will be funded and by whom.

   [ ] part-time faculty  $    [ ] new full-time faculty  $
   [ ] reassignment of full-time faculty  $    [ ] additional class/lab space  $
   [ ] modification of class/lab space  $    [ ] additional library resources  $
   [ ] additional computer equipment  $    [ ] other costs  $

8. Explanation: No new resources needed

Approved

Disapproved

Department Chair

Date

Approved

Disapproved

Dean/Director of School/College

Date

Approved

Disapproved

Provost

Date
## Curriculum Action Request
### University of Alaska Anchorage
#### Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC Honors College</td>
<td></td>
<td>HONR University Honors College</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/CEU</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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</thead>
<tbody>
<tr>
<td>HNRS</td>
<td>A292</td>
<td></td>
<td>3.0</td>
<td>(3+0)</td>
</tr>
</tbody>
</table>

### 6. Complete Course/Program Title
#### Honors Seminar in Social Science

**Abbreviated Title for Transcript (30 character)**

### 7. Type of Course
- [ ] Academic
- [ ] Non-credit
- [ ] CEU
- [ ] Professional Development

### 8. Type of Action
- [ ] Add
- [ ] Change
- [ ] Delete

### 9. Repeat Status
- [ ] Yes
- # of Repeats: 1
- Max Credits: 6

### 10. Grading Basis
- [ ] A-F
- [ ] P/NP
- [ ] NG

### 11. Implementation Date
- From: Fall/2008
- To: 9999

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

### 13. List any programs or college requirements that require this course
- University Honors College

### 14. Coordinate with Affected Units:
- Department, School, or College

### 15. General Education Requirement
- [ ] Oral Communication
- [ ] Written Communication
- [ ] Quantitative Skills
- [ ] Humanities
- [ ] Fine Arts
- [ ] Social Sciences
- [ ] Natural Sciences
- [ ] Integrative Capstone

### 16. Course Description
Examines selected topics from a social science perspective. Exposes students to a broad range of social issues, and helps them to develop skills to examine and evaluate their world. Emphasizes research findings and skills, including the collection and analysis of both quantitative and qualitative data. Students will gain considerable experience communicating both orally and in writing. Special Note: May be repeated once for credit under a different subtitle.

### 17a. Course Prerequisite(s) (list prefix and number)
- None

### 17b. Test Score(s)

### 17c. Co-requisite(s) (concurrent enrollment required)

### 17d. Other Restriction(s)
- College
- Major
- Class
- Level

### 17e. Registration Restriction(s) (non-codable)
Registration limited to students admitted to the University Honors College, and to student who have permission from the University Honors College to register.

### 18. Mark if course has fees

### 19. Justification for Action
Add this course to the GER Social Science list. Currently this course satisfies a GER in Social Science when taken with the Honors Foundation courses (HNRS A192 and HNRS A310 - see page 228 of the current catalog), but not independently.

---

Initiator (faculty only)

Initiator (PRINT NAME)

Approved

Disapproved

Dean/Director of School/College

Approved

Disapproved

Undergraduate or Graduate

Approved

Disapproved

Academic Board Chairperson

Approved

Disapproved

Provost or Designee

Date
I. Initiation Date: November 9, 2007

II. Course Information:

   College: University Honors College

   Course Subject/Number: HNRS A292

   Credits and Contact Hours: 3.0 credits, 3+0 Contact Hours

   Course Title: Honors Seminar in Social Science

   Grading basis: A-F

   Course Description: Examines selected topics from a social science perspective. Exposes students to a broad range of social issues, and helps them to develop skills to examine and evaluate their world. Emphasizes research findings and skills, including the collection and analysis of both quantitative and qualitative data. Students will gain considerable experience communicating both orally and in writing.

   Course attributes: UAA GER Social Science Requirement

   Special Note: May be repeated once for credit under a different subtitle

   Status of course relative to a degree or certificate program: required course for University Honors Students, and elective (on a space available basis) for other students

   Prerequisites: none (enrollment is controlled by the registration restriction provided below)

   Registration Restriction: Registration limited to students admitted to the University Honors College, and to student who have permission from the University Honors College to register.

   Course fees: None

III. Instructional Goals

   The instructor will:
   1) Introduce social science research methodology and applications;
   2) Provide examples of relevant social science theory and research;
   3) Guide students as they develop a research project and formulate an analysis plan; and
   4) Facilitate student discussions and active learning in a seminar format.

IV. Student Outcomes and Evaluation Methods

<table>
<thead>
<tr>
<th>Student Outcomes</th>
<th>Evaluation and Assessment Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students who successfully complete this course will be able to:</td>
<td></td>
</tr>
<tr>
<td>Demonstrate knowledge of the social science discipline under study</td>
<td>Examinations, class participation, written assignments</td>
</tr>
<tr>
<td>Formulate research ideas and hypotheses, examine a social science research question, and gain experience carrying out research by applying research methods learned in the course.</td>
<td>Research project and presentation</td>
</tr>
</tbody>
</table>

72
Distinguish between empirical and non-empirical data, and understand how ideas about social phenomena may be tested and verified or rejected

Class participation, examinations, written assignments

Employ appropriate research methodologies and applications to design a research project, including conducting a review of relevant literature, and collecting and analyzing empirical data, and summarizing key findings

Research project and presentation

V. Course Level Justification:

This course does not presume prior knowledge and familiarity with the social science discipline under study, but does require writing and reading skills. Students will be required to apply social science research methods learned in class to a research question.

VI. Course Activities:

The course will be taught primarily in a seminar format with some lecture component. Students will be expected to come to each class prepared to discuss reading materials and assignments.

Students will also be required to complete a major research project, which will involve designing and conducting an empirical study on a suitable topic of interest to the student. The project will require students to: 1) conduct a review of the relevant literature, 2) formulate a research question or hypothesis, 3) propose a study to address the research question, 4) collect and analyze data, and 5) report the results both orally and in writing.

Although each student will conduct his or her own project, students will be asked to report to the class at each stage of the project, and help each other through in-class discussion. Students may be required to complete essay examinations covering some course material (for example, social science research methodology).

VII. Course Outline

Although the general focus of the course defined by the course description and the course activities must be maintained, individual instructors have considerable freedom to define specific content components, based on the instructor’s discipline and personal perspective. The following is one sample outline for the course:

**Topic: Gender: Nature and Culture**

**Part I: Studying Sex and Gender**
- Social Science Research Methodologies
- Quantitative and Qualitative Data Analysis
- Ethics in Social Research
- Major Perspectives in the Study of Gender

**Part II: Influences on Gender Development**
- Nature: Biological and Genetic Influences on Gender
- Nurture: Social, Cultural, and Environmental Influences on Gender
- Gender Stereotyping and the Media

**Part III: Gender Differences and Similarities in Emotion, Health, and Sexuality**
- Gender and Emotion
- Relationships
- Sexual Behavior, Health, and Orientation
- Mental Health, Psychological Disorders, and Therapy
- Physical Health and Fitness
Part IV: Gender and Achievement in School and the Workplace
Intelligence and Cognitive Abilities
Achievement Motivation
School and the Education System
Workplace Achievement and Wage Gap
Sexual and Gender Harassment and Discrimination

III. Suggested Texts
The textbooks used will vary depending on the social science topic being examined.

Following are textbooks which could be used for the subject "Gender: Nature and Culture."


Bibliography
The bibliography, references, reading list, and films and videos will vary according to the specific perspective and course content elements chosen by the instructor of the specific course section. A sample bibliography for the topic of “Gender: Nature and Culture” follows. Many of these texts could be used for any social science topic taught in this course.

Gender: Nature and Culture


Program/Course Title: HNRS A292 Honors Seminar on Social Science

1. Please identify the library liaison consulted in preparation of this proposal.

   Name: Daria O. Carle

To see who your library liaison is at:
UAA go to: http://www.lib.uaa.alaska.edu/webgroup/liaison.php3
Kenai Peninsula College go to: http://www..uaa.alaska.edu/kenai/KPC%20Library%20Webpage/frameset.html
Kodiak College go to: http://www.koc.alaska.edu/library/default.html
Mat-Su College go to: http://www.matsu.alaska.edu/library/library_staff.htm

2. Please list any new library and information recommended to support the proposal.

Initiator signature
Curriculum Coordination Form

Notification Date: 11/9/07

Initiating unit: University Honors College, Academic Affairs

Affected unit(s):

Course Prefix and Number: HNRS A292 Previous Prefix and Number: n/a

Complete Course/Program Title: Honors Seminar in Social Science

Previous Course/Program Title:

Description of Action: List HNRS 292 as a separate GER in Social Science

Supporting documentation of the proposal is attached.

**Initiating faculty are also REQUIRED to send an email to uaa-faculty@uaa.alaska.edu describing the proposal, including the proposed action and the course prefix, number, course description, prerequisite, and any other relevant information.**

Any questions concerning the proposed changes may be addressed to the appropriate department chair, or the chair of the appropriate curriculum committee. Written comments may also be sent to the UAB or GAB, in care of the Governance Office, at the following address:

University of Alaska Anchorage
Governance Office, ADM 213
3211 Providence Drive
Anchorage, AK 99508

If no written comments are received by the UAB or GAB within ten (10) days of notification date shown above, it is assumed that there are no objections to the proposal.

Note: Acknowledgement of coordination does not mean approval, it is only meant to verify that coordination has occurred.
Resource Implication Form

1. School/College University Honors College

2. Program/Course Honors

3. Course Prefix HNRS

4. Course Number A292

5. Implementation Date Fall 2008

6. Type of Action and Category
   - [ ] Course addition
   - [x] Course change
   - [ ] Program addition
   - [ ] Program change

7. Consequences of Actions and Costs: Check all appropriate categories and provide an explanation of how it will be funded and by whom.
   - [ ] part-time faculty
   - [ ] new full-time faculty
   - [ ] reassignment of full-time faculty
   - [ ] additional class/lab space
   - [ ] modification of class/lab space
   - [ ] additional library resources
   - [ ] additional computer equipment
   - [ ] other costs

8. Explanation: No new resources needed

[ ] Approved  [ ] Disapproved

Department Chair

Date

[ ] Approved  [ ] Disapproved

Dean/Director of School/College

Date

[ ] Approved  [ ] Disapproved

Provost

Date