I. Roll Call
(-) Arlene Schmuland  (-) Anthony Paris  (-) Peter Olsson  (-) Hsing-Wen Hu
(-) Cindy Knall      (-) Dennis Drinka  (-) Clayton Trotter  (-) Sam Thiru
(-) Jervette Ward    (-) FS at Large  (-) FS at Large    (-) FS at Large
(-) FS CAS
Ex-Officio Members
(-) David Yesner
(-) Lora Volden
(-) Scheduling and Publications
(-) Diane Hirshberg

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

III. Approval of Meeting Summary (pg. 3)

IV. Administrative Reports
   A. GAB Chair- Arlene Schmuland
   B. Associate Dean of the Graduate School David Yesner; Graduate Council Report
   C. Graduate Student
   D. University Registrar Lora Volden

V. Program/Course Action Request - First Readings
   Chg Master of Science, Nursing Science (pg. 4-22)
   Chg Graduate Certificate, Nursing (pg. 23-40)
   Dlt BIOL A651 Advanced Applied Microbiology (3 cr)(3+0)(pg. 41)
   Chg BIOL A663 Advanced Molecular Biology of Cancer (3 cr)(3+0)(pg. 42-45)
   Chg BIOL A665 Experiential Learning: Advanced Molecular Biology (stacked with BIOL A465)
   (4 cr)(2+4)(pg. 46-55)
   Add BIOL A678 Advanced Biological Oceanography (stacked with BIOL A478)(4 cr)(4+0)(pg. 56-61)
   Chg STAT A601 Advanced Statistical Methods (stacked with STAT A401)(3 cr)(3+0)(pg. 62-69)
   Add STAT A602 Advanced Scientific Sampling (stacked with STAT A402)(3 cr)(3+0)(pg. 70-76)
   Add STAT A603 Advanced Regression Analysis (stacked with STAT A403)(3 cr)(3+0)(pg. 77-82)
   Add STAT A604 Advanced Analysis of Variance (stacked with STAT A404)(3 cr)(3+0)(pg. 83-88)
   Add STAT A607 Advanced Time Series Analysis (stacked with STAT A407)(3 cr)(3+0)(pg. 89-96)
   Add STAT A608 Advanced Multivariate Statistics (stacked with STAT A408)(3 cr)(3+0)(pg. 97-104)
   Chg Master of Arts, Anthropology (pg. 105-113)
   Chg ANTH A615 Advanced Applied Anthropology (stacked with ANTH A415)
   (3 cr)(3+0)(pg. 114-122)
   Add ANTH A654 Advanced Culture and Ecology (stacked with ANTH A454)(3 cr)(3+0)(pg. 123-141)
   Add ANTH A665 Advanced Culture and Globalization (stacked with ANTH A465)
   (3 cr)(3+0)(pg. 142-159)
   Dlt ANTH A683 Zooarchaeology (stacked with ANTH A483)(4 cr)(3+2)(pg. 160-161)
Dlt ANTH A685 Advanced Human Osteology (stacked with ANTH A485)(4 cr)(3+2)(pg. 162-163)
Dlt ANTH A686 Advanced Applied Human Osteology (stacked with ANTH A486)
(3 cr)(3+0)(pg. 164-165)

VI. Old Business

VII. New Business
   A. Credit Hour Review Process (pg. 166-171)
   B. Notification Process for Non-curricular Matters

VIII. Informational Items and Adjournment
Graduate Academic Board

Summary

April 25, 2014
ADM 204
9:30 to 11:30

I. Roll Call
(x) Arlene Schmuland  (x) Hsing-Wen Hu  (x) Sam Thiru
() Susan Garton  (x) Peter Olsson  (x) Cindy Knall
() Greg Protasel  (x) Anthony Paris  () GSA Vacancy
(x) Dennis Drinka  (x) Patricia Sandberg  () FSAL vacancy
(x) Jervette Ward  (x) Clayton Trotter

Ex-Officio Members:
(x) David Yesner
(x) Lora Volden
(x) Scheduling & Publications

II. Approval of Agenda
Approved

III. Approval of Meeting Summary
Add Hsing-Wen Hu’s attendance to April 11, 2014 meeting.
Approved as amended

IV. Program/Course Action Request – Second Readings
Add Doctor of Nursing Practice (pg. 5-20)
Approved for second

Administrative Reports

A. Associate Dean of the Graduate School David Yesner
   The Doctor of Education courses which GAB passed in spring 2011 are moving forward.
   The Masters in Computer Engineering and Computer Science will be reviewed in the fall.
   The Dean of Graduate School internal, part-time position is posted.
   Twenty-five theses are being processed from this year, 25 are expected each semester from now on with
   the December commencement ceremony.
   Working on signing with China for the joint Nankai MBA program this summer.

B. Graduate Student

C. University Registrar Lora Volden
   Moving into stage II of E-Catalog which will include working with vendors and beta-testing this fall.

V. Chair’s Report
A. GAB Chair- Arlene Schmuland
B. Faculty Alliance
C. Graduate Council

VI. Old Business

VII. New Business
A. Curriculum Handbook Changes from AAC (pg. 21-224)
   Waived for first reading, approve for second

B. 2014-2015 UAA Graduate School Catalog Changes (pg. 225-324)
   Waived for first reading, approve for second
   1st: Peter Olsson
   2nd: Anthony Paris
   Unanimously approved

C. Election of New Chair
   Move to have Arlene Schmuland serve as GAB Chair for the 2014-2015 academic year.
   Unanimously approved

VIII. Informational Items and Adjournment
A. Graduate Academic Board Report to Faculty Senate (pg. 325)
   Please send any changes or revisions you would like to see to Arlene by 5:00pm on Monday, April 28th.
March 31, 2014

The school of nursing is making the following changes to catalog copy for the MS program and Graduate Certificate program:

1. Updated name and address of National Accrediting organization
2. Changed: fall admission paperwork still due June 15 for SON but we will be considering the application in October rather than November... this allows us greater processing and review time. We are also going to admit for graduate study in fall and spring, but to specialty tracks in Spring only.
3. Clarified Academic progress statement
   a. We now require B or higher in all required courses
   b. Scholarly Project must be completed within 3 sequential semesters of finishing final clinical course.
4. Made editorial changes to improve clarity.

Jill Janke
Graduate Program Chairperson
UAA School of Nursing
1a. School or College
   CH College of Health

1b. Department
   NUR

2. Complete Program Title/Prefix
   Master of Science, Nursing Science

3. Type of Program
   Choose one from the appropriate drop down menu:  Undergraduate: or  Graduate:
   CHOOSE ONE
   Master of Science

   This program is a Gainful Employment Program:  ☐ Yes  or  ☑ No

4. Type of Action:  PROGRAM
   ☐ Add
   ☑ Change
   ☐ Delete
   PREFIX
   ☐ Add
   ☑ Change
   ☐ Inactivate

5. Implementation Date (semester/year)
   From:  Fall/2015  To:          /9999

6a. Coordination with Affected Units
   Department, School, or College:  School of Nursing
   Initiator Name (typed):  Jill Janke
   Initiator Signed Initials:  _________  Date:________________

6b. Coordination Email submitted to Faculty Listserv (uaa-faculty@lists.aaa.alaska.edu)
    Date:  3-31-14

6c. Coordination with Library Liaison
    Date:  3/31/2014

7. Title and Program Description
   Please attach the following:
   ☑ Cover Memo  ☑ Catalog Copy in Word using the track changes function

8. Justification for Action
   Need to update catalog copy to reflect new faculty, the new address/name of the accrediting body, application due dates, and revised standards of academic progress.

   Initiator (faculty only)  Date
   Jill Janke
   Initiator (TYPE NAME)

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

   ☐ Approved  ☑ Disapproved
   Undergraduate/Graduate Academic Board Chair  Date

   ☐ Approved  ☑ Disapproved
   Provost or Designee  Date

   ☐ Approved  ☑ Disapproved
   Department Chair  Date

   ☐ Approved  ☑ Disapproved
   College/School Curriculum Committee Chair  Date
Graduate studies at the master’s level place primary emphasis upon advanced professional nursing practice, theory, research and health care delivery systems. Students may develop a specialized practice focus in Nursing Education (EDUC), as a Family Nurse Practitioner (FNP) or Psychiatric-Mental Health Nurse Practitioner (PMH-NP). Master’s level studies provide the student with a basis for further study at the doctoral level. The graduate program is accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; (404) 975-5000). Graduates in the FNP option are eligible to write the national certification examination for advanced professional practice as a family nurse practitioner. Graduates of the PMH-NP option are eligible to write the national certification exam for advanced professional practice as a psychiatric-mental health nurse practitioner. Graduates of the EDUC option, who have had two years of full-time academic teaching experience, are eligible to take the NLN Certified Nurse Educator Examination.

Program Student Learning Outcomes

The graduate is prepared to:

1. Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or nursing education.
2. Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice or nursing education.
3. Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
4. Demonstrate competence and caring in the professional nurse role to serve as a leader, provider, and educator in the health care system.
5. Articulate a plan for self-directed, lifelong learning and professional development.

Master of Science, Nursing Science

UAA Admission Requirements

See the beginning of this chapter for Admission Requirements for Graduate Degrees. The following application submission deadlines are recommended to ensure full processing of application and transcripts:

- November 1 for March 1 applicants
- June 15 for October 1 applicants

School of Nursing Admission Requirements

Students applying to the Master of Science in Nursing Science must also submit documentation of having met the following requirements:

1. Hold a bachelor’s or a master’s degree in nursing from a program accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (NLNAC), or the Commission on Collegiate Nursing Education (CCNE).
2. Have a minimum undergraduate (and graduate, if applicable) GPA of at least a 3.00 (B) on a 4.00 scale.
3. Have a grade of 2.00 (C) or higher in an undergraduate research methods course and a statistics course that covers descriptive and inferential statistics.
4. Submit the School of Nursing graduate admission application directly to the School of Nursing. The Graduate Nursing Program Student Handbook provides details for completing the application packet.
5. Submit three letters of professional recommendation. Letters must be submitted directly to the School of Nursing from the person writing the reference. References may be contacted by a member of the admissions committee.
6. Complete a minimum of one year of half-time clinical experience as a registered nurse.

7. Hold and maintain an active unencumbered Alaska State RN license throughout the program.*

*There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.

The following School of Nursing application submission deadlines are required to ensure full processing of application:

- October 1 for graduate study
- March 1 for graduate study and/or FNP, PMH-NP or EDUC specialty

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Nor does prior acceptance into graduate study status guarantee admission into the clinical specialty tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats available in the program, preference may be given to residents of the state of Alaska as defined by the university’s policy on residency for tuition purposes.

**Academic Progress**

Students enrolled in the master’s degree program must make continuous progress toward completion of the degree and remain in good standing with the School of Nursing (SON). A detailed schematic of the SON good standing policy can be found in the SON Graduate Handbook. Noncompliance with the good standing policy and academic progress expectations will result in probation and possible dismissal from the program. In order to remain in good standing students must:

- Maintain professional and academic standards at all times.
- Maintain continuous registration each fall and spring semester (and summer if working on their Scholarly Project and utilizing UAA resources) until degree completed.
- Earn a 3.00 (B) or better in all required coursework.
- Complete Scholarly Project no later than 3 sequential semesters after completion of their final clinical course.
- Earn all credits, including transfer credits within a consecutive seven-year period prior to graduation. See UAA Catalog for additional information.

In addition, students in the FNP or the PMH-NP programs must complete additional clinical hours (2 credits) if they have not completed degree requirements within three sequential semesters after finishing their last clinical course. For each additional year that passes without completing degree requirements the student will need to complete an additional 2 credits of clinical. More information on this policy can be found in the School of Nursing Graduate Handbook.

**Part-Time/Full-Time Study**

This program is designed to be completed in six to eight semesters of part-time study. Prior to being formally admitted to graduate study, students with a bachelor’s or graduate degree in nursing and who are licensed or eligible to be licensed in Alaska as an RN may complete up to 9 credits of degree-applicable coursework, either UAA credit or transfer credit. Students who are not formally admitted will be allowed to register on a space-available basis and with instructor permission.

For part-time students, admission to graduate study only is recommended, with formal admission to a specialty track being delayed until core course requirements have been completed. Enrollment in any clinical course requires formal admission to graduate study and to the specialty track.

**Additional School of Nursing Requirements**

All students enrolled in UAA nursing programs must provide:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- Results the School of Nursing-sanctioned national-level criminal background check.
Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:

- Word processing (preferably MS Word),
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web, and
- Basic understanding of hardware, software, and operating systems.

**Scheduling of Courses**

Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conference. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

**Graduation Requirements**

See the beginning of this chapter for University Requirements for Graduate Degrees.

**Program Requirements**

1. Complete the following required core courses (18 credits)*:

   - **NS A618** Role Development in Advanced Practice Nursing 2
   - **NS A619** Health Policy Issues in Advanced Practice Nursing 2
   - **NS A620** Nursing Research Methods 4
   - **NS A621** Knowledge Development for Advanced Nursing Practice 3
   - **HS/NS A625** Biostatistics for Health Professionals 3
   - **NS A696** Individual Project (2 credits/semester) 4

   *Students seeking a second master’s degree may petition to have core courses waived based on evaluation of prior graduate degree.

2. Complete one of the following options:

   **Family Nurse Practitioner Option (32 credits)**

   - **NS A601** Advanced Pathophysiology 3
   - **NS A602** Advanced Health Assessment in Primary Care 3
   - **NS A610** Pharmacology for Primary Care 3
   - **NS A660** Family Nurse Practitioner I 4
   - **NS A661** Family Nurse Practitioner II 5
   - **NS A662** Family Nurse Practitioner III 5
   - **NS A663** Family Nurse Practitioner IV 6
   - Elective Advisor approved 3

   **Psychiatric-Mental Health Nurse Practitioner Option (32 credits)**

   - **NS A601** Advanced Pathophysiology 3
   - **NS A602** Advanced Health Assessment in Primary Care 3
   - **NS A610** Pharmacology for Primary Care 3
NS A611 Psychopharmacology 3
NS A670 Advanced Psychiatric/Mental Health Nursing I 5
NS A671 Advanced Psychiatric/Mental Health Nursing II 5
NS A672 Advanced Psychiatric/Mental Health Nursing III 5
NS A674 Advanced Psychiatric/Mental Health Nursing IV 5

**Nursing Education Option (27 credits)**

NS A601 Advanced Pathophysiology 3
NS A602 Advanced Health Assessment in Primary Care 3
NS A610 Pharmacology for Primary Care 3
NS A640 Teaching and Learning in Nursing 3
NS A641 Curriculum Development and Evaluation 3
NS A643 Assessment and Evaluation in Nursing Education 3
NS A644 Distance Education in Nursing 3
NS A647 Teaching Practicum in Nursing 3
Elective Advisor approved 3

3. A total of 45-50 credits is required for the degree.

**Scholarly Project**

A total of 4 credits of NS A696 Individual Project, taken over two semesters, are required for the degree. Students who are unable to complete the Scholarly Project after two semesters will be required to register for 2 credits of NS A696 Individual Project every semester thereafter and demonstrate continuing progress until the project is satisfactorily completed. Students are expected to complete their Scholarly Project within three sequential semesters of finishing the last clinical course. In the event a student does not complete their Scholarly Project during this time frame additional coursework may be required or they may be dismissed from the program for non-progression.

**Nursing Graduate Certificate Programs**

The nursing graduate certificate programs were designed for individuals who have previously acquired their master’s or doctoral degrees in nursing and wish to expand their nursing competencies or practice. Graduate certificate programs are offered in several specialty areas: Family Nurse Practitioner, Psychiatric-Mental Health Nurse Practitioner or Nurse Educator. Prior nursing degrees must be issued from institutions that hold regional accreditation and from programs that hold nursing accreditation (from either the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (NLNAC) or the Commission or the Collegiate Commission on Nursing Education (CCNE).

The 15-29 credit graduate certificate curriculum builds on the student’s prior graduate degree in nursing by integrating content from that degree with theory-based advanced practice nursing courses and specialty clinical practice. To be eligible for either of the nurse practitioner graduate certificate programs, the individual must already be certified as a nurse practitioner in another specialty.

**UAA Admission Requirements**

See the beginning of this chapter for Admission Requirements for Graduate Certificates. The following UAA application submission deadlines are recommended to ensure full processing of application and transcripts:

- November 1 for March 1 applicants
School of Nursing Admission Requirements

Students applying to the graduate certificate program must also submit documentation of having met the following requirements:

1. Have an earned graduate degree in nursing (master’s or doctoral) from a school of nursing accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission.
2. Have a minimum graduate GPA of 3.00 (B) on a 4.00 scale.
3. Submit the School of Nursing graduate admission application directly to the School of Nursing. The Graduate Nursing Program Student Handbook provides details for completing the application packet.
4. Submit three letters of professional recommendation. Letters must be submitted directly to the School of Nursing from the person writing the reference. References may be contacted by a member of the admissions committee.

In addition, students applying for the Family Nurse Practitioner or Psychiatric-Mental Health Nurse Practitioner graduate certificate programs must:

1. Hold and maintain an active unencumbered license as an advanced practice nurse in the state of Alaska.*
2. Provide documentation of national certification as an advanced nurse practitioner.

*There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate program chair to determine program eligibility.

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Prior acceptance into graduate study status does not guarantee admission into the clinical nursing tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats available in the program, preference may be given to residents of the state of Alaska as defined by the university’s policy on residency for tuition purposes.

The School of Nursing will consider applications for the graduate certificate during spring semester. Following are the deadlines for submission to ensure full consideration by the admissions committee:

- March 1: Graduate certificate FNP, PMH-NP or EDUC specialty

Academic Progress

Students enrolled in the graduate certificate program must:

- Earn a grade of 3.00 (B) or higher in all required coursework.
- Maintain continuous registration each fall and spring semester.

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

Additional School of Nursing Requirements

All students enrolled in UAA nursing graduate certificate programs must provide:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants, and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- The results of the School of Nursing-sanctioned national level criminal background check.

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:

- Word processing (preferably MS Word);
- Sending and receiving e-mail with attachments;
- Accessing and navigating the Internet/World Wide Web; and
- Basic understanding of hardware, software, and operating systems.
Scheduling of Courses

Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conference. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

Graduation Requirements

See the beginning of this chapter for University Requirements for Graduate Certificates.

Program Requirements

Graduate Certificate, Family Nurse Practitioner

The Family Nurse Practitioner (FNP) Graduate Certificate for psychiatric nurse practitioners is designed for nurses who are already certified as psychiatric nurse practitioners. This program expands their scope of practice to assist them to acquire the theory, knowledge, and skills needed to provide primary care for families. Courses and seminars are scheduled to allow students to attend classes with content specific to expand their specialty practice to include a family scope. The curriculum includes didactic, seminar, and approximately 720 clinical hours in practicum coursework. Students who successfully complete the graduate certificate program will be eligible to take the Family Nurse Practitioner examination offered by the American Nurses Credentialing Center (ANCC), or the American Academy of Nurse Practitioners (AANP) to become certified as a family nurse practitioner. These examinations are given nationwide throughout the year.

The Family Nurse Practitioner Graduate Certificate for primary care specialties was developed for nurses who are already certified in one of the primary care nurse practitioner specialties (adult, child, or women). Students who successfully complete it will be eligible to take the family nurse practitioner examination offered by the ANCC, or the AANP to become certified as a family nurse practitioner. These examinations are given nationwide throughout the year.

Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner

The Psychiatric-Mental Health Nurse Practitioner (PMH) Graduate Certificate for advanced nurse practitioners is designed for nurses who are already certified as advanced nurse practitioners in fields other than psychiatric-mental health. Students who successfully complete the graduate certificate program will be eligible to write the national certification for psychiatric mental health nurse practitioner-family offered by the ANCC. This examination is given nationwide throughout the year.

Graduate Certificate, Nursing Education

The specialty certificate in Nursing Education is designed for nurses who have previously acquired a minimum of a master’s degree in nursing and are seeking to develop advanced knowledge and skills in order to teach in academic or clinical settings. The coursework leading to the graduate certificate emphasizes instruction in teaching, program and course development, implementation, and evaluation.

The curriculum is based on standards for master’s education outlined in the Essentials for Master’s Education in Nursing published by the AACN (1996), as well as the newly developed Core Competencies of Nurse Educators proposed by the National League for Nursing (NLN).

All courses for this certificate will be offered using distance-delivery technologies, including but not limited to Blackboard web-based approaches, CD-ROMs, and audio-conferencing or video-conferencing as appropriate and available. Teaching practica may be completed in the student’s community, or in some cases may require visits to the UAA campus. Faculty may also validate teaching competencies through site visits and/or conference calls.
The 15-credit graduate certificate includes graduate-level coursework in nursing education with practicum opportunities in classroom and clinical settings.

**Program Requirements**

*Graduate Certificate, Family Nurse Practitioner*

1. Complete one of the following tracks:

   **Adult Nurse Practitioner (15 credits)**
   - NS A660 Family Nurse Practitioner I 6
   - NS A661 Family Nurse Practitioner II 3
   - NS A663 Family Nurse Practitioner IV 6

   **Pediatric Nurse Practitioner (15 credits)**
   - NS A631 Family Nurse Practitioner Focus on Women’s Health and Obstetrics I 2
   - NS A635 Family Nurse Practitioner Focus on Women’s Health and Obstetrics II 2
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   **Psychiatric Mental Health Nurse Practitioner (32 credits)**
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
   - NS A611 Psychopharmacology 3
   - NS A660 Family Nurse Practitioner I 4
   - NS A661 Family Nurse Practitioner II 5
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   **Women’s Health Nurse Practitioner (15 credits)**
   - NS A632 Family Nurse Practitioner Focus on Pediatrics I 2
   - NS A636 Family Nurse Practitioner Focus on Pediatrics II 2
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

2. A total of 15-32 credits is required for the certificate.*

*Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner*

1. Complete the following required courses (20 credits):

   - NS A670 Advanced Psychiatric/Mental Health Nursing I 5
   - NS A671 Advanced Psychiatric/Mental Health Nursing II 5
   - NS A672 Advanced Psychiatric/Mental Health Nursing III 5
   - NS A674 Advanced Psychiatric/Mental Health Nursing IV 5
2. A total of 20 credits is required for the certificate.*

**Graduate Certificate, Nursing Education**

1. Complete the following required courses (15 credits):
   - NS A640 Teaching and Learning in Nursing 3
   - NS A641 Curriculum Development and Evaluation 3
   - NS A643 Assessment and Evaluation in Nursing Education 3
   - NS A644 Distance Education in Nursing 3
   - NS A647 Teaching Practicum in Nursing 3

2. A total of 15 credits is required for the certificate.*

* Students need to have had an advanced pharmacology, pathophysiology and health assessment course in their original nursing master’s program; if their program did not include some or all of these courses, they may need to be taken for the graduate certificate.

**FACULTY**

Barbara Berner, Professor/Director, biberner@uaa.alaska.edu
Bethany Buchanan, Term Assistant Professor, bbuchan1@uaa.alaska.edu
Bernice Carmon, Associate Professor, bcarmon@uaa.alaska.edu
Elizabeth Driscoll, Term Assistant Professor, endriscoll@uaa.alaska.edu
Thomas Hendrix, Assistant Professor, thendri3@uaa.alaska.edu
Lisa Jackson, Assistant Professor, ljackson2@uaa.alaska.edu
Jill Janke, Professor/Graduate Program Chair, jjanke@uaa.alaska.edu
Cindy Jones, Assistant Professor, cgjones2@uaa.alaska.edu
Mary Logan, mlogan@uaa.alaska.edu
Patricia Lynes-Hayes, Assistant Professor, plyneshayes@uaa.alaska.edu
Christine Michel, Associate Professor, cmichel@uaa.alaska.edu
Maureen O’Malley, Associate Professor/Associate Director, momalley@uaa.alaska.edu
Nadine Parker, Assistant Professor, nparker8@uaa.alaska.edu
Sharon Peabody, Term Assistant Professor, speabody@uaa.alaska.edu
Elizabeth Predeger, Professor, ejpredeger@uaa.alaska.edu
Cynthia Strobach, Assistant Professor, csstrobach@uaa.alaska.edu
Dianne Tarrant, Associate Professor, dtarrant@uaa.alaska.edu
Dianne Toebe, Associate Professor, dntoebe@uaa.alaska.edu
Naomi Torrance, Assistant Professor, nctorrance@uaa.alaska.edu
Sharyl Toscano, Associate Professor, stoscano@uaa.alaska.edu
Angelia Trujillo, Assistant Professor, actrujillo@uaa.alaska.edu
Shirley Valek-Wilson, Associate Professor, sviolekwilson@uaa.alaska.edu
Graduate studies at the master’s level place primary emphasis upon advanced professional nursing practice, theory, research and health care delivery systems. Students may develop a specialized practice focus in Nursing Education (EDUC), as a Family Nurse Practitioner (FNP) or Psychiatric-Mental Health Nurse Practitioner (PMH-NP). Master’s level studies provide the student with a basis for further study at the doctoral level. The graduate program is accredited by the National League for Nursing Accreditation Commission Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (3343 Peachtree Road NE, Suite 500850, Atlanta, GA 30326; (404) 975-5000). Graduates in the FNP option are eligible to write the national certification examination for advanced professional practice as a family nurse practitioner. Graduates of the PMH-NP option are eligible to write the national certification exam for advanced professional practice as a psychiatric-mental health nurse practitioner. Graduates of the EDUC option, who have had two years of full-time academic teaching experience, are eligible to take the NLN Certified Nurse Educator Examination.

Program Student Learning Outcomes

The graduate is prepared to:

1. Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or nursing education.
2. Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice or nursing education.
3. Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
4. Demonstrate competence and caring in the professional nurse role to serve as a leader, provider, and educator in the health care system.
5. Articulate a plan for self-directed, lifelong learning and professional development.

Master of Science, Nursing Science

UAA Admission Requirements

See the beginning of this chapter for Admission Requirements for Graduate Degrees. The following application submission deadlines are recommended to ensure full processing of application and transcripts:

- November 1 for March 1 applicants
- June 15 for November/October 1 applicants

School of Nursing Admission Requirements

Students applying to the Master of Science in Nursing Science must also submit documentation of having met the following requirements:

1. Hold a bachelor’s or a master’s degree in nursing from a program accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (NLNAC), National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education (CCNE).
2. Have a minimum undergraduate (and graduate, if applicable) GPA of at least a 3.00 (B) on a 4.00 scale.
3. Have a grade of 2.00 (C) or higher in an undergraduate research methods course and a statistics course that covers descriptive and inferential statistics.
4. Submit the School of Nursing graduate admission application directly to the School of Nursing. The MS Graduate Nursing Program Student Handbook provides details for completing the application packet.
5. Submit three letters of professional recommendation. Letters must be submitted directly to the School of Nursing from the person writing the reference. References may be contacted by a member of the admissions committee.
6. Complete a minimum of one year of half-time clinical experience as a registered nurse.
7. Hold and maintain an active unencumbered Alaska State RN license throughout the program.*

*There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.

The following School of Nursing application submission deadlines are required to ensure full processing of application:

- November/October 1 for graduate study and/or PMH-NP or EDUC specialty
- March 1 for graduate study and/or FNP, PMH-NP or EDUC specialty

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Nor does prior acceptance into graduate study status guarantee admission into the clinical specialty tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats available in the program, preference may be given to residents of the state of Alaska as defined by the university’s policy on residency for tuition purposes.

**Academic Progress**

Students enrolled in the master’s degree program must make continuous progress toward completion of the degree and remain in good standing with the School of Nursing (SON). A detailed schematic of the SON good standing policy can be found in the SON Graduate Handbook. Noncompliance with the good standing policy and academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

In order to remain in good standing students must:

- Maintain professional and academic standards at all times.
- Maintain continuous registration each fall and spring semester (and summer if working on their Scholarly Project and utilizing UAA resources) until degree completed.
- Earn at least a 3.00 (B) GPA or better in all required coursework.
- Complete Scholarly Project no later than 3 sequential semesters after completion of their final clinical course.
- Earn a grade of 3.00 (B) or higher in all specialty courses.
- Receive no more than one 2.00 (C) grade in core and elective courses.
- Earn all credits, including transfer credits within a consecutive seven-year period prior to graduation. See UAA Catalog for additional information.

In addition, students in the Family Nurse Practitioner (FNP) or the Psychiatric-Mental Health Nurse Practitioner (PMH-NP) programs must complete additional clinical hours (2 credits) if they have not completed degree requirements within 12 months/three sequential semesters after finishing their last clinical course. For each additional year that passes without completing degree requirements the student will need to complete an additional 2 credits of clinical. More information on this policy can be found in the School of Nursing Graduate Handbook.

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

**Part-Time/Full-Time Study**

This program is designed to be completed in six to eight semesters of part-time study, although students can take longer. Prior to being formally admitted to graduate study, students with a bachelor's or graduate degree in nursing and who are licensed or eligible to be licensed in Alaska as an RN may complete up to 9 credits of degree-applicable coursework, either UAA credit or transfer credit. Students who are not formally admitted will be allowed to register on a space-available basis and with instructor permission.

For part-time students, admission to graduate study only is recommended, with formal admission to a specialty track being delayed until core course requirements have been completed. Enrollment in any clinical course requires formal admission to graduate study and to the specialty track.
Additional School of Nursing Requirements

All students enrolled in UAA nursing programs must provide:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubela, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- The results of the School of Nursing-sanctioned national-level criminal background check.

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:

- Word processing (preferably MS Word),
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web, and
- Basic understanding of hardware, software, and operating systems.

Scheduling of Courses

Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conference. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

Graduation Requirements

See the beginning of this chapter for University Requirements for Graduate Degrees.

Program Requirements

1. Complete the following required core courses (18 credits)*:
   - NS A618 Role Development in Advanced Practice Nursing 2
   - NS A619 Health Policy Issues in Advanced Practice Nursing 2
   - NS A620 Nursing Research Methods 4
   - NS A621 Knowledge Development for Advanced Nursing Practice 3
   - HS/NS A625 Biostatistics for Health Professionals 3
   - NS A696 Individual Project (2 credits/semester) 4

   *Students seeking a second master’s degree may petition to have core courses waived based on evaluation of prior graduate degree.

2. Complete one of the following options:

   Family Nurse Practitioner Option (32 credits)
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
   - NS A660 Family Nurse Practitioner I 4
   - NS A661 Family Nurse Practitioner II 5
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6
Psychiatric-Mental Health Nurse Practitioner Option
(32 credits)

NS A601 Advanced Pathophysiology 3
NS A602 Advanced Health Assessment in Primary Care 3
NS A610 Pharmacology for Primary Care 3
NS A611 Psychopharmacology 3
NS A670 Advanced Psychiatric/Mental Health Nursing I 5
NS A671 Advanced Psychiatric/Mental Health Nursing II 5
NS A672 Advanced Psychiatric/Mental Health Nursing III 5
NS A674 Advanced Psychiatric/Mental Health Nursing IV 5

Nursing Education Option (27 credits)

NS A601 Advanced Pathophysiology 3
NS A602 Advanced Health Assessment in Primary Care 3
NS A610 Pharmacology for Primary Care 3
NS A640 Teaching and Learning in Nursing 3
NS A641 Curriculum Development and Evaluation 3
NS A643 Assessment and Evaluation in Nursing Education 3
NS A644 Distance Education in Nursing 3
NS A647 Teaching Practicum in Nursing 3
Elective Advisor approved 3

3. A total of 45-50 credits is required for the degree.

Scholarly Project

A total of 4 credits of NS A696 Individual Project, taken over two semesters, are required for the degree. Students who are unable to complete the Scholarly Project after two semesters will be required to register for 2 credits of NS A696 Individual Project every semester thereafter and demonstrate continuing progress (excluding summer sessions) until the project is satisfactorily completed. Students are expected to complete their Scholarly Project within three sequential semesters of finishing the last clinical course. In the event a student does not complete their Scholarly Project during this timeframe, additional coursework may be required or they may be dismissed from the program for non-progression. In the event a student wants to work on the project during a summer semester, utilizing faculty and UAA resources, they must get approval from their committee and register for a 1-credit independent study (P/NP). The independent study credit does not count toward the 4 required project credits. There is no limit to the number of project credits that may be accrued; however, if a year or more passes since the last clinical course, additional coursework will be required. Specific requirements for additional coursework will be determined by the chair of the Graduate Program in Nursing, the coordinator of the specialty track, and the thesis or project chair.

Nursing Graduate Certificate Programs

The nursing graduate certificate programs were designed for individuals who have previously acquired their master’s or doctoral degrees in nursing and wish to expand their nursing competencies or practice. Graduate certificate programs are offered in several specialty areas: Family Nurse Practitioner, Psychiatric-Mental Health Nurse Practitioner or Nurse Educator. Prior nursing
degrees must be issued from institutions that hold regional accreditation and from programs that hold nursing accreditation (from either the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (NLNAC) National League for Nursing Accrediting or the Commission on Collegiate Commission on Nursing Education (CCNE)).

The 15-29 credit graduate certificate curriculum builds on the student’s prior graduate degree in nursing by integrating content from that degree with theory-based advanced practice nursing courses and specialty clinical practice. To be eligible for either of the nurse practitioner graduate certificate programs, the individual must already be certified as a nurse practitioner in another specialty.

**UAA Admission Requirements**

See the beginning of this chapter for Admission Requirements for Graduate Certificates. The following UAA application submission deadlines are recommended to ensure full processing of application and transcripts:

- **November 1** for March 1 applicants
- **June 15** for November 1 applicants

**School of Nursing Admission Requirements**

Students applying to the graduate certificate program must also submit documentation of having met the following requirements:

1. **Have an earned graduate degree in nursing (master's or doctoral) from a school of nursing accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education.**
2. **Have a minimum Graduate GPA of at least 3.00 (B) on a 4.00 scale.**
3. **Submit the School of Nursing graduate admission application directly to the School of Nursing. The Graduate Nursing Program Student Handbook provides details for completing the application packet.**
4. **Submit three letters of professional recommendation. Letters must be submitted directly to the School of Nursing from the person writing the reference. References may be contacted by a member of the admissions committee.**

In addition, additional requirements for students applying for the Family Nurse Practitioner or Psychiatric-Mental Health Nurse Practitioner graduate certificate programs must include:

- **Hold and maintain an active, unencumbered license as an advanced practice nurse in the state of Alaska.**
- **Provide documentation of national certification as an advanced nurse practitioner.**

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Prior acceptance into graduate study status does not guarantee admission into the clinical nursing tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats available in the program, preference may be given to residents of the state of Alaska as defined by the university’s policy on residency for tuition purposes.

The School of Nursing will consider applications for the graduate certificate during fall and spring semesters. Following are the deadlines for submission to ensure full consideration by the admissions committee:

- **November 1**: Graduate certificate PMH-NP or EDUC specialty
- **March 1**: Graduate certificate FNP, PMH-NP or EDUC specialty

**Academic Progress**

Students enrolled in the graduate certificate program must:

- **Maintain at least a 3.00 (B) GPA in all required coursework.**
- **Earn a grade of 3.00 (B) or higher in all specialty courses required coursework.**
• Maintain continuous registration each fall and spring semester.
• Receive no more than one 2.00 (C) grade in core or elective courses (if required).

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

Additional School of Nursing Requirements

All students enrolled in UAA nursing graduate certificate programs must provide:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants, and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubella, and hepatitis A and B (by titer);
- Documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- The results of the School of Nursing-sanctioned national level criminal background check.

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:

- Word processing (preferably MS Word);
- Sending and receiving e-mail with attachments;
- Accessing and navigating the Internet/World Wide Web; and
- Basic understanding of hardware, software, and operating systems.

Scheduling of Courses

Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conferencing. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

Graduation Requirements

See the beginning of this chapter for University Requirements for Graduate Certificates.

Program Requirements

Graduate Certificate, Family Nurse Practitioner

The Family Nurse Practitioner (FNP) Graduate Certificate for psychiatric nurse practitioners is designed for nurses who are already certified as psychiatric nurse practitioners. This program expands their scope of practice to assist them to acquire the theory, knowledge, and skills needed to provide primary care for families. Courses and seminars are scheduled to allow students to attend classes with content specific to expand their specialty practice to include a family scope. The curriculum includes didactic, seminar, and approximately 720 clinical hours in practicum coursework. Students who successfully complete the graduate certificate program will be eligible to take the Family Nurse Practitioner examination offered by the American Nurses Credentialing Center (ANCC), or the American Academy of Nurse Practitioners (AANP) to become certified as an family nurse practitioner. These examinations are given nationwide throughout the year.

The Family Nurse Practitioner Graduate Certificate for primary care specialties was developed for nurses who are already certified in one of the primary care nurse practitioner specialties (adult, child, or women). Students who successfully complete it will be eligible to take the family nurse practitioner examination offered by the ANCC, or the AANP to become certified as a family nurse practitioner. These examinations are given nationwide throughout the year.

Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner

The Psychiatric-Mental Health Nurse Practitioner (PMH) Graduate Certificate for advanced nurse practitioners is designed for nurses who are already certified as advanced nurse practitioners in fields other than psychiatric-mental health. Students who
successfully complete the graduate certificate program will be eligible to write the national certification for psychiatric mental health nurse practitioner-family offered by the ANCC. This examination is given nationwide throughout the year.

**Graduate Certificate, Nursing Education**

The specialty certificate in Nursing Education is designed for nurses who have previously acquired a minimum of a master’s degree in nursing and are seeking to develop advanced knowledge and skills in order to teach in academic or clinical settings. The coursework leading to the graduate certificate emphasizes instruction in teaching, program and course development, implementation, and evaluation.

The curriculum is based on standards for master’s education outlined in the Essentials for Master’s Education in Nursing published by the AACN (1996), as well as the newly developed Core Competencies of Nurse Educators proposed by the National League for Nursing (NLN).

All courses for this certificate will be offered using distance-delivery technologies, including but not limited to Blackboard web-based approaches, CD-ROMs, and audio-conferencing or video-conferencing as appropriate and available. Teaching practica may be completed in the student’s community, or in some cases may require visits to the UAA campus. Faculty may also validate teaching competencies through site visits and/or conference calls.

The 15-credit graduate certificate includes graduate-level coursework in nursing education with practicum opportunities in classroom and clinical settings.

**Program Requirements**

**Graduate Certificate, Family Nurse Practitioner**

1. Complete one of the following tracks:

   **Adult Nurse Practitioner (15 credits)**
   
   - NS A660 Family Nurse Practitioner I 6
   - NS A661 Family Nurse Practitioner II 3
   - NS A662 Family Nurse Practitioner IV 6

   **Pediatric Nurse Practitioner (15 credits)**
   
   - NS A631 Family Nurse Practitioner Focus on Women’s Health and Obstetrics I 2
   - NS A635 Family Nurse Practitioner Focus on Women’s Health and Obstetrics II 2
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   **Psychiatric Mental Health Nurse Practitioner (32 credits)**
   
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
   - NS A611 Psychopharmacology 3
   - NS A660 Family Nurse Practitioner I 4
   - NS A661 Family Nurse Practitioner II 5
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   **Women’s Health Nurse Practitioner (15 credits)**
   
   - NS A632 Family Nurse Practitioner Focus on Pediatrics I 2
   - NS A636 Family Nurse Practitioner Focus on
Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner

1. Complete the following required courses (20 credits):

   - NS A670  Advanced Psychiatric/Mental Health Nursing I  5
   - NS A671  Advanced Psychiatric/Mental Health Nursing II  5
   - NS A672  Advanced Psychiatric/Mental Health Nursing III  5
   - NS A674  Advanced Psychiatric/Mental Health Nursing IV  5

2. A total of 20 credits is required for the certificate.*

Graduate Certificate, Nursing Education

1. Complete the following required courses (15 credits):

   - NS A640  Teaching and Learning in Nursing  3
   - NS A641  Curriculum Development and Evaluation  3
   - NS A643  Assessment and Evaluation in Nursing Education  3
   - NS A644  Distance Education in Nursing  3
   - NS A647  Teaching Practicum in Nursing  3

2. A total of 15 credits is required for the certificate.*

* Students need to have had an advanced pharmacology, pathophysiology and health assessment course in their original nursing master’s program; if their program did not include some or all of these courses, they may need to be taken for the graduate certificate.

FACULTY

Barbara Berner, Professor/Interim Director, AFBHB@uaa.alaska.edu
Bethany Buchanan, Term Assistant Professor, BBUCHAN@uaa.alaska.edu
Elizabeth Campbell, Assistant Professor, AEC/Humaniatrics
Bernice Cerman, Associate Professor, AFBW@uaa.alaska.edu
Elizabeth Driscoll, Term Assistant Professor, AFEDMV@uaa.alaska.edu
Thomas Hendrix, Assistant Professor, AFTJ@uaa.alaska.edu
Jill Jansen, Professor/Graduate Program Chair, AFJR@uaa.alaska.edu
Cindy Jones, Assistant Professor, AFCC@uaa.alaska.edu
Mary Logan, AFMD@uaa.alaska.edu
Patricia Lynn-Hayes, Assistant Professor, AFPA@uaa.alaska.edu
Susan Medlin, Associate Professor, AFJH@uaa.alaska.edu
Monica C'Malley, Associate Professor/Interim Associate Director, AFM@uaa.alaska.edu
Nadine Parker, Assistant Professor, AFBW@uaa.alaska.edu
Sharon Peabody, Term Assistant Professor, AFSP@uaa.alaska.edu
Elizabeth Predeger, Professor, AFEAP@uaa.alaska.edu
Dianne Tarrant, Associate Professor, AFDT@uaa.alaska.edu
Sheryl Tschumske, Associate Professor, TBA
Angelia Trujillo, Assistant Professor, AFACM@uaa.alaska.edu
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<th>1a. School or College</th>
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<tr>
<td>Initiator Name (typed): Jill Janke</td>
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<th>Initiator (faculty only)</th>
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<tr>
<td>Jill Janke</td>
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Graduate studies at the master’s level place primary emphasis upon advanced professional nursing practice, theory, research and health care delivery systems. Students may develop a specialized practice focus in Nursing Education (EDUC), as a Family Nurse Practitioner (FNP) or Psychiatric-Mental Health Nurse Practitioner (PMH-NP). Master’s level studies provide the student with a basis for further study at the doctoral level. The graduate program is accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; (404) 975-5000). Graduates in the FNP option are eligible to write the national certification examination for advanced professional practice as a family nurse practitioner. Graduates of the PMH-NP option are eligible to write the national certification exam for advanced professional practice as a psychiatric-mental health nurse practitioner. Graduates of the EDUC option, who have had two years of full-time academic teaching experience, are eligible to take the NLN Certified Nurse Educator Examination.

Program Student Learning Outcomes

The graduate is prepared to:

1. Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or nursing education.
2. Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice or nursing education.
3. Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
4. Demonstrate competence and caring in the professional nurse role to serve as a leader, provider, and educator in the health care system.
5. Articulate a plan for self-directed, lifelong learning and professional development.

Master of Science, Nursing Science

UAA Admission Requirements

See the beginning of this chapter for Admission Requirements for Graduate Degrees. The following application submission deadlines are recommended to ensure full processing of application and transcripts:

- November 1 for March 1 applicants
- June 15 for October 1 applicants

School of Nursing Admission Requirements

Students applying to the Master of Science in Nursing Science must also submit documentation of having met the following requirements:

1. Hold a bachelor’s or a master’s degree in nursing from a program accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (NLNAC), or the Commission on Collegiate Nursing Education (CCNE).
2. Have a minimum undergraduate (and graduate, if applicable) GPA of at least a 3.00 (B) on a 4.00 scale.
3. Have a grade of 2.00 (C) or higher in an undergraduate research methods course and a statistics course that covers descriptive and inferential statistics.
4. Submit the School of Nursing graduate admission application directly to the School of Nursing. The Graduate Nursing Program Student Handbook provides details for completing the application packet.
5. Submit three letters of professional recommendation. Letters must be submitted directly to the School of Nursing from the person writing the reference. References may be contacted by a member of the admissions committee.
6. Complete a minimum of one year of half-time clinical experience as a registered nurse.
7. Hold and maintain an active unencumbered Alaska State RN license throughout the program.*

*There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.

The following School of Nursing application submission deadlines are required to ensure full processing of application:

- October 1 for graduate study
- March 1 for graduate study and/or FNP, PMH-NP or EDUC specialty

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Nor does prior acceptance into graduate study status guarantee admission into the clinical specialty tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats available in the program, preference may be given to residents of the state of Alaska as defined by the university’s policy on residency for tuition purposes.

**Academic Progress**

Students enrolled in the master’s degree program must make continuous progress toward completion of the degree and remain in good standing with the School of Nursing (SON). A detailed schematic of the SON good standing policy can be found in the SON Graduate Handbook. Noncompliance with the good standing policy and academic progress expectations will result in probation and possible dismissal from the program. In order to remain in good standing students must:

- Maintain professional and academic standards at all times.
- Maintain continuous registration each fall and spring semester (and summer if working on their Scholarly Project and utilizing UAA resources) until degree completed.
- Earn a 3.00 (B) or better in all required coursework.
- Complete Scholarly Project no later than 3 sequential semesters after completion of their final clinical course.
- Earn all credits, including transfer credits within a consecutive seven-year period prior to graduation. See UAA Catalog for additional information.

In addition, students in the FNP or the PMH-NP programs must complete additional clinical hours (2 credits) if they have not completed degree requirements within three sequential semesters after finishing their last clinical course. For each additional year that passes without completing degree requirements the student will need to complete an additional 2 credits of clinical. More information on this policy can be found in the School of Nursing Graduate Handbook.

**Part-Time/Full-Time Study**

This program is designed to be completed in six to eight semesters of part-time study. Prior to being formally admitted to graduate study, students with a bachelor’s or graduate degree in nursing and who are licensed or eligible to be licensed in Alaska as an RN may complete up to 9 credits of degree-applicable coursework, either UAA credit or transfer credit. Students who are not formally admitted will be allowed to register on a space-available basis and with instructor permission.

For part-time students, admission to graduate study only is recommended, with formal admission to a specialty track being delayed until core course requirements have been completed. Enrollment in any clinical course requires formal admission to graduate study and to the specialty track.

**Additional School of Nursing Requirements**

All students enrolled in UAA nursing programs must provide:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubella, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- Results the School of Nursing-sanctioned national-level criminal background check.
Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:

- Word processing (preferably MS Word),
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web, and
- Basic understanding of hardware, software, and operating systems.

**Scheduling of Courses**

Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conference. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

**Graduation Requirements**

See the beginning of this chapter for University Requirements for Graduate Degrees.

**Program Requirements**

1. Complete the following required core courses (18 credits)*:

   - NS A618 Role Development in Advanced Practice Nursing 2
   - NS A619 Health Policy Issues in Advanced Practice Nursing 2
   - NS A620 Nursing Research Methods 4
   - NS A621 Knowledge Development for Advanced Nursing Practice 3
   - HS/NS A625 Biostatistics for Health Professionals 3
   - NS A696 Individual Project (2 credits/semester) 4

   *Students seeking a second master's degree may petition to have core courses waived based on evaluation of prior graduate degree.

2. Complete one of the following options:

   **Family Nurse Practitioner Option (32 credits)**
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
   - NS A660 Family Nurse Practitioner I 4
   - NS A661 Family Nurse Practitioner II 5
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6
   - Elective Advisor approved 3

   **Psychiatric-Mental Health Nurse Practitioner Option (32 credits)**
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
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<tr>
<td>NS A674</td>
<td>Advanced Psychiatric/Mental Health Nursing IV</td>
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**Nursing Education Option (27 credits)**

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3. A total of 45-50 credits is required for the degree.

**Scholarly Project**

A total of 4 credits of NS A696 Individual Project, taken over two semesters, are required for the degree. Students who are unable to complete the Scholarly Project after two semesters will be required to register for 2 credits of NS A696 Individual Project every semester thereafter and demonstrate continuing progress until the project is satisfactorily completed. Students are expected to complete their Scholarly Project within three sequential semesters of finishing the last clinical course. In the event a student does not complete their Scholarly Project during this time frame additional coursework may be required or they may be dismissed from the program for non-progression.

**Nursing Graduate Certificate Programs**

The nursing graduate certificate programs were designed for individuals who have previously acquired their master’s or doctoral degrees in nursing and wish to expand their nursing competencies or practice. Graduate certificate programs are offered in several specialty areas: Family Nurse Practitioner, Psychiatric-Mental Health Nurse Practitioner or Nurse Educator. Prior nursing degrees must be issued from institutions that hold regional accreditation and from programs that hold nursing accreditation (from either the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (NLNAC) or the Commission or the Collegiate Commission on Nursing Education (CCNE).

The 15-29 credit graduate certificate curriculum builds on the student’s prior graduate degree in nursing by integrating content from that degree with theory-based advanced practice nursing courses and specialty clinical practice. To be eligible for either of the nurse practitioner graduate certificate programs, the individual must already be certified as a nurse practitioner in another specialty.

**UAA Admission Requirements**

See the beginning of this chapter for Admission Requirements for Graduate Certificates. The following UAA application submission deadlines are recommended to ensure full processing of application and transcripts:

- November 1 for March 1 applicants
School of Nursing Admission Requirements

Students applying to the graduate certificate program must also submit documentation of having met the following requirements:

1. Have an earned graduate degree in nursing (master’s or doctoral) from a school of nursing accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission.
2. Have a minimum graduate GPA of 3.00 (B) on a 4.00 scale.
3. Submit the School of Nursing graduate admission application directly to the School of Nursing. The Graduate Nursing Program Student Handbook provides details for completing the application packet.
4. Submit three letters of professional recommendation. Letters must be submitted directly to the School of Nursing from the person writing the reference. References may be contacted by a member of the admissions committee.

In addition, students applying for the Family Nurse Practitioner or Psychiatric-Mental Health Nurse Practitioner graduate certificate programs must:

1. Hold and maintain an active unencumbered license as an advanced practice nurse in the state of Alaska.*
2. Provide documentation of national certification as an advanced nurse practitioner.

*There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate program chair to determine program eligibility.

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Prior acceptance into graduate study status does not guarantee admission into the clinical nursing tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats available in the program, preference may be given to residents of the state of Alaska as defined by the university’s policy on residency for tuition purposes.

The School of Nursing will consider applications for the graduate certificate during spring semester. Following are the deadlines for submission to ensure full consideration by the admissions committee:

- March 1: Graduate certificate FNP, PMH-NP or EDUC specialty

Academic Progress

Students enrolled in the graduate certificate program must:

- Earn a grade of 3.00 (B) or higher in all required coursework.
- Maintain continuous registration each fall and spring semester.

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

Additional School of Nursing Requirements

All students enrolled in UAA nursing graduate certificate programs must provide:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants, and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- The results of the School of Nursing-sanctioned national level criminal background check.

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:

- Word processing (preferably MS Word);
- Sending and receiving e-mail with attachments;
- Accessing and navigating the Internet/World Wide Web; and
- Basic understanding of hardware, software, and operating systems.
Scheduling of Courses

Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conference. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

Graduation Requirements

See the beginning of this chapter for University Requirements for Graduate Certificates.

Program Requirements

Graduate Certificate, Family Nurse Practitioner

The Family Nurse Practitioner (FNP) Graduate Certificate for psychiatric nurse practitioners is designed for nurses who are already certified as psychiatric nurse practitioners. This program expands their scope of practice to assist them to acquire the theory, knowledge, and skills needed to provide primary care for families. Courses and seminars are scheduled to allow students to attend classes with content specific to expand their specialty practice to include a family scope. The curriculum includes didactic, seminar, and approximately 720 clinical hours in practicum coursework. Students who successfully complete the graduate certificate program will be eligible to take the Family Nurse Practitioner examination offered by the American Nurses Credentialing Center (ANCC), or the American Academy of Nurse Practitioners (AANP) to become certified as a family nurse practitioner. These examinations are given nationwide throughout the year.

The Family Nurse Practitioner Graduate Certificate for primary care specialties was developed for nurses who are already certified in one of the primary care nurse practitioner specialties (adult, child, or women). Students who successfully complete it will be eligible to take the family nurse practitioner examination offered by the ANCC, or the AANP to become certified as a family nurse practitioner. These examinations are given nationwide throughout the year.

Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner

The Psychiatric-Mental Health Nurse Practitioner (PMH) Graduate Certificate for advanced nurse practitioners is designed for nurses who are already certified as advanced nurse practitioners in fields other than psychiatric-mental health. Students who successfully complete the graduate certificate program will be eligible to write the national certification for psychiatric mental health nurse practitioner-family offered by the ANCC. This examination is given nationwide throughout the year.

Graduate Certificate, Nursing Education

The specialty certificate in Nursing Education is designed for nurses who have previously acquired a minimum of a master’s degree in nursing and are seeking to develop advanced knowledge and skills in order to teach in academic or clinical settings. The coursework leading to the graduate certificate emphasizes instruction in teaching, program and course development, implementation, and evaluation.

The curriculum is based on standards for master’s education outlined in the Essentials for Master’s Education in Nursing published by the AACN (1996), as well as the newly developed Core Competencies of Nurse Educators proposed by the National League for Nursing (NLN).

All courses for this certificate will be offered using distance-delivery technologies, including but not limited to Blackboard web-based approaches, CD-ROMs, and audio-conferencing or video-conferencing as appropriate and available. Teaching practica may be completed in the student’s community, or in some cases may require visits to the UAA campus. Faculty may also validate teaching competencies through site visits and/or conference calls.
The 15-credit graduate certificate includes graduate-level coursework in nursing education with practicum opportunities in classroom and clinical settings.

**Program Requirements**

**Graduate Certificate, Family Nurse Practitioner**

1. Complete one of the following tracks:

   **Adult Nurse Practitioner (15 credits)**
   - NS A660 Family Nurse Practitioner I 6
   - NS A661 Family Nurse Practitioner II 3
   - NS A663 Family Nurse Practitioner IV 6

   **Pediatric Nurse Practitioner (15 credits)**
   - NS A631 Family Nurse Practitioner Focus on Women’s Health and Obstetrics I 2
   - NS A635 Family Nurse Practitioner Focus on Women’s Health and Obstetrics II 2
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   **Psychiatric Mental Health Nurse Practitioner (32 credits)**
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
   - NS A611 Psychopharmacology 3
   - NS A660 Family Nurse Practitioner I 4
   - NS A661 Family Nurse Practitioner II 5
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   **Women’s Health Nurse Practitioner (15 credits)**
   - NS A632 Family Nurse Practitioner Focus on Pediatrics I 2
   - NS A636 Family Nurse Practitioner Focus on Pediatrics II 2
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

2. A total of 15-32 credits is required for the certificate.*

**Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner**

1. Complete the following required courses (20 credits):

   - NS A670 Advanced Psychiatric/Mental Health Nursing I 5
   - NS A671 Advanced Psychiatric/Mental Health Nursing II 5
   - NS A672 Advanced Psychiatric/Mental Health Nursing III 5
   - NS A674 Advanced Psychiatric/Mental Health Nursing IV 5

* A total of 15-32 credits is required for the certificate.*
2. A total of 20 credits is required for the certificate.*

**Graduate Certificate, Nursing Education**

1. Complete the following required courses (15 credits):
   - NS A640 Teaching and Learning in Nursing 3
   - NS A641 Curriculum Development and Evaluation 3
   - NS A643 Assessment and Evaluation in Nursing Education 3
   - NS A644 Distance Education in Nursing 3
   - NS A647 Teaching Practicum in Nursing 3

2. A total of 15 credits is required for the certificate.*

   * Students need to have had an advanced pharmacology, pathophysiology and health assessment course in their original nursing master’s program; if their program did not include some or all of these courses, they may need to be taken for the graduate certificate.

**FACULTY**

Barbara Berner, Professor/Director, biberner@uaa.alaska.edu
Bethany Buchanan, Term Assistant Professor, bbuchan1@uaa.alaska.edu
Bernice Carmon, Associate Professor, bcarmon@uaa.alaska.edu
Elizabeth Driscoll, Term Assistant Professor, endriscoll@uaa.alaska.edu
Thomas Hendrix, Assistant Professor, thendri3@uaa.alaska.edu
Lisa Jackson, Assistant Professor, ljackson2@uaa.alaska.edu
Jill Janke, Professor/Graduate Program Chair, jjanke@uaa.alaska.edu
Cindy Jones, Assistant Professor, cgjones2@uaa.alaska.edu
Mary Logan, mologan@uaa.alaska.edu
Patricia Lynes-Hayes, Assistant Professor, plyneshayes@uaa.alaska.edu
Christine Michel, Associate Professor, cmichel@uaa.alaska.edu
Maureen O’Malley, Associate Professor/Associate Director, momalley@uaa.alaska.edu
Nadine Parker, Assistant Professor, nparker8@uaa.alaska.edu
Sharon Peabody, Term Assistant Professor, speabody@uaa.alaska.edu
Elizabeth Predeger, Professor, ejpredeger@uaa.alaska.edu
Cynthia Strobach, Assistant Professor, csstrobach@uaa.alaska.edu
Dianne Tarrant, Associate Professor, dtarrant@uaa.alaska.edu
Dianne Toebe, Associate Professor, dtoebe@uaa.alaska.edu
Naomi Torrance, Assistant Professor, nctorrance@uaa.alaska.edu
Sharyl Toscano, Associate Professor, stoscano@uaa.alaska.edu
Angelia Trujillo, Assistant Professor, actrujillo@uaa.alaska.edu
Shirley Valek-Wilson, Associate Professor, sjvalekwilson@uaa.alaska.edu
Graduate studies at the master’s level place primary emphasis upon advanced professional nursing practice, theory, research and health care delivery systems. Students may develop a specialized practice focus in Nursing Education (EDUC), as a Family Nurse Practitioner (FNP) or Psychiatric-Mental Health Nurse Practitioner (PMH-NP). Master’s-level studies provide the student with a basis for further study at the doctoral level. The graduate program is accredited by the National League for Nursing Accreditation Commission Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (3343 Peachtree Road NE, Suite 500850, Atlanta, GA 30326; (404) 975-5000). Graduates in the FNP option are eligible to write the national certification examination for advanced professional practice as a family nurse practitioner. Graduates of the PMH-NP option are eligible to write the national certification exam for advanced professional practice as a psychiatric-mental health nurse practitioner. Graduates of the EDUC option, who have had two years of full-time academic teaching experience, are eligible to take the NLN Certified Nurse Educator Examination.

Program Student Learning Outcomes
The graduate is prepared to:

1. Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or nursing education.
2. Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice or nursing education.
3. Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
4. Demonstrate competence and caring in the professional nurse role to serve as a leader, provider, and educator in the health care system.
5. Articulate a plan for self-directed, lifelong learning and professional development.

Master of Science, Nursing Science

UAA Admission Requirements
See the beginning of this chapter for Admission Requirements for Graduate Degrees. The following application submission deadlines are recommended to ensure full processing of application and transcripts:

- November 1 for March 1 applicants
- June 15 for November/October 1 applicants

School of Nursing Admission Requirements
Students applying to the Master of Science in Nursing Science must also submit documentation of having met the following requirements:

1. Hold a bachelor’s or a master’s degree in nursing from a program accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (NLNAC), National League for Nursing Accrediting Commission or The Commission on Collegiate Nursing Education (CCNE).
2. Have a minimum undergraduate (and graduate, if applicable) GPA of at least a 3.00 (B) on a 4.00 scale.
3. Have a grade of 2.00 (C) or higher in an undergraduate research methods course and a statistics course that covers descriptive and inferential statistics.
4. Submit the School of Nursing graduate admission application directly to the School of Nursing. The MS Graduate Nursing Program Student Handbook provides details for completing the application packet.
5. Submit three letters of professional recommendation. Letters must be submitted directly to the School of Nursing from the person writing the reference. References may be contacted by a member of the admissions committee.
6. Complete a minimum of one year of half-time clinical experience as a registered nurse.

7. Hold and maintain an active unencumbered Alaska State RN license throughout the program.*

*There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.

The following School of Nursing application submission deadlines are required to ensure full processing of application:

- November/October 1 for graduate study and/or PMH-NP or EDUC specialty
- March 1 for graduate study and/or FNP, PMH-NP or EDUC specialty

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Nor does prior acceptance into graduate study status guarantee admission into the clinical specialty tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats available in the program, preference may be given to residents of the state of Alaska as defined by the university’s policy on residency for tuition purposes.

**Academic Progress**

Students enrolled in the master's degree program must make continuous progress toward completion of the degree and remain in good standing with the School of Nursing (SON). A detailed schematic of the SON good standing policy can be found in the SON Graduate Handbook. Noncompliance with the good standing policy and academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

In order to remain in good standing students must:

- Maintain professional and academic standards at all times.
- Maintain continuous registration each fall and spring semester (and summer if working on their Scholarly Project and utilizing UAA resources) until degree completed.
- Earn at least a 3.00 (B) GPA or better in all required coursework.
- Complete Scholarly Project no later than 3 sequential semesters after completion of their final clinical course.
- Earn a grade of 3.00 (B) or higher in all specialty courses.
- Receive no more than one 2.00 (C) grade in core and elective courses.
- Earn all credits, including transfer credits within a consecutive seven-year period prior to graduation. See UAA Catalog for additional information.

In addition, students in the Family Nurse Practitioner (FNP) or the Psychiatric-Mental Health Nurse Practitioner (PMH-NP) programs must complete additional clinical hours (2 credits) if they have not completed degree requirements within 12 months of three sequential semesters after finishing their last clinical course. For each additional year that passes without completing degree requirements the student will need to complete an additional 2 credits of clinical. More information on this policy can be found in the School of Nursing Graduate Handbook.

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

**Part-Time/Full-Time Study**

This program is designed to be completed in six to eight semesters of part-time study, although students can take longer. Prior to being formally admitted to graduate study, students with a bachelor’s or graduate degree in nursing and who are licensed or eligible to be licensed in Alaska as an RN may complete up to 9 credits of degree-applicable coursework, either UAA credit or transfer credit. Students who are not formally admitted will be allowed to register on a space-available basis and with instructor permission.

For part-time students, admission to graduate study only is recommended, with formal admission to a specialty track being delayed until core course requirements have been completed. Enrollment in any clinical course requires formal admission to graduate study and to the specialty track.
**Additional School of Nursing Requirements**

All students enrolled in UAA nursing programs must provide:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- Results of the School of Nursing-sanctioned national-level criminal background check.

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:

- Word processing (preferably MS Word),
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web, and
- Basic understanding of hardware, software, and operating systems.

**Scheduling of Courses**

Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conference. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

**Graduation Requirements**

See the beginning of this chapter for University Requirements for Graduate Degrees.

**Program Requirements**

1. Complete the following required core courses (18 credits)*:
   - NS A618 Role Development in Advanced Practice Nursing 2
   - NS A619 Health Policy Issues in Advanced Practice Nursing 2
   - NS A620 Nursing Research Methods 4
   - NS A621 Knowledge Development for Advanced Nursing Practice 3
   - HS/NS A625 Biostatistics for Health Professionals 3
   - NS A696 Individual Project (2 credits/semester) 4

*Students seeking a second master’s degree may petition to have core courses waived based on evaluation of prior graduate degree.

2. Complete one of the following options:

   **Family Nurse Practitioner Option (32 credits)**
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
   - NS A660 Family Nurse Practitioner I 4
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3. A total of 45-50 credits is required for the degree.

**Scholarly Project**

A total of 4 credits of NS A696 Individual Project, taken over two semesters, are required for the degree. Students who are unable to complete the Scholarly Project after two semesters will be required to register for 2 credits of NS A696 Individual Project every semester thereafter, and demonstrate continuing progress (excluding summer sessions) until the project is satisfactorily completed. Students are expected to complete their Scholarly Project within three sequential semesters of finishing the last clinical course. In the event a student does not complete their Scholarly Project during this timeframe, additional coursework may be required or they may be dismissed from the program for non-progression. In the event a student wants to work on the project during a summer semester, utilizing faculty and UAA resources, they must get approval from their committee and register for a 1-credit independent study (P/NP). The independent study credit does not count toward the 4 required project credits. There is no limit to the number of project credits that may be accepted; however, if a year or more passes since the last clinical course, additional coursework will be required. Specific requirements for additional coursework will be determined by the chair of the Graduate Program in Nursing, the coordinator of the specialty track, and the thesis or project chair.

**Nursing Graduate Certificate Programs**

The nursing graduate certificate programs were designed for individuals who have previously acquired their master’s or doctoral degrees in nursing and wish to expand their nursing competencies or practice. Graduate certificate programs are offered in several specialty areas: Family Nurse Practitioner, Psychiatric-Mental Health Nurse Practitioner or Nurse Educator. Prior nursing
degrees must be issued from institutions that hold regional accreditation and from programs that hold nursing accreditation (from either the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (NLNAC) National League for Nursing Accrediting or the Commission on Collegiate Nursing Education (CCNE)).

The 15-29 credit graduate certificate curriculum builds on the student’s prior graduate degree in nursing by integrating content from that degree with theory-based advanced practice nursing courses and specialty clinical practice. To be eligible for either of the nurse practitioner graduate certificate programs, the individual must already be certified as a nurse practitioner in another specialty.

**UAA Admission Requirements**

See the beginning of this chapter for Admission Requirements for Graduate Certificates. The following UAA application submission deadlines are recommended to ensure full processing of application and transcripts:

- **November 1** for March 1 applicants
- **June 15** for November 1 applicants

**School of Nursing Admission Requirements**

Students applying to the graduate certificate program must also submit documentation of having met the following requirements:

1. Have earned graduate degree in nursing (master’s or doctoral) from a school of nursing accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education.
2. Have a minimum graduate GPA of at least a 3.00 (B) on a 4.00 scale.
3. Submit the School of Nursing graduate admission application directly to the School of Nursing. The Graduate Nursing Program Student Handbook provides details for completing the application packet.

In addition, additional requirements for students applying for the Family Nurse Practitioner or Psychiatric-Mental Health Nurse Practitioner graduate certificate programs must include:

1. Hold and maintain an active unencumbered license in the state of Alaska.*
2. Provide documentation of national certification as an advanced nurse practitioner.

*There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate program chair to determine program eligibility.

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Prior acceptance into graduate study status does not guarantee admission into the clinical nursing tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats available in the program, preference may be given to residents of the state of Alaska as defined by the university’s policy on residency for tuition purposes.

The School of Nursing will consider applications for the graduate certificate during fall and spring semesters. Following are the deadlines for submission to ensure full consideration by the admissions committee:

- **November 1**: Graduate certificate PMH-NP or EDUC specialty
- **March 1**: Graduate certificate FNP, PMH-NP or EDUC specialty

**Academic Progress**

Students enrolled in the graduate certificate program must:

- Maintain at least a 3.00 (B) GPA in all required coursework.
- Earn a grade of 3.00 (B) or higher in all specialty courses required coursework.
Maintain continuous registration each fall and spring semester.

Receive no more than one 2.00 (C) grade in core or elective courses (if required).

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

**Additional School of Nursing Requirements**

All students enrolled in UAA nursing graduate certificate programs must provide:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants, and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubella, and hepatitis A and B (by titer);
- Documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- The results of the School of Nursing-sanctioned national level criminal background check.

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:

- Word processing (preferably MS Word);
- Sending and receiving e-mail with attachments;
- Accessing and navigating the Internet/World Wide Web; and
- Basic understanding of hardware, software, and operating systems.

**Scheduling of Courses**

Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conference. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

**Graduation Requirements**

See the beginning of this chapter for University Requirements for Graduate Certificates.

**Program Requirements**

**Graduate Certificate, Family Nurse Practitioner**

The Family Nurse Practitioner (FNP) Graduate Certificate for psychiatric nurse practitioners is designed for nurses who are already certified as psychiatric nurse practitioners. This program expands their scope of practice to assist them to acquire the theory, knowledge, and skills needed to provide primary care for families. Courses and seminars are scheduled to allow students to attend classes with content specific to expand their specialty practice to include a family scope. The curriculum includes didactic, seminar, and approximately 720 clinical hours in practicum coursework. Students who successfully complete the graduate certificate program will be eligible to take the Family Nurse Practitioner examination offered by the American Nurses Credentialing Center (ANCC), or the American Academy of Nurse Practitioners (AANP) to become certified as a family nurse practitioner. These examinations are given nationwide throughout the year.

The Family Nurse Practitioner Graduate Certificate for primary care specialties was developed for nurses who are already certified in one of the primary care nurse practitioner specialties (adult, child, or women). Students who successfully complete it will be eligible to take the family nurse practitioner examination offered by the ANCC, or the AANP to become certified as a family nurse practitioner. These examinations are given nationwide throughout the year.

**Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner**

The Psychiatric-Mental Health Nurse Practitioner (PMH) Graduate Certificate for advanced nurse practitioners is designed for nurses who are already certified as advanced nurse practitioners in fields other than psychiatric-mental health. Students who
successfully complete the graduate certificate program will be eligible to write the national certification for psychiatric mental
health nurse practitioner-family offered by the ANCC. This examination is given nationwide throughout the year.

**Graduate Certificate, Nursing Education**

The specialty certificate in Nursing Education is designed for nurses who have previously acquired a minimum of a master’s degree
in nursing and are seeking to develop advanced knowledge and skills in order to teach in academic or clinical settings. The
coursework leading to the graduate certificate emphasizes instruction in teaching, program and course development,
implementation, and evaluation.

The curriculum is based on standards for master’s education outlined in the Essentials for Master’s Education in Nursing published
by the AACN (1996), as well as the newly developed Core Competencies of Nurse Educators proposed by the National League for
Nursing (NLN).

All courses for this certificate will be offered using distance-delivery technologies, including but not limited to Blackboard web-
based approaches, CD-ROMs, and audio-conferencing or video-conferencing as appropriate and available. Teaching practica may
be completed in the student’s community, or in some cases may require visits to the UAA campus. Faculty may also validate
teaching competencies through site visits and/or conference calls.

The 15-credit graduate certificate includes graduate-level coursework in nursing education with practicum opportunities in
classroom and clinical settings.

**Program Requirements**

**Graduate Certificate, Family Nurse Practitioner**

1. Complete one of the following tracks:

   **Adult Nurse Practitioner (15 credits)**
   - NS A660 Family Nurse Practitioner I 6
   - NS A661 Family Nurse Practitioner II 3
   - NS A663 Family Nurse Practitioner IV 6

   **Pediatric Nurse Practitioner (15 credits)**
   - NS A631 Family Nurse Practitioner Focus on Women’s Health and Obstetrics I 2
   - NS A635 Family Nurse Practitioner Focus on Women’s Health and Obstetrics II 2
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   **Psychiatric Mental Health Nurse Practitioner (32 credits)**
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
   - NS A611 Psychopharmacology 3
   - NS A660 Family Nurse Practitioner I 4
   - NS A661 Family Nurse Practitioner II 5
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   **Women’s Health Nurse Practitioner (15 credits)**
   - NS A632 Family Nurse Practitioner Focus on Pediatrics I 2
   - NS A636 Family Nurse Practitioner Focus on
**Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner**

1. Complete the following required courses (20 credits):
   - NS A670 Advanced Psychiatric/Mental Health Nursing I 5
   - NS A671 Advanced Psychiatric/Mental Health Nursing II 5
   - NS A672 Advanced Psychiatric/Mental Health Nursing III 5
   - NS A674 Advanced Psychiatric/Mental Health Nursing IV 5

2. A total of 20 credits is required for the certificate.*

**Graduate Certificate, Nursing Education**

1. Complete the following required courses (15 credits):
   - NS A640 Teaching and Learning in Nursing 3
   - NS A641 Curriculum Development and Evaluation 3
   - NS A643 Assessment and Evaluation in Nursing Education 3
   - NS A644 Distance Education in Nursing 3
   - NS A647 Teaching Practicum in Nursing 3

2. A total of 15 credits is required for the certificate.*

* Students need to have had an advanced pharmacology, pathophysiology and health assessment course in their original nursing master’s program; if their program did not include some or all of these courses, they may need to be taken for the graduate certificate.

**FACULTY**

Barbara Berman, Professor/Interim Director, AFBHB@uaa.alaska.edu
Bethany Buchanan, Term Assistant Professor, BBUCHAN1@uaa.alaska.edu
Elizabeth Campbell, Assistant Professor, AFCCG@uaa.alaska.edu
Bernice Carmon, Associate Professor, AFBWC@uaa.alaska.edu
Elizabeth Driscoll, Term Assistant Professor, AFEMD1@uaa.alaska.edu
Thomas Hendrix, Assistant Professor, AFTJH1@uaa.alaska.edu
Jill Jansen, Professor/Graduate Program Chair, AFJRJ@uaa.alaska.edu
Cindy Jones, Assistant Professor, AFCGJ1@uaa.alaska.edu
Mary Logan, AFBH@uaa.alaska.edu
Patricia Lynne-Hayes, Assistant Professor, AFPAL1@uaa.alaska.edu
Susan Medlin, Associate Professor, AFSJU@uaa.alaska.edu
Maureen O’Malley, Associate Professor/Veterinarian Associate Director, AFBH@uaa.alaska.edu
Notturno Parker, Assistant Professor, AFPAL1@uaa.alaska.edu
Sharon Peabody, Term Assistant Professor, AFSSP@uaa.alaska.edu
Elizabeth Predeger, Professor, AFEAP@uaa.alaska.edu
Dianne Tarrant, Associate Professor, AFEAC@uaa.alaska.edu
Dianna Terhune, Associate Professor, AFDDT@uaa.alaska.edu
Sheral Toscano, Associate Professor, TBA
Angelia Trujillo, Assistant Professor, AFACM1@uaa.alaska.edu
Shirley Valek-Wilson, Associate Professor, AFSV@uaa.alaska.edu
Barbara Berner, Professor/Director, bberner@uaa.alaska.edu
Bethany Buchanan, Term Assistant Professor, bbuchan1@uaa.alaska.edu
Bernice Carmon, Associate Professor, bcarmon@uaa.alaska.edu
Elizabeth Driscoll, Term Assistant Professor, emdriscoll@uaa.alaska.edu
Thomas Hendrix, Assistant Professor, thendri3@uaa.alaska.edu
Lisa Jackson, Assistant Professor, ljackson2@uaa.alaska.edu
Jill Janke, Professor/Graduate Program Chair, jjanke@uaa.alaska.edu
Cindy Jones, Assistant Professor, cjones2@uaa.alaska.edu
Mary Logan, mlogan@uaa.alaska.edu
Patricia Lynes-Hayes, Assistant Professor, plyneshayes@uaa.alaska.edu
Christine Michel, Associate Professor, cmichel@uaa.alaska.edu
Maureen O’Malley, Associate Professor/Associate Director, momalley@uaa.alaska.edu
Nadine Parker, Assistant Professor, nparker8@uaa.alaska.edu
Sharon Paybar, Term Assistant Professor, speabody@uaa.alaska.edu
Elizabeth Predeger, Professor, epredeger@uaa.alaska.edu
Cynthia Strobach, Assistant Professor, cstrobach@uaa.alaska.edu
Dianne Tarrant, Associate Professor, dtarrant@uaa.alaska.edu
Dianne Toebe, Associate Professor, dtoebe@uaa.alaska.edu
Naomi Torrance, Associate Professor, ntorrance@uaa.alaska.edu
Sharyl Toscano, Associate Professor, setoscano@uaa.alaska.edu
Angelia Trujillo, Assistant Professor, atrujillo@uaa.alaska.edu
Shirley Valek-Wilson, Associate Professor, sjvalekwilson@uaa.alaska.edu
1a. School or College: AS CAS  
1b. Division: AMSC Division of Math Science  
1c. Department: Biological Sciences  

<table>
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<th>4. Previous Course Prefix &amp; Number</th>
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<th>5b. Contact Hours (Lecture + Lab)</th>
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6. Complete Course Title: Advanced Applied Microbiology  
Abbreviated Title for Transcript (30 characters)  

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

8. Type of Action:  
- Add  
- Change  
- Delete  

If a change, mark appropriate boxes:  
- Prefix  
- Credits  
- Title  
- Grading Basis  
- Course Description  
- Test Score Prerequisites  
- Automatic Restrictions  
- Class  
- Level  
- College  
- Major  
- Other  
- Course Number  
- Contact Hours  
- Repeat Status  
- Cross-Listed/Stacked  
- Course Prerequisites  
- Registration Restrictions  
- General Education Requirement  

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

10. Grading Basis:  
- A-F  
- P/NP  
- NG  

11. Implementation Date:  
- semester/year  
- From: Fall/2015  
- To: Fall/9999  

12. Cross Listed with:  
- Stacked with:  
- Cross-Listed Coordination Signature  

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

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

Initiator Name (typed): Khrys Duddleston  
Initiator Signed Initials:  
Date:  

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

13c. Coordination with Library Liaison:  
Date: 6Jan14  

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

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

16a. Course Prerequisite(s): (list prefix and number or test code and score)  
16b. Co-requisite(s): (concurrent enrollment required)  
16c. Automatic Restriction(s):  
- College  
- Major  
- Class  
- Level  
16d. Registration Restriction(s): (non-codable)  
17. Mark if course has fees  
18. Mark if course is a selected topic course  
19. Justification for Action:  
This course has been under-enrolled.
Course Action Request  
University of Alaska Anchorage  
Proposal to Initiate, Add, Change, or Delete a Course

<table>
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<tr>
<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
</tr>
</thead>
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<tr>
<td>AS CAS</td>
<td>AMSC Division of Math Science</td>
<td>Biological Sciences</td>
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6. Complete Course Title  
Advanced Molecular Biology of Cancer  
Adv Mol Biology Cancer

Abbreviated Title for Transcript (30 character)

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

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

If a change, mark appropriate boxes:

☐ Prefix  ☐ Course Number  ☐ Contact Hours  ☐ Repeat Status  ☐ Grading Basis  ☑ Cross-Listed/Stacked  ☐ Course Prerequisites  ☐ Co-requisites  ☐ Test Score Prerequisites  ☐ Registration Restrictions  ☐ Automatic Restrictions  ☐ General Education Requirement  ☜ Other CCG (please specify)

9. Repeat Status No  # of Repeats  Max Credits

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

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

12. ☐ Cross Listed  ☑ Stacked

Cross-Listed Coordination Signature

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

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</table>

Initiator Name (typed): Khrys Duddleston  
Initiator Signed Initials: __________ Date: ______________

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

13c. Coordination with Library Liaison  
Date: 6Jan14

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

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

A study of the molecular biology of cancer, with emphasis on the mechanisms by which a normal cell becomes a malignant cell, including the roles of chemicals, viruses, and other environmental insults in carcinogenesis. The orientation of the course will be toward a study of the fundamentals of cancer molecular biology and the current literature, through a combination of team-based learning (TBL), research, discussions, term papers, and seminars.

16a. Course Prerequisite(s) (list prefix and number or test code and score)  
BIOL A461 with minimum grade of C

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

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

16d. Registration Restriction(s) (non-codable)  
Graduate Standing

17. ☐ Mark if course has fees

18. ☑ Mark if course is a selected topic course

19. Justification for Action  
A 400-level course will now be offered in molecular biology of cancer. These courses will not be stacked, however we changed the title of this to “Advanced…” to reflect that it is a graduate course.
<table>
<thead>
<tr>
<th>Initiator (faculty only)</th>
<th>Date</th>
<th>Approved</th>
<th>Disapproved</th>
<th>Dean/Director of School/College</th>
<th>Date</th>
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<tbody>
<tr>
<td>Khrys Duddleston</td>
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<th>College/School Curriculum Committee Chair</th>
<th>Date</th>
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<tbody>
<tr>
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I. Date of Initiation: Spring 2014

II. Curriculum Action Request
A. College: College of Arts and Sciences
B. Course Prefix: BIOL
C. Course Number: A663
D. Number of Credits: 3
E. Contact Hours: 3+0
F. Course Title: Advanced Molecular Biology of Cancer
G. Grading Basis: A-F
H. Implementation Date: Fall 2015
I. Cross-listed/Stacked: N/A
J. Course Description: A study of the molecular biology of cancer, with emphasis on the mechanisms by which a normal cell becomes a malignant cell, including the roles of chemicals, viruses, and other environmental insults in carcinogenesis. The orientation of the course will be toward a study of the fundamentals of cancer molecular biology and the current literature, through a combination of team-based learning (TBL), research, discussions, term papers, and seminars.
K. Course Prerequisites: BIOL A461 with minimum grade of C.
L. Course Co-requisites: N/A
M. Other Restrictions: N/A
N. Registration Restrictions: Graduate Standing
O. Course Fees: No

III. Instructional Goals and Student Learning Outcomes
A. Instructional Goals. The instructor will:
   1. Explain and provide a framework for understanding the fundamental changes in cell physiology that must occur for a cell to become cancerous.
   2. Provide examples by which environmental insults promote carcinogenesis and discussion cancer prevention.
   3. Discuss the latest research findings relevant to carcinogenesis and cancer treatment.

B. Student Learning Outcomes and Assessment Measures

<table>
<thead>
<tr>
<th>Student Learning Outcomes: Upon completion of this course, the student will be able to:</th>
<th>Assessment Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Illustrate the classes of molecular defects that must occur in the progression of carcinogenesis, as well as specific examples of these molecular defects, and to understand how the relevant molecular pathways interact.</td>
<td>TBL exercises, written assignments, in class discussions</td>
</tr>
<tr>
<td>2. Demonstrate the mechanisms by which genetic and environmental factors promote or</td>
<td>Written assignments, presentations, in class discussions</td>
</tr>
</tbody>
</table>
inhibit carcinogenesis.

<p>| | |</p>
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<th></th>
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</thead>
<tbody>
<tr>
<td>3. Analyze data presented in the primary literature on cancer molecular biology.</td>
<td>Presentations, in class discussions, written term paper</td>
</tr>
<tr>
<td>4. Critique the latest research data for both the mechanisms of carcinogenesis and modern cancer therapies</td>
<td>Written assignments, presentations and examinations</td>
</tr>
<tr>
<td>5. Reframe readings to participate in the creation of TBL exercises</td>
<td>Written assignments, TBL exercises</td>
</tr>
<tr>
<td>6. Compose a research publication based on real data</td>
<td>Written assignment</td>
</tr>
</tbody>
</table>

IV. **Course Level Justification**

This course is an advanced interdisciplinary course comparable to graduate level molecular biology courses offered at other universities. This course emphasis on in-depth class discussions, review of the primary literature, student presentations of advanced topics in the primary literature, and preparation of manuscripts using real data. In addition, graduate students will participate in the creation of team-based learning exercises.

V. **Topical Course Outline**

A. Biology of Cancer  
B. Hallmarks of Cancer  
C. Enabling Characteristics of Cancer  
D. Growth Signaling and Oncogenes  
E. Anti-Growth Signaling and Tumor Suppressors  
F. Apoptosis  
G. Tissue Invasion/Metastasis  
H. Epigenetics and Cancer  
I. Genome Stability and Cancer  
   1. Genetics and Cancer Syndromes  
   2. Carcinogens  
J. Viruses and Cancer  
K. Cancer and the Immune System

VI. **Suggested Texts**


Primary literature from journals such as Oncogene, Science, Cell, Nature, and similar titles.

VII. **Bibliography**


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

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6. Complete Course Title
Experiential Learning: Advanced Molecular Biology
EL: Adv. Mol. Biology
Abbreviated Title for Transcript (30 character)

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

8. Type of Action:  [ ] Add  [ ] Change  [ ] Delete
If a change, mark appropriate boxes:
- [ ] Prefix
- [ ] Course Number
- [ ] Credits
- [ ] Title
- [ ] Grading Basis
- [ ] Contact Hours
- [ ] Repeat Status
- [ ] Course Description
- [ ] Cross-Listed/Stacked
- [ ] Course Prerequisites
- [ ] Co-requisites
- [ ] Test Score Prerequisites
- [ ] Registration Restrictions
- [ ] General Education Requirement
- [ ] Other CCG (please specify)

9. Repeat Status No  # of Repeats  Max Credits
[ ] A-F  [ ] P/NP  [ ] NG

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

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

12. [ ] Cross Listed with
[ ] Stacked with BIOL A465  Cross-Listed Coordination

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

<table>
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Initiator Name (typed): Khrys Duddleston  Initiator Signed Initials: __________  Date: __________

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

13c. Coordination with Library Liaison  Date: 6Jan14

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

15. Course Description (suggested length 20 to 50 words)
A practical implementation of the theory learned in BIOL A661, which includes in vitro DNA techniques, gene expression analysis, and genomics. Students will also learn experimental design, proposal writing, and oral and written presentation skills, along with mentorship and leadership skills.

16a. Course Prerequisite(s) (list prefix and number or test code and score)
BIOL A661 with minimum grade of C or concurrent enrollment

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

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

16d. Registration Restriction(s) (non-codable)
Graduate Standing

17. [ ] Mark if course has fees

18. [ ] Mark if course is a selected topic course

19. Justification for Action
The course number, credits and description are being changed to align with the BIOL A465, which was modified as part of an overall curriculum revision in which we are aligning our degree with the core concepts and competencies outlined in Vision and Change in Undergraduate Biology Education (National Science Foundation and American Association for the Advancement of Science).
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<td>Undergraduate/Graduate Academic</td>
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<td>Provost or Designee</td>
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</table>
I. **Date of Initiation:** Spring 2014

II. **Curriculum Action Request**
   A. **College:** College of Arts and Sciences  
   B. **Course Prefix:** BIOL  
   C. **Course Number:** A665  
   D. **Number of Credits:** 4  
   E. **Contact Hours:** 2+4  
   F. **Course Title:** Experiential Learning: Advanced Molecular Biology  
   G. **Grading Basis:** A-F  
   H. **Implementation Date:** Fall 2013  
   I. **Cross-listed/Stacked:** BIOL A465  
   J. **Course Description:** A practical implementation of the theory learned in BIOL A661, which includes in vitro DNA techniques, gene expression analysis, and genomics. Students will also learn experimental design, proposal writing, and oral and written presentation skills, along with mentorship and leadership skills.  
   K. **Course Prerequisites:** BIOL A661 with minimum grade of C or concurrent enrollment  
   L. **Course Co-requisite:** N/A  
   M. **Other Restrictions:** N/A  
   N. **Registration Restrictions:** Graduate Standing  
   M. **Course Fees:** Yes

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

   **A. Instructional Goals.** The instructor will:
   1. Integrate the process of scientific investigation, including quantitative reasoning and analysis into the curriculum.  
   2. Provide instruction on practical and theoretical aspects of molecular biology and related fields.  
   3. Support the development of group projects aimed at investigating one or more biological phenomena using molecular approaches. This includes facilitating the discussion of research topics and the developments of research aims and experimental design. The instructor will provide review and critical analysis of student proposals in addition to the student-to-student peer review.

   **B. Student Learning Outcomes and Assessment Measures**

<table>
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<tr>
<th>Student Learning Outcomes: Upon completion of this course, the student will be able to:</th>
<th>Assessment Measures</th>
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<tbody>
<tr>
<td>1. Develop an experimental research plan, including the elaboration of research aims and experimental</td>
<td>Oral literature summary, written proposal, group discussion and peer review.</td>
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</table>
strategies, and the evaluation of similar research proposals.

1. Demonstrate competency in molecular laboratory technique including, in vitro DNA/RNA protein methods, genomics and gene expression analysis.

   Laboratory exercises and group discussion.

2. Lead a small research team by coordinating group activity, maintaining communication and coordination of group efforts in written work and oral presentation.

   Laboratory exercises, primary research, written proposals, oral presentation and group discussion.

3. Demonstrate skills in data analysis, including use of, quantitative reasoning, statistics and graphical analysis.

   Oral literature summary and research presentation, written proposal, group discussion and in laboratory exercises.

4. Communicate, to an audience of scientific peers, their project as primary scientific research.

   Primary research report and oral presentation.

IV. Course Level Justification

   Designed for graduate students in the biological sciences as an elective graduate course comparable to 600-level molecular biology laboratory courses offered at other universities.

V. Topical Course Outline

   A. Research Project Proposals
   B. Choice of topic and experimental system
      1. Developing a research project from a topic of interest
      2. Choosing an effective model organism or model system
   C. Experimental design
      1. Developing research aims
      2. Developing hypotheses and designing experiments to address them
      3. Elaborating experimental protocols
   D. Experimentation
   E. Practical methodology
      1. Chemical safety
      2. Handling reagents and making solutions
      3. Biological media and organism care
      4. Biological assays and molecular techniques
      5. Data collection
   F. Data analysis
      1. Qualitative data analysis
      2. Quantitative data analysis
      3. Critical analysis and troubleshooting
   G. Research communication
   H. In-lab journal article presentation/discussion
   I. In-lab research project presentation/discussion
   J. Research Proposal
      1. Peer review
K. Primary research manuscript  
L. Oral presentation to a scientific audience - In-class presentation  
M. Poster presentation  
N. Mentorship  
   1. Lead group efforts in laboratory exercises  
   2. Organize and edit a research proposal  
   3. Organize and lead group presentations  

VI. Suggested Text(s)  


VII. Bibliography  
Journal articles from the primary literature (Science, Nature, Cell, EMBO J, Cell and Molecular Biology, etc) related to student research projects.  

Web-based resources for project development and data analysis, including genomic analysis (NCBI and model organism databases), microarray and image analysis platforms (Image J and MAGIC Tool), and DNA sequence analysis.  

Reference books related to student research topics and model systems, including:  


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

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
</tr>
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<tbody>
<tr>
<td>AS CAS</td>
<td>AMSC Division of Math Science</td>
<td>Biological Sciences</td>
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<table>
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<tr>
<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours</th>
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<tbody>
<tr>
<td>BIOL</td>
<td>A465</td>
<td>A461L</td>
<td>4</td>
<td>(2+4)</td>
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</table>

6. Complete Course Title   
Experiential Learning: Molecular Biology  
EL: Molecular Biology  
Abbreviated Title for Transcript (30 character) 

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

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

If a change, mark appropriate boxes:   
☐ Prefix  
☒ Credits  
☐ Title  
☐ Grading Basis  
☐ Course Description  
☐ Test Score Prerequisites  
☐ Automatic Restrictions  
☐ Other CCG (please specify)  
☐ Contact Hours  
☐ Repeat Status  
□ Cross-Listed/Stacked  
☐ Course Prerequisites  
☐ Co-requisites  
☐ Registration Restrictions  
☐ General Education Requirement  
☐ Class  
☐ Level  
☐ College  
☐ Major 

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

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

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

12. ☐ Cross Listed with  
☐ Stacked with BIOL A665  
☐ Cross-Listed Coordination 

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

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Initiator Name (typed): Khrys Duddleston   
Initiator Signed Initials: __________   
Date: ________________

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

13c. Coordination with Library Liaison   
Date: 6Jan14 

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

15. Course Description (suggested length 20 to 50 words)  
A practical implementation of the theory learned in BIOL A465, which includes in vitro DNA techniques, gene expression analysis, and genomics. Students will also learn experimental design, proposal writing, and oral and written presentation skills.

16a. Course Prerequisite(s) (list prefix and number or test code and score)  
BIOL A461 with minimum grade of C or concurrent enrollment  

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

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

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

17. ☒ Mark if course has fees  

18. ☐ Mark if course is a selected topic course  

19. Justification for Action   
Renumbering and renaming the course to comply with revision to BIOL undergraduate curriculum. Updating credits/contact hours to better reflect course content and student expectations. The course number, credits and description are being changed as part of an overall curriculum revision in which we are aligning our degree with the core concepts and competencies outlined in Vision and Change in Undergraduate Biology Education (National Science Foundation and American Association for the Advancement of Science).
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</table>
I. Date of Initiation: Spring 2014

II. Curriculum Action Request
A. College: College of Arts and Sciences
B. Course Prefix: BIOL
C. Course Number: A465
D. Number of Credits: 4
E. Contact Hours: 2+4
F. Course Title: Experiential Learning: Molecular Biology
G. Grading Basis: A-F
H. Implementation Date: Fall 2015
I. Cross-listed/Stacked: BIOL A665
J. Course Description: A practical implementation of the theory learned in BIOL A461, which includes in vitro DNA techniques, gene expression analysis, and genomics. Students will also learn experimental design, proposal writing, and oral and written presentation skills.
K. Course Prerequisites: BIOL A461 with minimum grade of C or concurrent enrollment
L. Course Co-requisite: N/A
M. Other Restrictions: N/A
N. Registration Restrictions: N/A
M. Course Fees Yes

III. Instructional Goals and Student Learning Outcomes
A. Instructional Goals. The instructor will:
   1. Integrate the process of scientific investigation, including quantitative reasoning and analysis into the curriculum.
   2. Provide instruction on practical and theoretical aspects of molecular biology and related fields.
   3. Support the development of group projects aimed at investigating one or more biological phenomena using molecular approaches. This includes facilitating the discussion of research topics and the developments of research aims and experimental design. The instructor will provide review and critical analysis of student proposals in addition to the student-to-student peer review.

B. Student Learning Outcomes and Assessment Measures

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<td>1. Develop an experimental research plan, including the elaboration of research aims and experimental strategies, and the evaluation of</td>
<td>Oral literature summary, written proposal, group discussion and peer review.</td>
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similar research proposals.

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<td>2. Demonstrate competency in molecular laboratory technique including, in vitro DNA/RNA protein methods, genomics and gene expression analysis.</td>
<td>Laboratory exercises and group discussion.</td>
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<td>3. Demonstrate skills in data analysis, including use of, quantitative reasoning, statistics and graphical analysis</td>
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<tr>
<td>4. Communicate, to an audience of scientific peers, their project as primary scientific research.</td>
<td>Primary research report and oral presentation.</td>
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</table>

IV. **Course Level Justification**

Designed for Biological and Natural Sciences majors as a selective undergraduate course comparable to 400-level molecular biology laboratory courses offered at other universities.

V. **Topical Course Outline**

A. Research Project Proposals
   1. Choice of topic and experimental system
      a. Developing a research project from a topic of interest
   B. Choosing an effective model organism or model system
      1. Experimental design
         a. Developing research aims
         b. Developing hypotheses and designing experiments to address them
         c. Elaborating experimental protocols
   C. Experimentation
      1. Practical methodology
         a. Chemical safety
         b. Handling reagents and making solutions
         c. Biological media and organism care
         d. Biological assays and molecular techniques
         e. Data collection
      2. Data analysis
   D. Qualitative data analysis
   E. Quantitative data analysis
   F. Critical analysis and troubleshooting
   G. Research communication
      1. In-lab journal article presentation/discussion
      2. In-lab research project presentation/discussion
      3. Research Proposal
         a. Peer review
      4. Primary research manuscript
      5. Oral presentation to a scientific audience - In-class presentation
      6. Poster presentation

VI. **Suggested Text(s)**


VII. Bibliography:

Web-based resources for project development and data analysis, including genomic analysis (NCBI), image analysis (Image J) and model organism databases, such as www.yeastgenome.org; www.wormbase.org; and www.uniprot.org

Reference books related to student research topics and model systems, including:


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

1a. School or College  
AS CAS

1b. Division  
AMSC Division of Math Science

1c. Department  
Biological Sciences

2. Course Prefix  
Biol

3. Course Number  
A678

4. Previous Course Prefix & Number  
N/A

5a. Credits/CEUs  
4

5b. Contact Hours  
(Lecture + Lab) 4+0

6. Complete Course Title  
Advanced Biological Oceanography
Abbreviated Title for Transcript (30 character)

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

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

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

9. Repeat Status No  
# of Repeats  
Max Credits

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

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

12. ☐ Cross Listed with  
BIOL A478

13. Coordination with Library Liaison  
Date: 6 Jan 14

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

15. Course Description (suggested length 20 to 50 words)  
Principles of biological oceanography with an emphasis on biological, chemical and physical processes in the world's oceans and linkages between biological ocean processes and carbon transport.

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

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

16c. Automatic Restriction(s)
- ☐ College  ☐ Major  ☐ Class  ☑ Level (please specify)

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

- ☐ Graduate Standing

17. ☐ Mark if course has fees

18. ☐ Mark if course is a selected topic course

19. Justification for Action  
This course addition meets a need for graduate students in the Dept. of Biological Sciences, particularly those with research foci in Marine Biology.

Initiator Name (typed): Khrys Duddleston  
Initiator Signed Initials:  
Date:  

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

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

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

13b. Coordination Email  
Date: 6 Jan 14

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

13c. Coordination with Library Liaison  
Date: 6 Jan 14

14. General Education Requirement  
Mark appropriate box:
- Oral Communication
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15. Course Description (suggested length 20 to 50 words)  
Principles of biological oceanography with an emphasis on biological, chemical and physical processes in the world's oceans and linkages between biological ocean processes and carbon transport.

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

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

16c. Automatic Restriction(s)
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16d. Registration Restriction(s) (non-codable)

- ☐ Graduate Standing

17. ☐ Mark if course has fees

18. ☐ Mark if course is a selected topic course

19. Justification for Action  
This course addition meets a need for graduate students in the Dept. of Biological Sciences, particularly those with research foci in Marine Biology.

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

Approved  ☐ Disapproved  Dean/Director of School/College  Date

Approved  ☐ Disapproved  Undergraduate/Graduate Academic  Board Chair  Date

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

I. Initiation Date:  
Spring 2014

II. Course Information  
A. College: College of Arts and Sciences  
B. Course prefix: BIOL  
C. Course Subject/Number: A678  
D. Number of credits: 4  
E. Contact Hours: 4+0  
F. Course Title: Advanced Biological Oceanography  
G. Grading Information: A-F  
H. Implementation Date: Fall 2015  
I. Cross-listed/ Stacked: BIOL A478  
J. Course Description: Principles of biological oceanography with an emphasis on biological, chemical and physical processes in the world’s oceans and linkages between biological ocean processes and carbon transport.

K. Course Prerequisites: N/A  
L. Course Co-requisites: N/A  
M. Other restrictions: N/A  
N. Registration Restrictions: Graduate Standing  
O. Lab Fees: No

III. Instructional Goals and Student Learning Outcomes  
A. Instructional Goals. The instructor will:  
1. Present the concepts and organisms important to the study of biological oceanography.  
2. Emphasize the reciprocal effects of biological processes in the oceans and atmosphere.  
3. Lead students to consider the biological processes in the oceans in the context of global systems  

B. Student Learning Outcomes and Assessment Measures  

<table>
<thead>
<tr>
<th>Student Learning Outcomes: Upon completion of this course, the student will be able to:</th>
<th>Assessment Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify major planktonic organisms, their ecology, global distributions and contributions to nutrient and chemical dynamics</td>
<td>Written assignments and examinations</td>
</tr>
<tr>
<td>2. Identify major benthic organisms, their ecology, global distributions and contributions to sediment/ water chemical dynamics</td>
<td>Written assignments and examinations</td>
</tr>
<tr>
<td>3. Communicate their understanding of the ocean environment with reference to organisms to peers</td>
<td>Written assignments, in class presentation</td>
</tr>
<tr>
<td>4. Synthesize and analyze primary literature</td>
<td>In class presentation, written assignments</td>
</tr>
<tr>
<td>5. Create and present a novel hypothesis as a</td>
<td>Written assignment</td>
</tr>
</tbody>
</table>
IV. Course Level Justification
This course is similar to other graduate level courses in biological oceanography offered at other universities.

V. Topical Course Outline
A. History of biological oceanography
B. Primary production
   1. Phytoplankton diversity
   2. Phytoplankton growth
   3. Blooms and toxic blooms
   4. Microbial primary production
C. Secondary production
   1. Zooplankton diversity
   2. Zooplankton growth
   3. Zooplankton population biology and models
D. Benthic environments
   1. Organismal diversity
   2. Community ecology
   3. Special environments: Hydrothermal vents, hydrocarbon seeps, methane ice, cold
      water corals, seamounts
E. Biogeography
   1. Pelagic biogeography
   2. Bioluminescence
   3. Biomes and provinces
   4. Benthic biogeography
F. Atmospheric impacts of biological processes
G. Fisheries

VI. Suggested Texts

VII. Bibliography
Gage, J.D. and P.A. Tyler. Deep-Sea Biology: A natural history of the organisms at the deep-sea
Van Dover, C.L. The Ecology of Deep-sea Hydrothermal Vents. Princeton University

Articles from the following journals:
Science, American Association for the Advancement of Science
Nature, Nature Publishing Group
Deep Sea Research, Elsevier
Marine Ecology Progress Series, Inter-Research
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</table>

<table>
<thead>
<tr>
<th>6. Complete Course Title</th>
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<tbody>
<tr>
<td>Biological Oceanography</td>
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<table>
<thead>
<tr>
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If a change, mark appropriate boxes:
- Prefix
- Credits
- Title
- Grading Basis
- Course Prerequisites
- Test Score Prerequisites
- Automatic Restrictions
- Contact Hours
- Repeat Status
- Cross-Listed/Stacked
- Course Prerequisites
- Registration Restrictions
- General Education Requirement
- Class
- Level
- College
- Major
- Other CCG (please specify)

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<th>14. General Education Requirement</th>
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<tr>
<td>Mark appropriate box:</td>
</tr>
<tr>
<td>Oral Communication</td>
</tr>
<tr>
<td>Written Communication</td>
</tr>
<tr>
<td>Quantitative Skills</td>
</tr>
<tr>
<td>Humanities</td>
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<tr>
<td>Integrative Capstone</td>
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<tr>
<th>15. Course Description (suggested length 20 to 50 words)</th>
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<tr>
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<tr>
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<th>19. Justification for Action</th>
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<tr>
<td>Course changes reflect the level at which the course is taught and allow stacking with graduate level course. The laboratory component of the course is being removed.</td>
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<td>Date</td>
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<td>Date</td>
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University of Alaska Anchorage  
College of Arts and Sciences  
Course Content Guide

I. Initiation Date: Spring 2014

II. Course Information
A. College: College of Arts and Sciences
B. Course prefix: BIOL
C. Course Number: A478
D. Number of credits: 3
E. Contact Hours: 3+0
F. Course Title: Biological Oceanography
G. Grading Basis: A-F
H. Implementation Date: Fall 2015
I. Cross-listed/Stacked: BIOL A678
J. Course Description: Principles of biological oceanography with an emphasis on biological, chemical and physical processes in the world’s oceans and linkages between biological ocean processes and carbon transport.

K. Course Prerequisites: N/A
L. Course Co-requisites: N/A
M. Other restrictions: N/A
N. Registration Restrictions: Junior standing
O. Lab Fees: No

III. Instructional Goals and Student Learning Outcomes
A. Instructional Goals. The instructor will:
   1. Present the concepts and organisms important to the study of biological oceanography.
   2. Emphasize the reciprocal effects of biological processes in the oceans and atmosphere.
   3. Lead students to consider the biological processes in the oceans in the context of global systems

B. Student Learning Outcomes and Assessment Measures:

<table>
<thead>
<tr>
<th>Student Learning Outcomes: Upon completion of this course, the student will be able to:</th>
<th>Assessment Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify major planktonic organisms, their ecology, global distributions and contributions to nutrient and chemical dynamics</td>
<td>Written assignments and examinations</td>
</tr>
<tr>
<td>2. Identify major benthic organisms, their ecology, global distributions and contributions to sediment/ water chemical dynamics</td>
<td>Written assignments and examinations</td>
</tr>
<tr>
<td>3. Communicate their understanding of the ocean environment with reference to organisms to peers</td>
<td>Written assignments, in class presentation</td>
</tr>
</tbody>
</table>

IV. Course Level Justification
This course builds on concepts presented in 200 level courses. Students are required to learn and integrate information from a variety of scientific disciplines as it relates to biological oceanography

V. Topical Course Outline
A. History of biological oceanography
B. Primary production
   1. Phytoplankton diversity
   2. Phytoplankton growth
   3. Blooms and toxic blooms
   4. Microbial primary production
C. Secondary production
   1. Zooplankton diversity
   2. Zooplankton growth
   3. Zooplankton population biology and models
D. Benthic environments
   1. Organismal diversity
   2. Community ecology
   3. Special environments: Hydrothermal vents, hydrocarbon seeps, methane ice, cold water corals, seamounts
E. Biogeography
   1. Pelagic biogeography
   2. Bioluminescence
   3. Biomes and provinces
   4. Benthic biogeography
F. Atmospheric impacts of biological processes
G. Fisheries

VI. Suggested Texts


VII. Bibliography


Review articles from the following journals:
Science, American Association for the Advancement of Science
Nature, Nature Publishing Group
Deep Sea Research, Elsevier
Marine Ecology Progress Series, Inter-Research
Course Action Request
University of Alaska Anchorage
Proposal to Initiate, Add, Change, or Delete a Course

<table>
<thead>
<tr>
<th>1a. School or College</th>
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<th>1c. Department</th>
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<tbody>
<tr>
<td>AS CAS</td>
<td>AMSC</td>
<td>Mathematics and Statistics</td>
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</table>

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<tr>
<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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<tr>
<td>STAT</td>
<td>601</td>
<td>n/a</td>
<td>3.0</td>
<td>(3+0)</td>
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6. Complete Course Title
Advanced Statistical Methods

Abbreviated Title for Transcript (30 character)

<table>
<thead>
<tr>
<th>7. Type of Course</th>
<th>8. Type of Action: Add or Change or Delete</th>
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</thead>
<tbody>
<tr>
<td>Academic</td>
<td>Change</td>
</tr>
<tr>
<td>Preparatory/Development</td>
<td>Add or Change or Delete</td>
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8. Type of Action: Add or Change or Delete
If a change, mark appropriate boxes:
- [ ] Prefix
- [ ] Credits
- [ ] Grading Basis
- [ ] Title
- [ ] Course Number
- [ ] Contact Hours
- [ ] Repeat Status
- [ ] Course Prerequisites
- [ ] Course Description
- [ ] Cross-Listed/Stacked
- [ ] Test Score Prerequisites
- [ ] Registration Restrictions
- [ ] Co-requisites
- [ ] General Education Requirement
- [ ] Other Course Content Guide (please specify)

9. Repeat Status No # of Repeats Max Credits
n/a
n/a

10. Grading Basis
A-F
P/NP
NG

11. Implementation Date
From: Fall/2015
To: 99/9999

12. Cross Listed with
[ ] Stacked with STAT A401

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

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601</td>
<td>03/19/2014</td>
<td>John Olofsson</td>
</tr>
<tr>
<td>2. MS in Civil Engineering</td>
<td>03/19/2014</td>
<td>Osama Abaza</td>
</tr>
<tr>
<td>3. ___________________</td>
<td>03/19/2014</td>
<td>___________________</td>
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Initiator Name (typed): Kanapathi Thiru
Initiator Signed Initials: ___________
Date: ___________

13b. Coordination Email
Date: 03/11/2014
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison
Date: 03/18/2014

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

15. Course Description (suggested length 20 to 50 words)
Parametric and nonparametric statistical methods. The topics will include, but not restricted to, contingency table analysis, goodness-of-fit tests, simple linear and multiple regression, curvilinear regression, logistic regression, design and analysis of single and multifactor experiments, and introduction to multivariate statistics. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A401.

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

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

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

16d. Registration Restriction(s) (non-codable)
Graduate standing

17. [ ] Mark if course has fees

18. [ ] Mark if course is a selected topic course

19. Justification for Action
Update, change title, and stack with undergraduate course.

Initiator (faculty only)
Kanapathi Thiru
Initiator (TYPE NAME)

[ ] Approved
[ ] Disapproved

Dean/Director of School/College
Date

[ ] Approved
[ ] Disapproved

Undergraduate/Graduate Academic Board Chair
Date

[ ] Approved
[ ] Disapproved

Provost or Designee
Date

[ ] Approved
[ ] Disapproved

Department Chair
Date

[ ] Approved
[ ] Disapproved

College/School Curriculum Committee Chair
Date
Course Content Guide  
University of Alaska Anchorage  
College of Arts and Sciences  
Mathematics & Statistics Department

I. Initiation Date: Spring 2014

II. Course Information
   A. College: College of Arts and Sciences  
   B. Course Subject/Number: STAT A601  
   C. Credits: 3  
   D. Contact Hours: 3+0  
   E. Course Title: Advanced Statistical Methods  
   F. Repeat Status: No  
   G. Grading Basis: A-F  
   H. Course Description: Parametric and nonparametric statistical methods. The topics will include, but not restricted to, contingency table analysis, goodness-of-fit tests, simple linear and multiple regression, curvilinear regression, logistic regression, design and analysis of single and multifactor experiments, and introduction to multivariate statistics. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A401.
   I. Course Prerequisites: n/a
   J. Fees: Yes
   K. Stacked: Yes: STAT A401
   L. Registration Restrictions: Graduate standing

III. Course Level Justification
     Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A401, and complete a major research project.

IV. Instructional Goals and Student Learning Outcomes

<table>
<thead>
<tr>
<th>A. Instructional Goals. The instructor will:</th>
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</thead>
<tbody>
<tr>
<td>1. Discuss parametric and nonparametric hypothesis testing.</td>
</tr>
<tr>
<td>2. Discuss parametric and nonparametric design of experiments, analysis of variance and regression analysis.</td>
</tr>
<tr>
<td>3. Introduce goodness-of-fit tests and multi-way contingency table analysis.</td>
</tr>
<tr>
<td>4. Provide an introduction to multivariate statistics.</td>
</tr>
<tr>
<td>5. Guide with literature review and writing research papers.</td>
</tr>
</tbody>
</table>

B. Student Learning Outcomes: Students will be able to:  

<table>
<thead>
<tr>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Justify a selection of nonparametric test over the parametric alternative.</td>
</tr>
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</table>
V. **Topical Course Outline**

1. The Role of Statistics in Research
2. Some Tests Based on the Binomial Distributions
   a. Test of two proportions using independent samples
   b. The sign test
   c. The McNemar test for significance of changes
3. Goodness-of-Fit Tests
   a. Test of hypothesis concerning specified cell probabilities
   b. Test of composite hypothesis
4. Contingency Table Analysis
   a. Test of homogeneity
   b. Test of independence
   c. Relative risks and odds ratios
5. Hypothesis of Two Means using Independent Samples
   a. Inferences using a pooled variance
   b. Inferences using Welch-Satterthwaite approximation
   c. Mann-Whitney test
6. Hypothesis Testing of Two Means using Related samples
   a. Paired-t test
   b. Wilcoxon signed rank test
7. Design and Analysis of Experiments
   a. Terminology and basic concepts
   b. One-way analysis-of-variance
   c. Model testing and diagnostic tools
   d. Kruskal–Wallis test based on ranks
   e. Multi-factor analysis of variance
   f. Random effects, fixed effects, and mixed effects models
   g. Transformations
   h. Randomized complete block design
   i. Friedman test based on ranks
   j. Split plot design and nested designs
   k. Analysis of covariance
8. Simple Linear Regression and Correlation
   a. Simple linear regression model
   b. Least square estimation of regression coefficients
c. Statistical inferences for linear regression
d. Regression diagnostics
e. Pearson’s correlation coefficient
f. Spearman’s rank correlation coefficient

9. Multiple Linear Regression
a. Inferences about effects of independent variables
b. Model building
c. Curvilinear regression
d. Logistic regression

10. Introduction to Multivariate Statistics
a. Discussion of multivariate data
b. Multivariate normal distribution
c. Hotelling’s $T^2$ test statistic

VI. Suggested Texts


VII Bibliography


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

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- Grading Basis
- Course Description
- Test Score Prerequisites
- Automatic Restrictions
- College
- Other (please specify)

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<th>P/NP</th>
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Initiator Name (typed): Kanapathi Thiru  
Initiator Signed Initials: ___________  
Date: ___________

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<th>13c. Coordination with Library Liaison</th>
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| 15. Course Description (suggested length 20 to 50 words) | Parametric and nonparametric statistical methods. The topics will include, but not restricted to, contingency table analysis, goodness-of-fit tests, simple linear and multiple regression, curvilinear regression, logistic regression, design and analysis of single and multifactor experiments, and introduction to multivariate statistics. Special note: Not available for credit to students who have completed STAT A601. |

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<tr>
<td>College</td>
<td>Major</td>
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</tbody>
</table>

| 17. | Mark if course has fees |

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

| 19. Justification for Action | Need for an undergraduate level course that covers both parametric and nonparametric statistical methods. Stack with STAT A601. |

Initiator (faculty only)  
Kanapathi Thiru  
Initiator (TYPE NAME)  
___________  
Date  

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<th>Approved</th>
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<td>Provost or Designee</td>
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Course Content Guide  
University of Alaska Anchorage  
College of Arts and Sciences  
Mathematics & Statistics Department

I. Initiation Date: Spring 2014

II. Course Information
   A. College: College of Arts and Sciences  
   B. Course Subject/Number: STAT A401  
   C. Credits: 3  
   D. Contact Hours: 3+0  
   E. Course Title: Statistical Methods  
   F. Repeat Status: No  
   G. Grading Basis: A-F  
   H. Course Description: Parametric and nonparametric statistical methods. The topics will include, but not restricted to, contingency table analysis, goodness-of-fit tests, simple linear and multiple regression, curvilinear regression, logistic regression, design and analysis of single and multifactor experiments, and introduction to multivariate statistics. Special note: Not available for credit to students who have completed STAT A601.  
   I. Course Prerequisites: (STAT A253 or STAT A308) with minimum grade of C  
   J. Fees: Yes  
   K. Stacked: Yes: STAT A601

III. Course Level Justification
    The course requires knowledge of topics typically covered in the prerequisite courses of STAT A253 or STAT A308.

IV. Instructional Goals and Student Learning Outcomes

<table>
<thead>
<tr>
<th>A. Instructional Goals</th>
<th>The instructor will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Discuss parametric and nonparametric hypothesis testing.</td>
</tr>
<tr>
<td>2.</td>
<td>Discuss parametric and nonparametric design of experiments, analysis of variance and regression analysis.</td>
</tr>
<tr>
<td>3.</td>
<td>Introduce goodness-of-fit tests and multi-way contingency table analysis.</td>
</tr>
<tr>
<td>4.</td>
<td>Provide an introduction to multivariate statistics.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>B. Student Learning Outcomes</th>
<th>Students will be able to:</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Justify a selection of nonparametric test over the parametric alternative.</td>
<td>Exams and Mini Projects</td>
</tr>
<tr>
<td>2.</td>
<td>Perform hypothesis tests for designed experiments or reliable observational studies and understand the results.</td>
<td>Exams and Mini Projects</td>
</tr>
<tr>
<td>3.</td>
<td>Demonstrate proficiency in the tools of regression analysis and use variable selection techniques in</td>
<td>Exams and Mini Projects</td>
</tr>
</tbody>
</table>

67
4. Write reports summarizing statistical analysis.

V. **Topical Course Outline**

1. The Role of Statistics in Research
2. Some Tests Based on the Binomial Distributions
   a. Test of two proportions using independent samples
   b. The sign test
   c. The McNemar test for significance of changes
3. Goodness-of-Fit Tests
   a. Test of hypothesis concerning specified cell probabilities
   b. Test of composite hypothesis
4. Contingency Table Analysis
   a. Test of homogeneity
   b. Test of independence
   c. Relative risks and odds ratios
5. Hypothesis of Two Means using Independent Samples
   a. Inferences using a pooled variance
   b. Inferences using Welch-Satterthwaite approximation
   c. Mann-Whitney test
6. Hypothesis Testing of Two Means using Related samples
   a. Paired-t test
   b. Wilcoxon signed rank test
7. Design and Analysis of Experiments
   a. Terminology and basic concepts
   b. One-way analysis-of-variance
   c. Model testing and diagnostic tools
   d. Kruskal–Wallis test based on ranks
   e. Multi-factor analysis of variance
   f. Random effects, fixed effects, and mixed effects models
   g. Transformations
   h. Randomized complete block design
   i. Friedman test based on ranks
   j. Split plot design and nested designs
   k. Analysis of covariance
8. Simple Linear Regression and Correlation
   a. Simple linear regression model
   b. Least square estimation of regression coefficients
   c. Statistical inferences for linear regression
   d. Regression diagnostics
   e. Pearson’s correlation coefficient
   f. Spearman’s rank correlation coefficient
9. Multiple Linear Regression
   a. Inferences about effects of independent variables
   b. Model building
10. Introduction to Multivariate Statistics
   a. Discussion of multivariate data
   b. Multivariate normal distribution
   c. Hotelling’s $T^2$ test statistic

VI. Suggested Texts


VII Bibliography


* Classic Text
1a. School or College  
AS CAS

1b. Division  
AMSC Division of Math Science

1c. Department  
Mathematics and Statistics

2. Course Prefix  
STAT

3. Course Number  
A602

4. Previous Course Prefix & Number  
n/a

5a. Credits/CEUs  
3.0

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

6. Complete Course Title  
Advanced Scientific Sampling

Abbreviated Title for Transcript (30 character)

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

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

If a change, mark appropriate boxes:

- Prefix
- Credits
- Title
- Grading Basis
- Course Description
- Test Score Prerequisites
- Automatic Restrictions
- Other

9. Repeat Status No  
# of Repeats  
n/a  
Max Credits  
n/a

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

11. Implementation Date  
semester/year
From: Fall/2015  
To: 99/9999

12. ☐ Cross Listed with

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

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

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601</td>
<td>03/19/2014</td>
<td>John Olofsson</td>
</tr>
<tr>
<td>2. MS in Civil Engineering</td>
<td>03/19/2014</td>
<td>Osama Abaza</td>
</tr>
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</table>

Initiator Name (typed): Kanapathi Thiru  
Initiator Signed Initials: _________  
Date:________________

13b. Coordination Email  
Date: 03/11/2014

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

13c. Coordination with Library Liaison  
Date: 03/18/2014

14. General Education Requirement  
Mark appropriate box:

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

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

Sampling methods including simple random, stratified, systematic, and cluster sampling. Special emphasis on estimation procedures including ratio and regression methods, and topics selected from allocations, direct sampling, inverse sampling, randomized response sampling, computer simulation of random variables, bootstrap, jackknife, and cross validation. Students will be required to complete a major survey project and write a report on the findings. Special note: Not available for credit to students who have completed STAT A402.

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

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

16c. Automatic Restriction(s)  

☐ College  ☐ Major  ☐ Class  ☐ Level

16d. Registration Restriction(s) (non-codable)  
Graduate standing

17. ☒ Mark if course has fees

18. ☐ Mark if course is a selected topic course

19. Justification for Action

Support MS in AEST, MS in CE, and interdisciplinary graduate degrees.

Initiator (faculty only)  
Rieken Venema  
Initiator (TYPE NAME)

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

☐ Approved  ☐ Disapproved  
Department Chair  
Date

☐ Approved  ☐ Disapproved  
Undergraduate/Graduate Academic Board Chair  
Date

☐ Approved  ☐ Disapproved  
Provost or Designee  
Date
Course Content Guide  
University of Alaska Anchorage  
College of Arts and Sciences  
Mathematics & Statistics Department

I. **Initiation Date:** Spring 2014

II. **Course Information**
   A. **College:** College of Arts and Sciences  
   B. **Course Subject/Number:** STAT A602  
   C. **Credits:** 3  
   D. **Contact Hours:** 3+0  
   E. **Course Title:** Advanced Scientific Sampling  
   F. **Repeat Status:** No  
   G. **Grading Basis:** A-F  
   H. **Course Description:** Sampling methods including simple random, stratified, systematic, and cluster sampling. Special emphasis on estimation procedures including ratio and regression methods, and topics selected from: allocations, direct sampling, inverse sampling, randomized response sampling, computer simulation of random variables, bootstrap, jackknife, and cross validation. Students will be required to complete a major survey project and write a report on the findings. Special note: Not available for credit to students who have completed STAT A402.  
   I. **Course Prerequisites:** n/a  
   J. **Fees:** Yes  
   K. **Stacked:** Yes: STAT A402  
   L. **Registration Restrictions:** Graduate standing

III. **Course Level Justification**

   Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A402, and complete a major research project.

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

<table>
<thead>
<tr>
<th>A.</th>
<th><strong>Instructional Goals.</strong> The instructor will:</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Explain survey methodology, execution, and analysis.</td>
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<tr>
<td>2.</td>
<td>Describe a wide variety of sampling methods, estimation procedures, and sample size calculations.</td>
</tr>
<tr>
<td>3.</td>
<td>Explain Monte Carlo simulation of random variables, estimation of standard error and bias using bootstrapping and other re-sampling methods.</td>
</tr>
<tr>
<td>4.</td>
<td>Guide with literature review in survey methodology and writing research papers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B.</th>
<th><strong>Student Learning Outcomes:</strong> Students will be able to:</th>
<th><strong>Assessment Method</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Describe how to design and implement the steps that are required to conduct a sample survey.</td>
<td>Exams</td>
</tr>
</tbody>
</table>
V. **Topical Course Outline**

1. Elements of Sampling Problem  
   a. Introduction  
   b. Estimation of population parameters  
   c. Selection of sample size  
2. Stratified Random Sampling  
   a. Introduction  
   b. Estimation population parameters  
   c. Allocations  
   d. Selection of sample size  
   e. Stratification after selection of the sample  
3. Ratio, Regression, and Difference Estimation  
4. Systematic Sampling  
   a. Introduction  
   b. Estimation of population parameters  
   c. Selection of sample size  
5. Quota Sampling  
6. Cluster Sampling  
   a. Introduction  
   b. Estimation of population parameters  
   c. Selection of sample size  
   a. Direct sampling  
   b. Inverse sampling  
8. Randomized Response Sampling  
9. Monte Carlo Simulation of Random Variables  
10. Bootstrap, Jackknife, and Cross validation  

VI. **Suggested Texts**


VII Bibliography


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

1a. School or College
AS CAS
1b. Division
AMSC Division of Math Science
1c. Department
Mathematics and Statistics

2. Course Prefix
STAT
3. Course Number
A402
4. Previous Course Prefix & Number
n/a
5a. Credits/CEUs
3
5b. Contact Hours
(Lecture + Lab)
(3+0)

6. Complete Course Title
Scientific Sampling
Abbreviated Title for Transcript (30 character)

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

8. Type of Action:
☐ Add ☒ Change ☐ Delete
If a change, mark appropriate boxes:
☐ Prefix ☐ Credits ☐ Course Number ☐ Contact Hours ☐ Title ☐ Repeat Status
☐ Grading Basis ☐ Cross-Listed/Stacked ☐ Course Description ☐ Course Prerequisites
☐ Test Score Prerequisites ☐ Co-requisites ☐ Registration Restrictions
☐ Automatic Restrictions ☐ General Education Requirement ☐ Class ☐ Level
☐ College ☐ Major ☐ Other Course Content Guide (please specify)

9. Repeat Status No
# of Repeats
n/a
Max Credits
n/a

10. Grading Basis
☒ A-F ☐ P/NP ☐ NG

11. Implementation Date
From: Spring/2015 To: 99/9999

12. ☐ Cross Listed with
Stacked with STAT A602
Cross-Listed Coordination

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

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Initiator Name (typed): Kanapathi Thiru Initiator Signed Initials: __________ Date: __________

13b. Coordination Email
Date: 03/11/2014
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison
Date: 03/18/2014

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

15. Course Description (suggested length 20 to 50 words)
Sampling methods including simple random, stratified, systematic, and cluster sampling. Special emphasis on estimation procedures including ratio and regression methods, and topics selected from allocations, direct sampling, inverse sampling, randomized response sampling, computer simulation of random variables, bootstrap, jackknife, and cross validation. Special Note: Not available for credit to students who have completed STAT A602.

16a. Course Prerequisite(s) (list prefix and number or test code and score) (STAT A252 or STAT A253 or STAT A307) with minimum grade of C

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

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

16d. Registration Restriction(s) (non-codable)
n/a

17. ☒ Mark if course has fees

18. ☐ Mark if course is a selected topic course

19. Justification for Action
Stack with graduate course to support MS in AEST, MS in CE, and interdisciplinary graduate degrees.

Initiator (faculty only)
Rieken Venema
Initiator (TYPE NAME)

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

☐ Approved ☐ Disapproved
Undergraduate/Graduate Academic Date

☐ Approved ☐ Disapproved
Board Chair Date

☐ Approved ☐ Disapproved
Provost or Designee Date
I. **Initiation Date:** Spring 2014

II. **Course Information**
   A. **College:** College of Arts and Sciences
   B. **Course Subject/Number:** STAT A402
   C. **Credits:** 3
   D. **Contact Hours:** 3+0
   E. **Course Title:** Scientific Sampling
   F. **Repeat Status:** No
   G. **Grading Basis:** A-F
   H. **Course Description:** Sampling methods including simple random, stratified, systematic, and cluster sampling. Special emphasis on estimation procedures including ratio and regression methods, and topics selected from allocations, direct sampling, inverse sampling, randomized response sampling, computer simulation of random variables, bootstrap, jackknife, and cross validation. Special Note: Not available for credit to students who have completed STAT A602.
   I. **Course Prerequisites:** (STAT A252 or STAT A253 or STAT A307) with minimum grade of C
   J. **Fees:** Yes
   K. **Stacked:** Yes: STAT A602

III. **Course Level Justification**
    The course requires knowledge of topics typically covered in the prerequisite courses of STAT A252 or STAT A253 or STAT A307.

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

<table>
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<th>B. <strong>Student Learning Outcomes:</strong> Students will be able to:</th>
<th><strong>Assessment Method</strong></th>
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</thead>
<tbody>
<tr>
<td>1. Describe how to design and implement the steps that are required to conduct a sample survey.</td>
<td>Exams</td>
</tr>
<tr>
<td>2. Distinguish between and describe advantages and disadvantages of various sampling methods.</td>
<td>Exams</td>
</tr>
<tr>
<td>3. Compute parameter estimates and standard errors for various sampling schemes.</td>
<td>Exams and Mini Projects</td>
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</tbody>
</table>
V. **Topical Course Outline**

1. Elements of Sampling Problem
   a. Introduction
   b. Estimation of population parameters
   c. Selection of sample size
2. Stratified Random Sampling
   a. Introduction
   b. Estimation population parameters
   c. Allocations
   d. Selection of sample size
   e. Stratification after selection of the sample
3. Ratio, Regression, and Difference Estimation
4. Systematic Sampling
   a. Introduction
   b. Estimation of population parameters
   c. Selection of sample size
5. Quota Sampling
6. Cluster Sampling
   a. Introduction
   b. Estimation of population parameters
   c. Selection of sample size
   a. Direct sampling
   b. Inverse sampling
8. Randomized Response Sampling
9. Monte Carlo Simulation of Random Variables
10. Bootstrap, Jackknife, and Cross validation

VI. **Suggested Texts**


VII **Bibliography**


* Classic Text
**Course Action Request**

**University of Alaska Anchorage**

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

<table>
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<th>1b. Division</th>
<th>1c. Department</th>
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<td>Mathematics and Statistics</td>
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<th>5b. Contact Hours (Lecture + Lab)</th>
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<th>9. Repeat Status No</th>
<th># of Repeats</th>
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<th>11. Implementation Date</th>
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<td>☑ P/NP</td>
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<td>☑ 99/9999</td>
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<td>☐ Stack with STAT A403</td>
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<table>
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<tr>
<th>13a. Impacted Courses or Programs:</th>
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<tr>
<td>List any programs or college requirements that require this course.</td>
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<th>Date of Coordination</th>
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<tr>
<td>3.</td>
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</table>

Initiator Name (typed): Kanapathi Thiru  Initiator Signed Initials: _________  Date:________________

<table>
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<tr>
<th>13b. Coordination Email</th>
<th>Date: 03/11/2014</th>
<th>13c. Coordination with Library Liaison</th>
<th>Date: 03/18/2014</th>
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<td></td>
<td></td>
<td></td>
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<th>14. General Education Requirement</th>
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<tbody>
<tr>
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<td>☐ Oral Communication</td>
</tr>
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<tr>
<td>☐ Integrative Capstone</td>
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<table>
<thead>
<tr>
<th>15. Course Description (suggested length 20 to 50 words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple and multiple regression, statistical inferences in regression, matrix formulation of regression, polynomial regression, ridge regression, nonlinear regression, and normal correlation models. A major statistical package is used as a tool to aid calculations required for many of the techniques. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A403.</td>
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I. **Initiation Date:** Spring 2014

II. **Course Information**
   A. **College:** College of Arts and Sciences  
   B. **Course Subject/Number:** STAT A603  
   C. **Credits:** 3  
   D. **Contact Hours:** 3+0  
   E. **Course Title:** Advanced Regression Analysis  
   F. **Repeat Status:** No  
   G. **Grading Basis:** A-F  
   H. **Course Description:** Simple and multiple regression, statistical inferences in regression, matrix formulation of regression, polynomial regression, ridge regression, nonlinear regression, and normal correlation models. A major statistical package is used as a tool to aid calculations required for many of the techniques. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A403.  
   I. **Course Prerequisites:** n/a  
   J. **Fees:** Yes  
   K. **Stacked:** Yes: STAT A403  
   L. **Registration Restrictions:** Graduate standing

III. **Course Level Justification**
   Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A403, and complete a major research project.

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

<table>
<thead>
<tr>
<th>A.</th>
<th><strong>Instructional Goals.</strong> The instructor will:</th>
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<tbody>
<tr>
<td>1.</td>
<td>Introduce simple linear regression, polynomial regression, multiple regression, and nonlinear regression models.</td>
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</tr>
<tr>
<td>2.</td>
<td>Discuss methods for checking model adequacy and provide remedial measures to improve model adequacy.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Present variable selection and model building.</td>
<td></td>
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<tr>
<td>4.</td>
<td>Guide with literature review and writing research papers.</td>
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<tr>
<th>B.</th>
<th><strong>Student Learning Outcomes:</strong> Students will be able to:</th>
<th><strong>Assessment Method</strong></th>
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<tbody>
<tr>
<td>1.</td>
<td>Investigate and model the relationship between variables.</td>
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<tr>
<td>2.</td>
<td>Fit and check appropriate regression models.</td>
<td>Exams and Mini Projects</td>
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</table>
3. Investigate the adequacy of conjectured models with many different techniques.  

4. Select a suitable remedial measure to improve model adequacy.  

5. Conduct a literature review, analyze experimental or observational data, write a research summary paper, and present findings in a public forum.  

V. **Topical Course Outline**

1. Some Basic Results in Probability and Statistics.
2. Basic Regression Analysis
   a. Linear regression with one independent variable
   b. Inferences in regression analysis
   c. Aptness of model and remedial measures
   d. Simultaneous inferences
   e. Inverse predictions
3. General Regression and Correlational Analysis
   a. Matrix approach to simple regression analysis
   b. Multiple regression
   c. Polynomial regression
   d. Indicator variables
   e. Variable selection methods and model building
   f. Autocorrelation in time series data
   g. Non-linear regression

VI. **Suggested Texts**


VII **Bibliography**


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

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19. Justification for Action
Stack with graduate course to support MS in AEST, and interdisciplinary graduate degrees

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80
Course Content Guide  
University of Alaska Anchorage  
College of Arts and Sciences  
Mathematics & Statistics Department

I. **Initiation Date:** Spring 2014

II. **Course Information**
   A. **College:** College of Arts and Sciences  
   B. **Course Subject/Number:** STAT A403  
   C. **Credits:** 3  
   D. **Contact Hours:** 3+0  
   E. **Course Title:** Regression Analysis  
   F. **Repeat Status:** No  
   G. **Grading Basis:** A-F  
   H. **Course Description:** Simple and multiple regression, statistical inferences in regression, matrix formulation of regression, polynomial regression, ridge regression, nonlinear regression, and normal correlation models. A major statistical package is used as a tool to aid calculations required for many of the techniques. Special Note: Not available for credit to students who have completed STAT A603.
   I. **Course Prerequisites:** STAT A308 with minimum grade of C  
   J. **Fees:** Yes  
   K. **Stacked:** Yes: STAT A603

III. **Course Level Justification**
   The course requires knowledge of topics typically covered in the prerequisite course of STAT A308.

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

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   b. Inferences in regression analysis
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<td>Single-factor models, factor effects, nonparametric tests, two-factor models, random and mixed effects models, multifactor studies, analysis of covariance, and selected experimental designs. A major statistical package is used as a tool to aid calculations required for many of the techniques. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A404.</td>
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<tbody>
<tr>
<td>Rieken Venema</td>
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<td>Date</td>
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<tr>
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<th>Provost or Designee</th>
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<tr>
<th>College/School Curriculum Committee Chair</th>
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<tbody>
<tr>
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<tr>
<td>Date</td>
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</table>

83
I.  **Initiation Date:** Spring 2014

II. **Course Information**
   A. **College:** College of Arts and Sciences  
   B. **Course Subject/Number:** STAT A604  
   C. **Credits:** 3  
   D. **Contact Hours:** 3+0  
   E. **Course Title:** Advanced Analysis of Variance  
   F. **Repeat Status:** No  
   G. **Grading Basis:** A-F  
   H. **Course Description:** Single-factor models, factor effects, nonparametric tests, two-factor models, random and mixed effects models, multifactor studies, analysis of covariance, and selected experimental designs. A major statistical package is used as a tool to aid calculations required for many of the techniques. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A404.  
   I. **Course Prerequisites:** n/a  
   J. **Fees:** Yes  
   K. **Stacked:** Yes: STAT A404  
   L. **Registration Restrictions:** Graduate standing

III. **Course Level Justification**  
Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A404, and complete a major research project.

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

<table>
<thead>
<tr>
<th>A.</th>
<th><strong>Instructional Goals.</strong> The instructor will:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduce guidelines for designing experiments.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Discuss experiments with single-factor, multi-factor, blocks, and nested or hierarchical designs with fixed, random or mixed effects.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Discuss model adequacy checking and choice of sample size.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Guide with literature review and writing research papers</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B.</th>
<th><strong>Student Learning Outcomes:</strong> Students will be able to:</th>
<th><strong>Assessment Method</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recognize a practical problem in order to design an experiment.</td>
<td>Exams and Mini Projects</td>
</tr>
<tr>
<td>2.</td>
<td>Choose the factors to be varied in the experiment, the ranges over which factors will be varied, the specific levels at which runs will be made, and the response variable to be</td>
<td>Exams and Mini Projects</td>
</tr>
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</table>
measured.

<p>| | |</p>
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<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>3.</td>
<td>Understand the rationale behind the use of blocking and other noise-reducing designs.</td>
</tr>
<tr>
<td>4.</td>
<td>Conduct a literature review, analyze experimental or observational data, write a research summary paper, and present findings in a public forum.</td>
</tr>
</tbody>
</table>

V. **Topical Course Outline**

1. Some Basic Results in Probability and Statistics.
2. Basic Analysis of Variance  
   a. Single factor analysis of variance  
   b. Analysis of factor effects  
   c. Implementation of ANOVA model  
   d. Non-parametric tests, random effects and other topics in ANOVA.
3. Multifactor Analysis of Variance  
   a. Two factor analysis of variance  
   b. Equal and unequal sample sizes  
   c. Random and fixed effect models for two factor studies  
   d. Multifactor studies  
   e. Analysis of covariance
4. Experimental Designs  
   a. Completely randomized designs  
   b. Randomized block design  
   c. Nested designs  
   d. Latin squares and related designs  
   e. Rules for sums of squares and expected mean squares

VIII. **Suggested Texts**


IX. **Bibliography**


* Classic Text
### Course Information

**1a. School or College**
AS CAS

**1b. Division**
AMSC Division of Math Science

**1c. Department**
Mathematics and Statistics

**2. Course Prefix**
STAT

**3. Course Number**
A404

**4. Previous Course Prefix & Number**
n/a

**5a. Credits/CEUs**
3

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

**6. Complete Course Title**
Analysis of Variance

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

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

**9. Repeat Status No**

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

**11. Implementation Date**
From: Spring/2015 To: 99/9999

**12. Cross Listed with**
STAT A604

**13a. Impacted Courses or Programs:**
- MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601
  Date of Coordination: 03/19/2014
  Chair/Coordinator: John Olofsson

**13b. Coordination Email**
submitted to Faculty Listserv: uaa-faculty@lists.uaa.alaska.edu
Date: 03/11/2014

**13c. Coordination with Library Liaison**
Date: 03/18/2014

**14. General Education Requirement**
- Oral Communication
- Written Communication
- Quantitative Skills
- Humanities
- Fine Arts
- Social Sciences
- Natural Sciences
- Integrative Capstone

**15. Course Description**
(Suggested length 20 to 50 words)
Single-factor models, factor effects, nonparametric tests, two-factor models, random and mixed effects models, multifactor studies, analysis of covariance, and selected experimental designs. A major statistical package is used as a tool to aid calculations required for many of the techniques. Special Note: Not available for credit to students who have completed STAT A604.

**16a. Course Prerequisite(s)**
STAT A308 with minimum grade of C

**16b. Co-requisite(s)**
(concurrent enrollment required) n/a

**16c. Automatic Restriction(s)**

**16d. Registration Restriction(s)**
(non-codable) n/a

**17. Mark if course has fees**

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

**19. Justification for Action**
Stack with graduate course to support MS in AEST, and interdisciplinary graduate degrees.
Course Content Guide
University of Alaska Anchorage
College of Arts and Sciences
Mathematics & Statistics Department

I. **Initiation Date:** Spring 2014

II. **Course Information**
   A. **College:** College of Arts and Sciences
   B. **Course Subject/Number:** STAT A404
   C. **Credits:** 3
   D. **Contact Hours:** 3+0
   E. **Course Title:** Analysis of Variance
   F. **Repeat Status:** No
   G. **Grading Basis:** A-F
   H. **Course Description:** Single-factor models, factor effects, nonparametric tests, two-factor models, random and mixed effects models, multifactor studies, analysis of covariance, and selected experimental designs. A major statistical package is used as a tool to aid calculations required for many of the techniques. Special Note: Not available for credit to students who have completed STAT A604.
   I. **Course Prerequisites:** STAT A308 with minimum grade of C
   J. **Fees:** Yes
   K. **Stacked:** Yes: STAT A604

III. **Course Level Justification**
The course requires knowledge of topics typically covered in the prerequisite course of STAT A308.

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

<table>
<thead>
<tr>
<th>A. <strong>Instructional Goals.</strong> The instructor will:</th>
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<tbody>
<tr>
<td>1. Introduce guidelines for designing experiments.</td>
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<th>B. <strong>Student Learning Outcomes:</strong> Students will be able to:</th>
<th><strong>Assessment Method</strong></th>
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</thead>
<tbody>
<tr>
<td>1. Recognize a practical problem in order to design an experiment.</td>
<td>Exams and Mini projects</td>
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<td>2. Choose the factors to be varied in the experiment, the ranges over which factors will be varied, the specific levels at which runs will be made, and the response variable to be measured.</td>
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V. Topical Course Outline

1. Some Basic Results in Probability and Statistics.
2. Basic Analysis of Variance
   a. Single factor analysis of variance
   b. Analysis of factor effects
   c. Implementation of ANOVA model
   d. Non-parametric tests, random effects and other topics in ANOVA.
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   a. Two factor analysis of variance
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4. Experimental Designs
   a. Completely randomized designs
   b. Randomized block design
   c. Nested designs
   d. Latin squares and related designs
   e. Rules for sums of squares and expected mean squares

VIII. Suggested Text(s)


IX. Bibliography


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

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
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<tbody>
<tr>
<td>AS CAS</td>
<td>AMSC Division of Math Science</td>
<td>Mathematics and Statistics</td>
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<th>2. Course Prefix</th>
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<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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6. **Complete Course Title**  
Advanced Time Series Analysis

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

<table>
<thead>
<tr>
<th>7. Type of Course</th>
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<th>9. Repeat Status No</th>
<th>10. Grading Basis</th>
<th>11. Implementation Date</th>
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<td>To: 99/9999</td>
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12. **Cross Listed with**  
Stacked with STAT A407

| 13a. Impacted Courses or Programs: List any programs or college requirements that require this course.  
Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at www.uaa.alaska.edu/governance. |
<table>
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<tr>
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<tbody>
<tr>
<td>1. MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601</td>
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<td>John Olofsson</td>
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<tr>
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Initiator Name (typed): Kanapathi Thiru  
Initiator Signed Initials: __________  
Date: __________

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

13c. **Coordination with Library Liaison**  
Date: 03/18/2014

14. **General Education Requirement**  
Mark appropriate box:

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

15. **Course Description (suggested length 20 to 50 words)**  
Decomposition of time series, seasonal adjustment methods, and index numbers. Forecasting models including causal models, trend models, and smoothing models. Autoregressive (AR) forecasting models, moving average (MA) forecasting models, and integrated (ARIMA) forecasting models. A major statistical package is used as a tool to aid calculations required for many of the techniques. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A407.

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

16b. **Co-requisite(s) (concurrent enrollment required)**  
n/a

16c. **Automatic Restriction(s)**

- College
- Major
- Class
- Level

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

- Graduate standing

17. **Mark if course has fees**

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

19. **Justification for Action**  
Stack with graduate course to support MS in AEST, and interdisciplinary graduate degrees.

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I. Initiation Date: Spring 2014

II. Course Information
   A. College: College of Arts and Sciences
   B. Course Subject/Number: STAT A607
   C. Credits: 3
   D. Contact Hours: 3+0
   E. Course Title: Advanced Time Series Analysis
   F. Repeat Status: No
   G. Grading Basis: A-F
   H. Course Description: Decomposition of time series, seasonal adjustment methods, and index numbers. Forecasting models including causal models, trend models, and smoothing models. Autoregressive (AR) forecasting models, moving average (MA) forecasting models, and integrated (ARIMA) forecasting models. A major statistical package is used as a tool to aid calculations required for many of the techniques. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A407.
   I. Course Prerequisites: n/a
   J. Fees: Yes
   K. Stacked: Yes: STAT A407
   L. Registration Restrictions: Graduate standing

III. Course Level Justification
Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A407, and complete a major research project.

IV. Instructional Goals and Student Learning Outcomes

A. Instructional Goals. The instructor will:
1. Introduce decomposition of time series.
2. Explain forecasting methods using a variety of smoothing techniques.
3. Introduce the basic properties of AR models, MA models, ARMA models, and ARIMA models and teach how to identify these models.
4. Explain diagnostic checks for model adequacy to select a tentative model and forecast with the selected model.
5. Guide with literature review and writing research papers.

B. Student Learning Outcomes: Students will be able to:
1. Recognize time series data, be able to use descriptive

Assessment Method
Exams
methods and decompose a series into different components.

2. Demonstrate understanding of a variety of forecasting methods based on exponential smoothing and other smoothing techniques. Exams

3. Identify appropriate time series models, perform diagnostic checks for model adequacy, and forecast with the selected model. Exams and Mini Projects

4. Conduct a literature review, analyze experimental or observational data, write a research summary paper, and present findings in a public forum. Major Project, Research Summary Paper, Presentation

V. Topical Course Outline

1. Simple Descriptive Techniques
   a. Decomposition of time series
   b. Stationary time series
   c. The time series plot
   d. Transformations
   e. Analyzing series which contain a trend
   f. Analyzing series which contain seasonal variation
   g. Autocorrelation and the correlogram

2. Probability Models for Time Series
   a. Stochastic processes
   b. Stationary processes
   c. The autocorrelation function

3. Estimation in the Time Domain
   a. Estimating the autocovariance and autocorrelation functions
   b. Fitting an autoregressive process
   c. Fitting a moving average process
   d. Estimating the parameters of an ARMA model
   e. Estimating the parameters of an ARIMA model
   f. The Box-Jenkins seasonal model

4. Forecasting
   a. Exponential smoothing
   b. The Holt-Winters forecasting procedure
   c. The Box-Jenkins procedure
   d. Stepwise autoregression

5. Stationary Processes in the Frequency Domain
   a. The spectral distribution function
   b. The spectral density function
   c. The spectrum of a continuous process

6. Spectral Analysis
   a. Fourier analysis
   b. A simple sinusoidal model
c. Periodogram analysis
d. Estimation procedures
e. Analysis of continuous time series

7. Bivariate Processes
   a. Cross-covariance and cross-correlation functions
   b. The cross-spectrum

VI. Suggested Texts


VII Bibliography


### Course Action Request

**University of Alaska Anchorage**

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

<table>
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<th>5b. Contact Hours (Lecture + Lab)</th>
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<tr>
<th>6. Complete Course Title</th>
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<th>7. Type of Course</th>
<th>8. Type of Action:</th>
<th>9. Repeat Status No</th>
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<th>11. Implementation Date</th>
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<td>A-F</td>
<td>From: Spring/2015</td>
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<tr>
<th>12. Cross Listed with</th>
<th>13a. Impacted Courses or Programs:</th>
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<tr>
<td>STAT A607</td>
<td>List any programs or college requirements that require this course.</td>
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<th>13b. Coordination Email</th>
<th>13c. Coordination with Library Liaison</th>
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<td>Date: 03/11/2014</td>
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<thead>
<tr>
<th>14. General Education Requirement</th>
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<tbody>
<tr>
<td>Mark appropriate box:</td>
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<tr>
<td>Oral Communication</td>
</tr>
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<td>Quantitative Skills</td>
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<th>16a. Course Prerequisite(s) (list prefix and number or test code and score)</th>
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<tbody>
<tr>
<td>(STAT A307 or STAT A308) with minimum grade of C</td>
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<table>
<thead>
<tr>
<th>16b. Co-requisite(s) (concurrent enrollment required)</th>
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<tbody>
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<td>n/a</td>
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<table>
<thead>
<tr>
<th>16c. Automatic Restriction(s)</th>
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<td>Level: No</td>
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<tr>
<th>17. Mark if course has fees</th>
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<th>18. Mark if course is a selected topic course</th>
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<thead>
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<th>19. Justification for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stack with graduate course to support MS in AEST, and interdisciplinary graduate degrees.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>20. Initator (faculty only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kanapathi Thiru</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>21. Initiator Signed Initials: Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>__________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>22. Department Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>23. Undergraduate/Graduate Academic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>24. Board Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disapproved Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25. Provost or Designee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disapproved Date</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
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<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initiator Name (typed): Kanapathi Thiru  Initiator Signed Initials: _________ Date:________________

93
I. **Initiation Date:** Spring 2014

II. **Course Information**
   A. **College:** College of Arts and Sciences  
   B. **Course Subject/Number:** STAT A407  
   C. **Credits:** 3  
   D. **Contact Hours:** 3+0  
   E. **Course Title:** Time Series Analysis  
   F. **Repeat Status:** No  
   G. **Grading Basis:** A-F  
   H. **Course Description:** Decomposition of time series, seasonal adjustment methods, and index numbers. Forecasting models including causal models, trend models, and smoothing models. Autoregressive (AR) forecasting models, moving average (MA) forecasting models, and integrated (ARIMA) forecasting models. A major statistical package is used as a tool to aid calculations required for many of the techniques. Special Note: Not available for credit to students who have completed STAT A607.

   I. **Course Prerequisites:** (STAT A307 or STAT A308) with minimum grade of C

   J. **Fees:** Yes

   K. **Stacked:** Yes: STAT A607

III. **Course Level Justification**
    The course requires knowledge of topics typically covered in the prerequisite courses of STAT A307 or STAT A308.

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

<table>
<thead>
<tr>
<th>A. <strong>Instructional Goals.</strong> The instructor will:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduce decomposition of time series.</td>
<td></td>
</tr>
<tr>
<td>2. Explain forecasting methods using a variety of smoothing techniques.</td>
<td></td>
</tr>
<tr>
<td>3. Introduce the basic properties of AR models, MA models, ARMA models, and ARIMA models and teach how to identify these models.</td>
<td></td>
</tr>
<tr>
<td>4. Explain diagnostic checks for model adequacy to select a tentative model and forecast with the selected model.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. <strong>Student Learning Outcomes:</strong> Students will be able to:</th>
<th><strong>Assessment Method</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recognize time series data, be able to use descriptive methods, and decompose a series into different components.</td>
<td>Exams</td>
</tr>
<tr>
<td>2. Demonstrate understanding of a variety of forecasting methods based on exponential smoothing and other smoothing techniques.</td>
<td>Exams</td>
</tr>
</tbody>
</table>
3. Identify appropriate time series models, perform diagnostic checks for model adequacy, and forecast with the selected model.

V. Topical Course Outline

1. Simple Descriptive Techniques
   a. Decomposition of time series
   b. Stationary time series
   c. The time series plot
   d. Transformations
   e. Analyzing series which contain a trend
   f. Analyzing series which contain seasonal variation
   g. Autocorrelation and the correlogram

2. Probability Models for Time Series
   a. Stochastic processes
   b. Stationary processes
   c. The autocorrelation function

3. Estimation in the Time Domain
   a. Estimating the autocovariance and autocorrelation functions
   b. Fitting an autoregressive process
   c. Fitting a moving average process
   d. Estimating the parameters of an ARMA model
   e. Estimating the parameters of an ARIMA model
   f. The Box-Jenkins seasonal model

4. Forecasting
   a. Exponential smoothing
   b. The Holt-Winters forecasting procedure
   c. The Box-Jenkins procedure
   d. Stepwise autoregression

5. Stationary Processes in the Frequency Domain
   a. The spectral distribution function
   b. The spectral density function
   c. The spectrum of a continuous process

6. Spectral Analysis
   a. Fourier analysis
   b. A simple sinusoidal model
   c. Periodogram analysis
   d. Estimation procedures
   e. Analysis of continuous time series

7. Bivariate Processes
   a. Cross-covariance and cross-correlation functions
   b. The cross-spectrum
VI. **Suggested Texts**


VII **Bibliography**


# Course Action Request

**University of Alaska Anchorage**

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

---

### 1. School or College<br>AS CAS

### 1b. Division<br>AMSC Division of Math Science

### 1c. Department<br>Mathematics and Statistics

### 2. Course Prefix<br>STAT

### 3. Course Number<br>A608

### 4. Previous Course Prefix & Number<br>n/a

### 5. Credits/CEUs<br>3.0

### 5b. Contact Hours<br>(Lecture + Lab) (3+0)

---

### 6. Complete Course Title<br>Advanced Multivariate Statistics

Abbreviated Title for Transcript (30 characters): Advanced Multivariate Stat

### 7. Type of Course

- **X** Academic
- Preparatory/Development
- Non-credit
- CEU
- Professional Development

### 8. Type of Action: **X** Add or **☐** Change or **☐** Delete

If a change, mark appropriate boxes:

- **☐** Prefix
- **☐** Credits
- **☐** Grading Basis
- **☐** Course Description
- **☐** Test Score Prerequisites
- **☐** Automatic Restrictions
- **☐** Other
- **☐** Course Number
- **☐** Contact Hours
- **☐** Repeat Status
- **☐** Cross/Listed/Stacked
- **☐** Registration Restrictions
- **☐** General Education Requirement

### 9. Repeat Status: choose one

- **☐** # of Repeats
- **☐** Max Credits

### 10. Grading Basis

- **X** A-F
- **☐** P/NP
- **☐** NG

### 11. Implementation Date: semester/year

- From: Fall/2015
- To: 99/9999

### 12. Cross Listed with<br>STAT A408

Cross-Listed Coordination

---

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

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

<table>
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<td>John Olofsson</td>
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<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initiator Name (typed): Kanapathi Thiru  
Initiator Signed Initials: __________  
Date: __________

---

### 13b. Coordination Email

Date: 03/11/2014  
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

---

### 13c. Coordination with Library Liaison

Date: 03/18/2014

---

### 14. General Education Requirement

Mark appropriate box:

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

---

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

Multivariate statistical methods including exploratory data analysis, geometrical interpretation of multivariate data, multivariate tests of hypotheses, multivariate analysis of variance, multivariate multiple regression, principal components, factor analysis, discriminant analysis, cluster analysis, and multidimensional scaling. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A408.

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

n/a

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

n/a

### 16c. Automatic Restriction(s)

- **☐** College  
- **☐** Major  
- **☐** Class  
- **☐** Level

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

- **☐** Graduate standing

### 17. **X** Mark if course has fees

---

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

---

### 19. Justification for Action

Support MS in AEST, and interdisciplinary graduate degrees.

---

Initiator (faculty only)

Kanapathi Thiru  
Initiator (TYPE NAME)

---

Approved  
Disapproved  
Dean/Director of School/College

---

Approved  
Disapproved  
Undergraduate/Graduate Academic

---

Approved  
Disapproved  
Board Chair

---

Approved  
Disapproved  
Provost or Designee

---

Initiator (faculty only) Date

Dean/Director of School/College Date

Undergraduate/Graduate Academic Date

Board Chair Date

Provost or Designee Date
Initiation Date: Spring 2014

Course Information
A. College: College of Arts and Sciences
B. Course Subject/Number: STAT A608
C. Credits: 3
D. Contact Hours: 3+0
E. Course Title: Advanced Multivariate Statistics
F. Repeat Status: No
G. Grading Basis: A-F
H. Course Description: Multivariate statistical methods including exploratory data analysis, geometrical interpretation of multivariate data, multivariate tests of hypotheses, multivariate analysis of variance, multivariate multiple regression, principal components, factor analysis, discriminant analysis, cluster analysis, and multidimensional scaling. Students will be required to complete a major research project, conduct literature review, write a short paper, and make a presentation in a public forum. Special note: Not available for credit to students who have completed STAT A408.
I. Course Prerequisites: n/a
J. Fees: Yes
K. Stacked: Yes: STAT A408
L. Registration Restrictions: Graduate standing

Course Level Justification
Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A408, and complete a major research project.

Instructional Goals and Student Learning Outcomes

A. Instructional Goals. The instructor will:
1. Introduce multivariate distributions, estimation, and hypothesis tests.
2. Explain variable reduction techniques such as principal components and factor analysis.
3. Explain classification by discriminant analysis.
4. Discuss relationship between variables through canonical correlation.
5. Guide with literature review and writing research papers.

B. Student Learning Outcomes: Students will be able to:

<table>
<thead>
<tr>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate understanding of the difference</td>
</tr>
</tbody>
</table>
between univariate and multivariate statistics.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Perform multivariate estimation and hypothesis tests.</td>
</tr>
<tr>
<td>3.</td>
<td>Demonstrate understanding of variable reduction techniques and be able to solve classification problems.</td>
</tr>
<tr>
<td>4.</td>
<td>Estimate and investigate canonical correlation between two sets of variables.</td>
</tr>
<tr>
<td>5.</td>
<td>Conduct a literature review, analyze experimental or observational data, write a research summary paper, and present findings in a public forum.</td>
</tr>
</tbody>
</table>

V. **Topical Course Outline**

1. The Nature of Multivariate Data
2. Some Elementary Statistical Concepts
   a. Normal random variables
   b. Estimation
   c. Hypothesis testing
   d. ANOVA
3. Matrix Algebra
   a. Elementary operations
   b. Determinant and Inverse
   c. Rank of a matrix
   d. Quadratic forms
   e. Characteristic roots
4. Multivariate Normal Distribution
   a. Joint, marginal, and conditional distributions
   b. MLE of mean vector and the covariance matrix
5. Tests of Hypotheses on Means
   a. Hotelling's $T^2$ statistic
   b. Confidence regions
   c. MANOVA
6. Testing Multivariate Distances
7. Principal Component (PC) Analysis
   a. The geometrical meaning of PC's
   b. The interpretation of PC's
   c. Sampling properties of PC's
8. Factor Analysis
   a. The factor analysis model
   b. The principal factor solution
   c. The maximum likelihood solution
   d. Rotation of factors and factor scores
9. Discriminant Analysis and Allocation
   a. Discrimination using Mahalanobis distances
   b. Canonical discriminant functions
10. Cluster Analysis
a. Hierarchical clustering
b. Nonhierarchical clustering

11. Inferences from Covariance Matrices
12. Multidimensional Scaling

VI. Suggested Texts


VII Bibliography


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

1a. School or College  
AS CAS
1b. Division  
AMSC Division of Math Science
1c. Department  
Mathematics and Statistics

<table>
<thead>
<tr>
<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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</thead>
<tbody>
<tr>
<td>STAT</td>
<td>A408</td>
<td>n/a</td>
<td>3.0</td>
<td>(3+0)</td>
</tr>
</tbody>
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6. Complete Course Title  
Multivariate Statistics

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

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

If a change, mark appropriate boxes:

- ☐ Prefix
- ☐ Credits
- ☐ Title
- ☐ Repeat Status
- ☐ Grading Basis
- ☐ Cross-Listed/Stacked
- ☑ Course Description
- ☐ Course Prerequisites
- ☐ Test Score Prerequisites
- ☐ Co-requisites
- ☐ Automatic Restrictions
- ☐ Registration Restrictions
- ☐ General Education Requirement
- ☑ Class
- ☑ Level
- ☐ College
- ☐ Major
- ☑ Other Course Content Guide (please specify)

9. Repeat Status No  # of Repeats  n/a  Max Credits  n/a

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

11. Implementation Date  
From:  Spring/2015  To:  99/9999

12.  
☐ Cross Listed with  
Stacked with  STAT A608  
Cross-Listed Coordination  
Signature

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

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

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Initiator Name (typed): Kanapathi Thiru  
Initiator Signed Initials: _________  
Date:________________

13b. Coordination Email  
Date: 03/11/2014  
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison  
Date: 03/18/2014

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

15. Course Description (suggested length 20 to 50 words)  
Multivariate statistical methods including exploratory data analysis, geometrical interpretation of multivariate data, multivariate tests of hypotheses, multivariate analysis of variance, multivariate multiple regression, principal components, factor analysis, discriminant analysis, cluster analysis, and multidimensional scaling. Special Note: Not available for credit to students who have completed STAT A608.

16a. Course Prerequisite(s) (list prefix and number or test code and score)  
STAT A308 with minimum grade of C

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

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

16d. Registration Restriction(s) (non-codable)  
n/a

17. ☑ Mark if course has fees

18. ☐ Mark if course is a selected topic course

19. Justification for Action  
Stack with graduate course to support MS in AEST, and interdisciplinary graduate degrees.

Initiator (faculty only)  
Kanapathi Thiru  
Initiator (TYPE NAME)  
☐ Approved  
☐ Disapproved

Initiator (TYPE NAME)  
Dean/Director of School/College  
Date

Undergraduate/Graduate Academic  
Date

Board Chair  
Date

Provost or Designee  
Date
Course Content Guide  
University of Alaska Anchorage  
College of Arts and Sciences  
Mathematics & Statistics Department

I. **Initiation Date:** Spring 2014

II. **Course Information**
   A. **College:** College of Arts and Sciences  
   B. **Course Subject/Number:** STAT A408  
   C. **Credits:** 3  
   D. **Contact Hours:** 3+0  
   E. **Course Title:** Multivariate Statistics  
   F. **Repeat Status:** No  
   G. **Grading Basis:** A-F  
   H. **Course Description:** Multivariate statistical methods including exploratory data analysis, geometrical interpretation of multivariate data, multivariate tests of hypotheses, multivariate analysis of variance, multivariate multiple regression, principal components, factor analysis, discriminant analysis, cluster analysis, and multidimensional scaling. Special Note: Not available for credit to students who have completed STAT A608.
   I. **Course Prerequisites:** STAT A308 with minimum grade of C  
   J. **Fees:** Yes  
   K. **Stacked:** Yes: STAT A608

III. **Course Level Justification**
   The course requires knowledge of topics typically covered in the prerequisite course of STAT A308.

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

<table>
<thead>
<tr>
<th>A. <strong>Instructional Goals.</strong> The instructor will:</th>
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<td>3. Explain classification by discriminant analysis.</td>
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<td>4. Discuss relationship between variables through canonical correlation.</td>
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<thead>
<tr>
<th>B. <strong>Student Learning Outcomes:</strong> Students will be able to:</th>
<th><strong>Assessment Method</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate understanding of difference between univariate and multivariate statistics.</td>
<td>Exams</td>
</tr>
<tr>
<td>2. Perform multivariate estimation and hypothesis tests.</td>
<td>Exams</td>
</tr>
<tr>
<td>3. Demonstrate understanding of variable reduction techniques and be able to solve classification problems.</td>
<td>Exams and Mini Projects</td>
</tr>
</tbody>
</table>
4. Estimate and investigate canonical correlation between two sets of variables.

V. Topical Course Outline

1. The Nature of Multivariate Data
2. Some Elementary Statistical Concepts
   a. Normal random variables
   b. Estimation
   c. Hypothesis testing
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   c. Rank of a matrix
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   a. Hotelling's $T^2$ statistic
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10. Cluster Analysis
    a. Hierarchical clustering
    b. Nonhierarchical clustering
11. Inferences from Covariance Matrices
12. Multidimensional Scaling

VI. Suggested Texts

Analysis. Routledge.


VII Bibliography


### 1a. School or College
AS CAS

### 1b. Department
Anthropology

#### 2. Complete Program Title/Prefix
Master of Arts, Anthropology

#### 3. Type of Program
Choose one from the appropriate drop down menu:
- Undergraduate: Master of Arts
- Graduate: Master of Arts

This program is a Gainful Employment Program: □ Yes or □ No

#### 4. Type of Action:
- PROGRAM: □ Add, □ Change, □ Delete
- PREFIX: □ Add, □ Change, □ Inactivate

#### 5. Implementation Date (semester/year)
From: Fall/2014 To: Fall/9999

#### 6a. Coordination with Affected Units
Department, School, or College: CAS
Initiator Name (typed): Steve J. Langdon
Initiator Signed Initials: _________

#### 6b. Coordination Email submitted to Faculty Listserv (uaa-faculty@lists.uaa.alaska.edu)
Date: 10/13/2013

#### 6c. Coordination with Library Liaison
Date: 10/13/2013

#### 7. Title and Program Description - Please attach the following:
- Cover Memo
- Catalog Copy in Word using the track changes function

#### 8. Justification for Action
Revisions of courses to streamline offerings to make more efficient for students.

---

Initiator (faculty only) Steve J. Langdon
Date

Approved: □
Disapproved: □

Dean/Director of School/College Date

Approved: □
Disapproved: □

Undergraduate/Graduate Academic Date

Approved: □
Disapproved: □

Board Chair

Approved: □
Disapproved: □

Provost or Designee Date

Approved: □
Disapproved: □

Department Chair Date

Approved: □
Disapproved: □

College/School Curriculum Committee Chair Date
COLLEGE OF ARTS AND SCIENCES

ANTHROPOLOGY

Professional Studies Building (PSB), Room 104, (907) 786-6840
www.uaa.alaska.edu/anthropology

Master of Arts, Anthropology

The Master of Arts degree in Anthropology, with emphases in General or Applied Anthropology, is designed to provide a rigorous background in contemporary theory and practice in anthropology, particularly through the use of prosemarians, internships, and independent research. The MA degree requires a research-based thesis. Within the MA program, the Applied Anthropology emphasis offers specialized tracks designed to train students in applied aspects of anthropology that may be employment related. The Applied Cultural Anthropology track identifies and assists in resolving current social issues in their cultural dimensions. The Applied Biological Anthropology track encompasses forensic anthropology, medical anthropology, and other practical applications of physical anthropology. The Cultural Resource Management track involves the inventory, assessment, and conservation of archaeological and historical sites and remains, and places of traditional cultural importance, as a part of a larger management framework.

Program Student Learning Outcomes

Students graduating with a Master of Arts in Anthropology will be able to:

- Demonstrate comprehension at a graduate level in their knowledge of core concepts, research methods and findings in archeology, cultural anthropology and biological anthropology;
- Demonstrate comprehension of specialized knowledge in the track or subfield they select from program choices;
- Demonstrate the capacity to design anthropological research, conduct that research, analyze research results and present a thesis concerning that research acceptable by the faculty of the anthropology department;
- Effectively apply the perspective, skills, and knowledge obtained in the anthropology Master’s program in an employment capacity that requires their utilization.

Admission Requirements

See Admission Requirements for Graduate Degrees at the beginning of this chapter. Deadline for application: February 15 for fall semester admission. Students seeking admission into the Anthropology MA degree program must meet the following requirements (1-3) and must submit the following documents (4-9):

1. Although graduating college or university seniors are invited to apply, no student may be formally admitted to graduate study until the baccalaureate degree has been awarded from an accredited college or university.
2. It is strongly recommended that the student has completed a minimum of 18 credits of undergraduate coursework in Anthropology with a GPA of 3.00. An undergraduate major in anthropology is preferred.
3. Students must have at least a 3.00 overall undergraduate GPA.
4. Completed UAA graduate admissions application form.
5. Official transcripts of college-level work from each institution attended.
6. Graduate Record Examination (GRE) results (General Test Scores), taken within five years prior to the application date.
7. Three letters of recommendation from professors or other professionals particularly qualified to attest to the applicant’s qualifications for graduate study.
8. A letter of intent, including a brief statement of the applicant’s research and career goals and reasons for pursuing graduate study in Anthropology at UAA.
9. Optional: An example of a substantial paper or research proposal indicative of the applicant’s potential for graduate study.

Acceptance is determined by the Anthropology Graduate Admissions Committee and is based on:

1. The prospective student’s overall credentials and
2. The availability of appropriate faculty for student research interests.

Failure to meet any of the above criteria may result in conditional admission to the MA program. Conditional admission may be conferred on students if important deficiencies are identified in their undergraduate training. Conditionally admitted students are notified of these deficiencies, and required to rectify them at UAA, normally within a period of one year, before admission to regular status in the program is conferred. In some cases, deficiencies can be made up at another academic institution. Conditional students cannot receive graduate teaching assistantships, research assistantships or departmental travel/research grants.

Prospective graduate students are strongly advised to contact all potential faculty for research/advisor arrangements at an early stage of their admission process. An attempt is made to assign an initial advisor to students based on interests and other academic criteria.

**Academic Progress**

To maintain continuous progress toward the MA degree, a student in the graduate program is expected to complete each semester a minimum of 9 credits of coursework applicable to the program, with grades of A or B, for full-time students, or 3 credits per semester for part-time students. Failure to comply may result in the student being removed from the program. The same is true of students who fail to rectify conditions of their admission. In addition, students must advance to candidacy within five years, unless on an approved leave of absence. Such leaves of absence may not total more than four semesters.

**Candidacy Requirements**

See the beginning of this chapter for Advancement to Candidacy requirements. A student advances to candidacy by doing the following:

1. Select a graduate studies committee by the end of the first semester of graduate study.
2. Submit an official Graduate Studies Plan, as described in the UAA Catalog, after no more than three semesters of full-time graduate study.
3. Complete at least 24 semester-credits of non-thesis coursework applicable to the MA program.
4. Demonstrate research or statistical competence needed to complete the degree program, as approved by a student’s graduate studies committee. Usually, UAA courses such as STAT A252 or STAT A253 or the equivalent, or computer skills such as photogrammetry, SEM image analysis, or GIS analysis will meet this requirement.
5. In addition, a student may be required to demonstrate mastery of a foreign language, if deemed necessary by the graduate studies committee.
6. Pass ANTH A602, ANTH A605, and ANTH A611 proseminars with a grade no less than a B. If necessary, a proseminar may be repeated once, but failure to earn a B or higher the second time will result in removal from the program.
7. Prepare a thesis prospectus for approval by the graduate studies committee.

**Graduation Requirements**

See University Requirements for Graduate Degrees at the beginning of this chapter.

**Program Requirements**

1. The following courses must be taken with a grade of A or B.
2. At least 21 credits must be taken at the graduate (600) level.
3. No more than 6 credits of Internship/Practicum or Independent Study may be applied to the degree, unless a student is taking more than one track in the Applied Anthropology emphasis, in which case 3 additional credits are available.
4. Courses outside the field of Anthropology may be taken as electives if approved by the student’s advisor.
5. The student must advance to candidacy within three years based upon fulfillment of the Candidacy Requirements listed above.
6. The student must submit a written MA thesis to the graduate studies committee, conforming to UAA specifications.
7. The student must pass an oral defense of the thesis, open to the university community and the general public.
8. The student must submit an Application for Graduation.
9. One of the following study emphases must be chosen:
General Anthropology Emphasis

1. Complete the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A602</td>
<td>Proseminar in Cultural Anthropology*</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A605</td>
<td>Proseminar in Biological Anthropology*</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A611</td>
<td>Proseminar in Archaeology*</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A620</td>
<td>Research Design</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A699</td>
<td>Thesis Research</td>
<td>1-6</td>
</tr>
<tr>
<td>600 level elective courses</td>
<td></td>
<td>11-17</td>
</tr>
<tr>
<td>400 level elective courses</td>
<td></td>
<td>0-6</td>
</tr>
</tbody>
</table>

2. A total of 30 credits are required for the degree.

Applied Anthropology Emphasis

1. Complete the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A602</td>
<td>Proseminar in Cultural Anthropology*</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A605</td>
<td>Proseminar in Biological Anthropology*</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A611</td>
<td>Proseminar in Archaeology*</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A620</td>
<td>Research Design</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A699</td>
<td>Thesis Research</td>
<td>1-6</td>
</tr>
<tr>
<td>600 level elective courses</td>
<td></td>
<td>2-8</td>
</tr>
<tr>
<td>400 level elective courses</td>
<td></td>
<td>0-6</td>
</tr>
</tbody>
</table>

* All proseminar courses and Research Design must be taken in residence at UAA. These courses may not be taken by directed study or by correspondence. Students may not take Research Design or any proseminar until formally admitted to the MA program.

2. Complete one of the following tracks:

Applied Cultural Anthropology Track

Complete the following courses (9 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A615</td>
<td>Advanced Applied Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A630</td>
<td>Advanced Research Methods in Cultural Anthropology*</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A695</td>
<td>Anthropology Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

*If this course was taken as an undergraduate upper division course (ANTH A430 or the equivalent), another course may be substituted with the approval of the student’s graduate studies committee.

Applied Biological Anthropology Track

Complete 9 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A645</td>
<td>Advanced Evolution of Humans and Disease (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH A655</td>
<td>Advanced Medical Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH A657</td>
<td>Nutritional Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH A695</td>
<td>Anthropology Practicum (3)</td>
<td></td>
</tr>
</tbody>
</table>

Cultural Resource Management Track

a. Complete the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A675</td>
<td>Cultural Resource Management</td>
<td>3</td>
</tr>
</tbody>
</table>

b. Complete 6 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A631</td>
<td>Field Methods in Archaeology (1-8)*</td>
<td></td>
</tr>
<tr>
<td>ANTH A676</td>
<td>Ethical Issues in Archaeology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH A680</td>
<td>Advanced Analytical Techniques in</td>
<td></td>
</tr>
</tbody>
</table>
Archaeology (3)
ANTH A681 Advanced Museum Studies in Anthropology (3)
ANTH A695 Anthropology Practicum (3)

*No more than 3 credits may be applied to this emphasis.

3. A total of 30 credits are required for the degree.

FACULTY

Alan Boraas, Professor (KPC campus), IFASB@uaa.alaska.edu
Sarah Carraher, Assistant professor, scarrahe@uaa.alaska.edu
Clare Dannenberg, Assistant Professor, cjdannenberg@uaa.alaska.edu
Phyllis Fast, Professor Emeritus, pfast@uaa.alaska.edu
Kerry Feldman, Professor Emeritus, kdfeldman@uaa.alaska.edu
Diane Hanson, Associate Professor, dkhanson@uaa.alaska.edu
Ryan Harrod, Assistant Professor, rharrod2@uaa.alaska.edu
Catherine Knott, Assistant Professor (KPC campus), chknott@kpc.alaska.edu
Steve J. Langdon, Professor Emeritus, silangdon@uaa.alaska.edu
Marie Lowe, Assistant Professor (ISER), milowe@uaa.alaska.edu
Paul White, Assistant Professor, pjwhite2@uaa.alaska.edu
Douglas Veltre, Professor Emeritus, dveltre@uaa.alaska.edu
William Workman, Professor Emeritus, AFWBW@uaa.alaska.edu
David Yesner, Professor, dryesner@uaa.alaska.edu
Master of Arts, Anthropology

The Master of Arts degree in Anthropology, with emphases in General or Applied Anthropology, is designed to provide a rigorous background in contemporary theory and practice in anthropology, particularly through the use of proseminars, internships, and independent research. The MA degree requires a research-based thesis. Within the MA program, the Applied Anthropology emphasis offers specialized tracks designed to train students in applied aspects of anthropology that may be employment related. The Applied Cultural Anthropology track identifies and assists in resolving current social issues in their cultural dimensions. The Applied Biological Anthropology track encompasses forensic anthropology, medical anthropology, and other practical applications of physical anthropology. The Cultural Resource Management track involves the inventory, assessment, and conservation of archaeological and historical sites and remains, and places of traditional cultural importance, as a part of a larger management framework.

Program Student Learning Outcomes

Students graduating with a Master of Arts in Anthropology will be able to:

- Demonstrate comprehension at a graduate level in their knowledge of core concepts, research methods and findings in archeology, cultural anthropology and biological anthropology;
- Demonstrate comprehension of specialized knowledge in the track or subfield they select from program choices;
- Demonstrate the capacity to design anthropological research, conduct that research, analyze research results and present a thesis concerning that research acceptable by the faculty of the anthropology department;
- Effectively apply the perspective, skills, and knowledge obtained in the anthropology Master’s program in an employment capacity that requires their utilization.

Admission Requirements

See Admission Requirements for Graduate Degrees at the beginning of this chapter. Deadline for application: February 15 for fall semester admission. Students seeking admission into the Anthropology MA degree program must meet the following requirements (1-3) and must submit the following documents (4-9):

1. Although graduating college or university seniors are invited to apply, no student may be formally admitted to graduate study before the baccalaureate degree has been awarded from an accredited college or university.
2. It is strongly recommended that the student has completed a minimum of 18 credits of undergraduate coursework in Anthropology with a GPA of 3.00. An undergraduate major in anthropology is preferred.
3. Students must have at least a 3.00 overall undergraduate GPA.
4. Completed UAA graduate admissions application form.
5. Official transcripts of college-level work from each institution attended.
6. Graduate Record Examination (GRE) results (General Test Scores), taken within five years prior to the application date.
7. Three letters of recommendation from professors or other professionals particularly qualified to attest to the applicant’s qualifications for graduate study.
8. A letter of intent, including a brief statement of the applicant’s research and career goals and reasons for pursuing graduate study in Anthropology at UAA.
9. Optional: An example of a substantial paper or research proposal indicative of the applicant’s potential for graduate study. Applicants may also be requested to complete a personal interview.

Acceptance is determined by the Anthropology Graduate Admissions Committee and is based on:

1. The prospective student’s overall credentials and
2. The availability of appropriate faculty for student research interests. Failure to meet any of the above criteria may result in conditional admission to the MA program. Conditional admission may be conferred on students if important deficiencies are identified in their undergraduate training. Conditionally admitted students are notified of those deficiencies, and required to rectify them at UAA, normally within a period of one year, before admission to regular status in the program is conferred. In some cases, deficiencies can be made up at another academic institution. Conditional students cannot receive graduate teaching assistantships, research assistantships or departmental travel/research grants.

Prospective graduate students are strongly advised to contact all potential faculty for research/advisor arrangements at an early stage of their admission process. An attempt is made to assign an initial advisor to students based on interests and other academic criteria.

**Academic Progress**

To maintain continuous progress toward the MA degree, a student in the graduate program is expected to complete each semester a minimum of 9 credits of coursework applicable to the program, with grades of A or B, for full-time students, or 3 credits per semester for part-time students. Failure to comply may result in the student being removed from the program. The same is true of students who fail to rectify conditions of their admission. In addition, students must advance to candidacy within five years, unless on an approved leave of absence. Such leaves of absence may not total more than four semesters.

**Candidacy Requirements**

See the beginning of this chapter for Advancement to Candidacy requirements. A student advances to candidacy by doing the following:

1. Select a graduate studies committee by the end of the first semester of graduate study.
2. Submit an official Graduate Studies Plan, as described in the UAA Catalog, after no more than three semesters of full-time graduate study.
3. Complete at least 24 semester-credits of non-thesis coursework applicable to the MA program.
4. Demonstrate research or statistical competence needed to complete the degree program, as approved by a student’s graduate studies committee. Usually, UAA courses such as STAT A252 or STAT A253 or the equivalent, or computer skills such as photogrammetry, SEM image analysis, or GIS analysis will meet this requirement.
5. In addition, a student may be required to demonstrate mastery of a foreign language, if deemed necessary by the graduate studies committee.
6. Pass ANTH A602, ANTH A605, and ANTH A611 seminars with a grade no less than a B. If necessary, a seminar may be repeated once, but failure to earn a B or higher the second time will result in removal from the program.
7. Prepare a thesis prospectus for approval by the graduate studies committee.

**Graduation Requirements**

See University Requirements for Graduate Degrees at the beginning of this chapter.

**Program Requirements**

1. The following courses must be taken with a grade of A or B.
2. At least 23 credits must be taken at the graduate (600) level.
3. No more than 6 credits of Internship/Practicum or Independent Study may be applied to the degree, unless a student is taking more than one track in the Applied Anthropology emphasis, in which case 3 additional credits are available.
4. Courses outside the field of Anthropology may be taken as electives if approved by the student’s advisor.
5. The student must advance to candidacy within three years based upon fulfillment of the Candidacy Requirements listed above.
6. The student must submit a written MA thesis to the graduate studies committee, conforming to UAA specifications.
7. The student must pass an oral defense of the thesis, open to the university community and the general public.
8. The student must submit an Application for Graduation.
9. One of the following study emphases must be chosen:
General Anthropology Emphasis

1. Complete the following:
   - ANTH A602 Proseminar in Cultural Anthropology*  3
   - ANTH A605 Proseminar in Biological Anthropology*  3
   - ANTH A611 Proseminar in Archaeology*  3
   - ANTH A620 Research Design  3
   - ANTH A699 Thesis Research  1-6
   - 600 level elective courses  11-17
   - 400 level elective courses  0-6

2. A total of 30 credits are required for the degree.

Applied Anthropology Emphasis

1. Complete the following:
   - ANTH A602 Proseminar in Cultural Anthropology*  3
   - ANTH A605 Proseminar in Biological Anthropology*  3
   - ANTH A611 Proseminar in Archaeology*  3
   - ANTH A620 Research Design  3
   - ANTH A699 Thesis Research  1-6
   - 600 level elective courses  2-8
   - 400 level elective courses  0-6

* All proseminar courses and Research Design must be taken in residence at UAA. These courses may not be taken by directed study or by correspondence. Students may not take Research Design or any proseminar until formally admitted to the MA program.

2. Complete one of the following tracks:

   **Applied Cultural Anthropology Track**
   Complete the following courses (9 credits):
   - ANTH A615 Advanced Applied Anthropology  3
   - ANTH A630 Advanced Research Methods in Cultural Anthropology*  3
   - ANTH A695 Anthropology Practicum  3

   *If this course was taken as an undergraduate upper division course (ANTH A430 or the equivalent), another course may be substituted with the approval of the student's graduate studies committee.

   **Applied Biological Anthropology Track**
   Complete 9 credits from the following:
   - ANTH A645 Advanced Evolution of Humans and Disease  (3)
   - ANTH A655 Advanced Medical Anthropology  (3)
   - ANTH A657 Nutritional Anthropology  (3)
   - ANTH A685 Advanced Human Osteology  (3)
   - ANTH A686 Advanced Applied Human Osteology  (4)
   - ANTH A695 Anthropology Practicum  (3)

   **Cultural Resource Management Track**
   a. Complete the following:
      - ANTH A675 Cultural Resource Management  3
   b. Complete 6 credits from the following:
      - ANTH A631 Field Methods in Archaeology  (1-8)*
ANTH A676  Ethical Issues in Archaeology (3)
ANTH A680  Advanced Analytical Techniques in Archaeology (3)
ANTH A681  Advanced Museum Studies in Anthropology (3)
ANTH A695  Anthropology Practicum (3)

*No more than 3 credits may be applied to this emphasis.

3. A total of 30 credits are required for the degree.

FACULTY

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Christine Hanson, Professor, AFCLH@uaa.alaska.edu
Diane Hansen, Associate Professor, AFDKH@uaa.alaska.edu
Steve I. Langdon, Professor /Chair, AFSLJ@uaa.alaska.edu
Paul White, Assistant Professor, AFPJW@uaa.alaska.edu
William Workman, Professor Emeritus, AFWBW@uaa.alaska.edu
David Yesner, Professor, AFDRY@uaa.alaska.edu
## Course Action Request
### University of Alaska Anchorage

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

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS CAS</td>
<td>ASSC Division of Social Science</td>
<td>Anthropology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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</thead>
<tbody>
<tr>
<td>ANTH</td>
<td>A615</td>
<td>N/A</td>
<td>3</td>
<td>(3+0)</td>
</tr>
</tbody>
</table>

**Complete Course Title**

Advanced Applied Anthropology

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

### Type of Course
- Academic
- Preparatory/Development
- Non-credit
- CEU
- Professional Development

**Type of Action:** Add

**If a change, mark appropriate boxes:**
- Prefix
- Credits
- Title
- Grading Basis
- Course Description
- Test Score Prerequisites
- Automatic Restrictions
- Class Level
- Co-requisites
- Registration Restrictions
- General Education Requirement

### Repeat Status No

- # of Repeats
- Max Credits

### Grading Basis
- A-F
- P/NP
- NG

### Implementation Date

- semester/year
- From: Fall/2014
- To: Fall/9999

### Cross Listed with

- A415

### Coordination Email

- Date: 10/31/2013
- submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

### Coordination with Library Liaison

- Date: 10/31/2013

### General Education Requirement

- Mark appropriate box:
  - Oral Communication
  - Written Communication
  - Quantitative Skills
  - Humanities
  - Fine Arts
  - Social Sciences
  - Natural Sciences
  - Integrative Capstone

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

**Advanced applied anthropology, theory, methods, and the history of applied anthropology in the United States, with an emphasis on applying anthropology for social justice in Alaska. Students will conduct a local research project as a team through engagement with community institutions, thereby learning the methods of applying anthropology to solve contemporary sociocultural issues and problems.**

### Course Prerequisite(s)

- Anth 202 completed with minimum grade of C

### Co-requisite(s)

- (concurrent enrollment required)

### Automatic Restriction(s)

- College Major Class Level

### Registration Restriction(s)

- (non-codable)
- Graduate standing

### Mark if course has fees

- ☒ Cross Listed with A415

### Mark if course is a selected topic course

### Justification for Action

**Updating course description and classroom approach to keep up with innovative teaching strategies being used for similar courses at other universities. Updating prerequisites to ensure students have taken Cultural Anthropology (ANTH202).**

---

**Initiator Name (typed):** Sally Carragher

**Initiator Signed Initials:**

**Date:**

**Initiator (faculty only) Approved**

- Date

**Dean/Director of School/College Disapproved**

- Date

**Undergraduate/Graduate Academic Approved**

- Date

**Board Chair Disapproved**

- Date

**Provost or Designee Approved**

- Date

---

**College/School Curriculum Committee Chair Disapproved**

- Date
I. Date of initiation: October, 2013

II. A. College or school: CAS
   B. Course title: Applied Anthropology
   C. Course prefix: ANTH
   D. Course number: A615
   E. Credits and Contact hours: 3.0 credits, 3+0 contact hours
   F. Grading: A-F
   G. Stacking: ANTH A415
   H. Course description: Advanced applied anthropology, theory, methods, and the history of applied anthropology in the United States, with an emphasis on applying anthropology for social justice in Alaska. Students will conduct a local research project as a team through engagement with community institutions, thereby learning the methods of applying anthropology to solve contemporary sociocultural issues and problems.
   I. Registration restrictions: Graduate standing
   J. Course fee: No

III. Course activities/teaching methods:
    Course will be offered every other academic year. Each time course is offered, the instructor will have identified a local client and research project, and the main research focus/question for the class to work on as a team. Students work collaboratively with the client to identify specific research questions, project timeline, project data collection methods (i.e. open or structured interviews, focus groups, questionnaire surveys, oral histories, life histories, archival research), and develop project deliverables for the client (i.e. a final report, a web site, pamphlets, public presentation, community education materials). Through this approach, students learn through personal experience how to actually do applied anthropological research with an emphasis on promoting social justice in Alaska. In addition to providing educational materials about the theory, methods, and history of applied anthropology, the instructor serves as a facilitator and mediator for students and the project client.

IV. Instructional goals and student outcomes:
   A. The instructor will:
      1. Explain the core concepts, historical developments, methods employed, and major results of applying anthropological theory and method to the understanding and amelioration of sociocultural problems or challenges in Alaska, the US, and worldwide.
      2. Identify and discuss the major subfields in applied anthropology, and the kinds of employment available in each related to one’s educational achievement and experience.
3. Explain the ethical principles required of applied and practicing anthropologists, proving illustrations of both appropriate and unethical activity in the field.
4. Serve as a project facilitator and a mediator between students the client.
5. Prior to the start of the semester, the instructor will identify a client (person, community group, or organization) in the Anchorage/Mat-Su area, and work with the client to identify the main research topic and people who will be involved in the project (i.e. interviewees).
6. Prior to the start of the semester, the instructor will obtain IRB and any other necessary approvals/licenses, as well as project funding (if needed).

B. The student will be able to:
1. Discuss the core concepts, historical developments, methods and results of applying anthropological theory and method to sociocultural problems.
2. Discuss the development, activities appropriate to, and notable results of applied anthropology.
3. Discuss the ethical principles adhered to in this field.
4. Gain experience and competency in types of methods commonly used in applied anthropology.
5. Gain experience in designing, carrying out, and analyzing anthropological research with an applied focus; and in the development and dissemination of research deliverables to a client.
6. Work effectively as a part of a team.
7. Work as project managers to assist the instructor with mentoring undergraduate student research and writing; and oversee particular aspects of project completion.

V. Assessment:
1. Graduate students will receive a final grade for the course (A-F). Graduate students will maintain research journals cataloguing their progress and accounting for individual contributions and activities related to the class research project. Graduate students will be assessed based on the quality, rigor, completion, and collegiality reflected in their journals, in-class activities, and the final database and project reports developed for delivery to the class client. The journal also provides the instructor with information about student participation and success outside of the classroom – thus highlighting contributions to the class project that may not be readily observable in the classroom or the final report to the client.  
2. Graduate students will be assessed, in addition to the above, based on their performance as mentors to the undergraduates, as reflected in their own journal entries and the instructor’s observations during class activities. Graduate students are expected to contribute to class research, analysis,
and writing at a higher level – and will work as project managers under the instructor to guide undergraduate student work.

VI. Topical course outline:
1. Introduction and overview; distinction between basic and applied anthropological research
2. History and kinds of applied anthropology, globally, in the US, and with a special emphasis on Alaska
3. Ethics in applied research and practice
4. Method and theory in applied anthropology:
   a. Ethnography, participant observation, key-informant interviewing, oral and life histories, qualitative analyses
   b. Focus groups, questionnaire surveys, quantitative analyses
5. Research design and process:
   a. Identifying core research problem and developing specific research questions to answer the problem
   b. Time management and troubleshooting
   c. Population sampling techniques
   d. Designing research instruments (surveys, interviews)
   e. Storing, organizing, coding, and analyzing data
   f. Writing research dissemination materials for clients and public audiences

VII. Suggested texts:

VIII. Bibliography:


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

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<th>1a. School or College</th>
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6. Complete Course Title  
Applied Anthropology

Abbreviated Title for Transcript (30 character)

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

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12. Cross Listed with

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

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

<table>
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<td>BA/BS Anthropology</td>
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<td>Paul White</td>
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13b. Coordination Email  
submitted to Faculty Listerv: (uac-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison  
Date: 10/31/2013

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

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

Applied anthropology, theory, methods, and the history of applied anthropology in the United States, with an emphasis on applying anthropology for social justice in Alaska. Students will conduct a local research project as a team through engagement with community institutions, thereby learning the methods of applying anthropology to solve contemporary sociocultural issues and problems.

16a. Course Prerequisite(s) (list prefix and number or test code and score)  
ANTH A202, minimum grade of C

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

16c. Automatic Restriction(s)

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

16e. Mark if course has fees

16f. Mark if course is a selected topic course

19. Justification for Action  
Updating course description and classroom approach to keep up with innovative teaching strategies being used for similar courses at other universities. Updating prerequisites to ensure students have taken Cultural Anthropology (ANTH A202).
I. Date of initiation: October, 2013

II. A. College or school: CAS
   B. Course title: Applied Anthropology
   C. Course prefix: ANTH
   D. Course number: A415
   E. Credits and Contact hours: 3.0 credits, 3+0 contact hours
   F. Grading: A-F
   G. Stacking: ANTH A615
   H. Course description: Applied anthropology, theory, methods, and the history of applied anthropology in the United States, with an emphasis on applying anthropology for social justice in Alaska. Students will conduct a local research project as a team through engagement with community institutions, thereby learning the methods of applying anthropology to solve contemporary sociocultural issues and problems.
   I. Course prerequisites: ANTH A202, with minimum grade of C
   J. Registration restrictions: none
   K. Course fee: No

III. Course activities/teaching methods:
   - Course will be offered every other academic year. Each time course is offered, the instructor will have identified a local client and research project, and the main research focus/question for the class to work on as a team. Students work collaboratively with the client to identify specific research questions, project timeline, project data collection methods (i.e. open or structured interviews, focus groups, questionnaire surveys, oral histories, life histories, archival research), and develop project deliverables for the client (i.e. a final report, a web site, pamphlets, public presentation, community education materials). Through this approach, students learn through personal experience how to actually do applied anthropological research with an emphasis on promoting social justice in Alaska. In addition to providing educational materials about the theory, methods, and history of applied anthropology, the instructor serves as a facilitator and mediator for students and the project client.

IV. Instructional goals and student learning outcomes:
   A. The instructor will:
      1. Explain the core concepts, historical developments, methods employed, and major results of applying anthropological theory and method to the understanding and amelioration of sociocultural problems or challenges in Alaska, the US, and worldwide.
      2. Identify and discuss the major subfields in applied anthropology, and the kinds of employment available in each related to one’s educational achievement and experience.
3. Explain the ethical principles required of applied and practicing anthropologists, proving illustrations of both appropriate and unethical activity in the field.
4. Serve as a project facilitator and a mediator between students the client.
5. Prior to the start of the semester, the instructor will identify a client (person, community group, or organization) in the Anchorage/Mat-Su area, and work with the client to identify the main research topic and people who will be involved in the project (i.e. interviewees).
6. Prior to the start of the semester, the instructor will obtain IRB and any other necessary approvals/licenses, as well as project funding (if needed).

B. The student will be able to:
1. Discuss the core concepts, historical developments, methods and results of applying anthropological theory and method to sociocultural problems.
2. Discuss the development, activities appropriate to, and notable results of applied anthropology.
3. Discuss the ethical principles adhered to in this field.
4. Demonstrate competency in types of methods commonly used in applied anthropology.
5. Demonstrate competency in designing, carrying out, and analyzing anthropological research with an applied focus; and in the development and dissemination of research deliverables to a client.
6. Work effectively as a part of team.

V. Topical course outline:
1. Introduction and overview; distinction between basic and applied anthropological research
2. History and kinds of applied anthropology, globally, in the US, and with a special emphasis on Alaska
3. Ethics in applied research and practice
4. Method and theory in applied anthropology:
   a. Ethnography, participant observation, key-informant interviewing, oral and life histories, qualitative analyses
   b. Focus groups, questionnaire surveys, quantitative analyses
5. Research design and process:
   a. Identifying core research problem and developing specific research questions to answer the problem
   b. Time management and troubleshooting
   c. Population sampling techniques
   d. Designing research instruments (surveys, interviews)
   e. Storing, organizing, coding, and analyzing data
f. Writing research dissemination materials for clients and public audiences

VI. Suggested texts:

VII. Bibliography:
### Course Action Request

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

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<table>
<thead>
<tr>
<th>1a. School or College</th>
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<th>1c. Department</th>
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<th>5b. Contact Hours (Lecture + Lab)</th>
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If a change, mark appropriate boxes:

- ☐ Prefix
- ☐ Course Number
- ☐ Credits
- ☐ Title
- ☐ Grading Basis
- ☐ Contact Hours
- ☐ Repeat Status
- ☐ Cross-Listed/Stacked
- ☐ Course Prerequisites
- ☐ Co-requisites
- ☐ Registration Restrictions
- ☐ General Education Requirement
- ☐ Class
- ☐ Major
- ☐ (please specify)

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<td>To: Fall/9999</td>
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| 12. ☐ Cross Listed with | ANTH A454 |

Cross-Listed Coordination

Signature

---

### 13a. Impacted Courses or Programs

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

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<td>Paul White</td>
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Initiator Name (typed): Steve J. Langdon  
Initiator Signed Initials: _________  
Date: ________________

### 13b. Coordination Email

Date: 10/31/2013  
Submitted to Faculty Listserv: [uaa-faculty@lists.uaa.alaska.edu](mailto:uaa-faculty@lists.uaa.alaska.edu)

### 13c. Coordination with Library Liaison

Date: 10/31/2013

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### 14. General Education Requirement

Mark appropriate box:

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

### 15. Course Description

(suggested length 20 to 50 words)

Advanced anthropological approaches to the relationships between cultural and ecological systems. Culture as an adaptive system and the role of various cultural subsystems in different adaptations. Application of ecological concepts to human societies; impacts of environmental change on human societies, and impacts of human societies on environments; ethnoecology and traditional ecological knowledge of indigenous communities; values of nature among Western and non-Western societies; and political ecology in relation to the juxtaposition of indigenous peoples within contemporary nation-states. Research paper required.

### 16a. Course Prerequisite(s)

(list prefix and number or test code and score)

Anth 202 completed with minimum C grade

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

### 16c. Other Restriction(s)

- ☐ College
- ☐ Major
- ☐ Class
- ☑ Level

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

Graduate standing

### 17. ☑ Mark if course has fees

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

### 19. Justification for Action

Graduate students have need for a course in ecological anthropology that reflects both Western and non-Western (indigenous) approaches to human-environment interaction.
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## I. Date of Initiation Date:
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Fall 2013
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## II. Course Information

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<td>H. Implementation Date</td>
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<td>Advanced anthropological approaches to the relationships between cultural and ecological systems. Culture as an adaptive system and the role of various cultural subsystems in different adaptations. Application of ecological concepts to human societies; impacts of environmental change on human societies, and impacts of human societies on environments; ethnoecology and traditional ecological knowledge of indigenous communities; values of nature among Western and non-Western societies; and political ecology in relation to the juxtaposition of indigenous peoples within contemporary nation-states.</td>
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<td>J. Status of Course Relative to a Degree or Certificate Program:</td>
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<td>K. Course Fees:</td>
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<td>L. Registration Restrictions:</td>
<td>Graduate Standing</td>
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<td>M. Stacking:</td>
<td>ANTH A454</td>
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## III. Course Activities

In a lecture and discussion format, information will be presented concerning the diversity of ways in which human societies adapt and have adapted to their natural environments and have transformed those environments, from prehistory to the present, in global perspective.

## IV. Course Evaluation

Evaluation procedures are at the discretion of the instructor and will be discussed at the first class meeting of the semester. Students will be evaluated on all class content and assigned readings. Evaluation vehicles will include (but are not limited to) examinations, research papers, student journals/reflections, student questions on readings, and class discussions. The requirement for research papers differentiates the undergraduate (A454) and graduate (A654) versions of this course.
V. **Course Justifications:**

A. Justification for new course: this course will provide graduate students with information on human-environmental relationships, including key concepts of resilience and sustainability, as well as traditional ecological knowledge and indigenous environmental perspectives, that are critical to graduate education in anthropology.

B. Justification for stacking: achieves goal of providing information on human-environmental relationships to graduate students in an efficient delivery vehicle; allows graduate students to mentor undergraduates; will be differentiated by requirement for research papers.

VI. **Instructional Goals and Defined Outcomes**

A. Instructional Goals. The Instructor will:

1. Present fundamental ecological concepts and their relationship to human societies

2. Discuss human adaptations from a variety of cultural perspectives

3. Describe the impacts of environmental changes on human societies, and of human societies on their environments

4. Present Western and Non-western (indigenous) perspectives on ecological knowledge

B. Defined Outcomes. The Student will be able to:

1. Apply fundamental ecological concepts to human societies

2. Analyze environmental changes during human prehistory and history, and their impacts on human societies

3. Analyze long-term impacts of human societies on their environments, from prehistory to the present

4. Articulate in detail a specific aspect of human-environmental relationships resulting from individual research

C. Student assessment: based on examinations, research papers, student journals/reflections, daily questions, and class discussion

VII. **Topical Outline:**

1. History of Human Ecological Thought

2. Application of Ecological Concepts to Human Societies: Ecosystems and Communities; Species and Populations; Niches and Habitats; Ecotones and Boundaries; Limiting Factors
3. Global Environmental Change and Human Societies

4. Concepts of Adaptation, Resilience, and Sustainability as Applied to Human Societies

5. Biomes and Energetics

6. Human Bioenergetics; human food chains and food webs in ecological perspective; energy flow in human populations; energy and cultural evolution

7. Modeling Human Resource Utilization: bioeconomic optimization models; efficiency and risk in Human Adaptation; environment and technology; human subsistence patterns in spatiotemporal perspective

8. Ethnoecology, ethnoscience, and ethnotaxonomy

9. Traditional Ecological Knowledge (TEK); cognitive models and decision-making processes of indigenous communities

10. Gender and Ecology


12. Nutrient Cycles and Human Populations; Adaptation and Malnutrition


14. Cooperation and Competition for Resources; Ecology of Territoriality and Warfare

15. Human Resource Management Strategies: Notions of the Commons; Resource Redistribution, Reciprocity, Exchange, and Trade; Storage and Conservation of Resources

16. Concepts of Resilience and Sustainability

17. Valuing Nature - Spiritual and Ritual Ecology

18. Political Ecology of Economic “Development” and Globalization

19. Political Ecology and the Sustainability of Indigenous Communities in Contemporary Nation-states

20. Humans and Climate Change

Suggested Textbooks:


VIII. Bibliography:


1. **School or College**  
   AS CAS  

2. **Course Prefix**  
   ANTH  

3. **Course Number**  
   A454  

4. **Previous Course Prefix & Number**  
   ANTH A354  

5. **Credits/CEUs**  
   3  

6. **Complete Course Title**  
   Culture and Ecology  

7. **Type of Course**  
   Academic  

8. **Type of Action:**  
   Add or Change or Delete  

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

10. **Grading Basis**  
    A-F  
    P/NP  
    NG  

11. **Implementation Date**  
    From: Spring/2014  
    To: Fall1/9999  

12. **Cross Listed with**  
    ANTH A654  

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

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

15. **Course Description**  
   Anthropological approaches to the relationships between cultural and ecological systems. Culture as an adaptive system and the role of various cultural subsystems in different adaptations. Application of ecological concepts to human societies; impacts of environmental change on human societies, and impacts of human societies on environments; ethnoecology and traditional ecological knowledge of indigenous communities; values of nature among Western and non-Western societies; and political ecology in relation to the juxtaposition of indigenous peoples within contemporary nation-states.  

16a. **Course Prerequisite(s)**  
   ANTH A202 minimum grade of C  

16b. **Co-requisite(s)**  
   Concurrent enrollment required  

16c. **Other Restriction(s)**  
   - College  
   - Major  
   - Class  
   - Level  

16d. **Registration Restriction(s)**  
   Non-codable  

17. **Mark if course has fees**  
   -  

18. **Mark if course is a selected topic course**  
   -  

19. **Justification for Action**  
   This capstone course has been taught at the advanced undergraduate level for the past several years, and its movement to the 400 level reflects its content level as a capstone course in Anthropology.
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<th>Date</th>
<th>Dean/Director of School/College</th>
<th>Date</th>
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II. Course Information

A. College: College of Arts and Sciences
B. Course Prefix: ANTH
C. Course Number: A454
D. Number of Credits: 3
E. Contact Hours: 3+0
F. Course Title: Culture and Ecology
G. Grading Basis: A-F
H. Implementation Date: Fall 2014
I. Course Description: Anthropological approaches to the relationships between cultural and ecological systems. Culture as an adaptive system and the role of various cultural subsystems in different adaptations. Application of ecological concepts to human societies; impacts of environmental change on human societies, and impacts of human societies on environments; ethnoecology and traditional ecological knowledge of indigenous communities; values of nature among Western and non-Western societies; and political ecology in relation to the juxtaposition of indigenous peoples within contemporary nation-states.

J. Status of Course Relative to a GER Integrative Capstone Degree or Certificate Program: BA Anthropology capstone
                                   BS Anthropology capstone
                                   BS Environment and Society, Society and Environment emphasis
                                   Minor, Environmental Studies, List B
                                   BS Natural Sciences, Environmental Sciences option, Social Sciences list

K. Course Fees: No
L. Course Prerequisite: ANTH A202, minimum grade of C
M. Stacking ANTH A654

III. Course Activities

In a lecture and discussion format, information will be presented concerning the diversity of ways in which human societies adapt and have adapted to their natural environments and have transformed those environments, from prehistory to the present, in global perspective.
IV. Course Evaluation

Evaluation procedures are at the discretion of the instructor and will be discussed at the first class meeting of the semester. Students will be evaluated on all class content and assigned readings. Evaluation vehicles will include (but are not limited to) examinations, student journals/reflections, student questions on readings, and class discussions.

A. Student Learning Outcomes and Assessment Measures

<table>
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<tr>
<th>Student Learning Outcomes: Upon completion of this course, the student will be able to:</th>
<th>Assessment Measures</th>
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<td>1. Apply fundamental ecological concepts to human societies</td>
<td>Examinations, student journals/reflections, daily questions, and/or class discussion</td>
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<tr>
<td>2. Analyze environmental changes during human prehistory and history, and their impacts on human societies</td>
<td>Examinations, student journals/reflections, daily questions, and/or class discussion</td>
</tr>
<tr>
<td>3. Analyze long-term impacts of human societies on their environments, from prehistory to the present</td>
<td>Examinations, student journals/reflections, daily questions, and/or class discussion</td>
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<tr>
<td>4. Interpret different approaches of societies to nature, and the differences and similarities between indigenous environmental knowledge and that of contemporary Western societies</td>
<td>Examinations, student journals/reflections, daily questions, and/or class discussion</td>
</tr>
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</table>

V. Course Justifications:

A. Justification of course level: This course contains advanced content; it is a synthetic course requiring specialized knowledge

B. Justification for capstone status: This course integrates general knowledge about human cultural adaptations to produce a synthetic but detailed understanding of the long-term history of human-environmental relations, including both environmental impacts on human societies and vice versa, as well as an understanding of distinctions between Western and non-Western approaches to ecological knowledge and values of nature, and a consideration of the ecological circumstances of indigenous peoples embedded within contemporary nation-states.

C. Justification for stacking: Presence of graduate students in the course will enhance the course experience; graduate students will serve as mentors

VI. Instructional Goals and Defined Outcomes
A. Instructional Goals. The Instructor will:

1. Present fundamental ecological concepts and their relationship to human societies
2. Discuss human adaptations from a variety of cultural perspectives
3. Describe the impacts of environmental changes on human societies, and of human societies on their environments
4. Present Western and Non-western (indigenous) perspectives on ecological knowledge

B. Defined Student Learning Outcomes. The Student will be able to:

1. Apply fundamental ecological concepts to human societies
2. Analyze environmental changes during human prehistory and history, and their impacts on human societies
3. Analyze long-term impacts of human societies on their environments, from prehistory to the present
4. Interpret different approaches of societies to nature, and the differences and similarities between indigenous environmental knowledge and that of contemporary Western societies

C. Student assessment: based on examinations, student journals/reflections, daily questions, and class discussion

VII. Topical Outline:

1. History of Human Ecological Thought
2. Application of Ecological Concepts to Human Societies: Ecosystems and Communities; Species and Populations; Niches and Habitats; Ecotones and Boundaries; Limiting Factors
3. Global Environmental Change and Human Societies
4. Concepts of Adaptation, Resilience, and Sustainability as Applied to Human Societies
5. Biomes and Energetics
6. Human Bioenergetics; human food chains and food webs in ecological perspective; energy flow in human populations; energy and cultural evolution
7. Modeling Human Resource Utilization: bioeconomic optimization models; efficiency and risk in Human Adaptation; environment and technology; human subsistence patterns in spatiotemporal perspective
8. Ethnoecology, ethnoscience, and ethnotaxonomy

9. Traditional Ecological Knowledge (TEK); cognitive models and decision-making processes of indigenous communities

10. Gender and Ecology


12. Nutrient Cycles and Human Populations; Adaptation and Malnutrition


14. Cooperation and Competition for Resources; Ecology of Territoriality and Warfare

15. Human Resource Management Strategies: Notions of the Commons; Resource Redistribution, Reciprocity, Exchange, and Trade; Storage and Conservation of Resources

16. Concepts of Resilience and Sustainability

17. Valuing Nature - Spiritual and Ritual Ecology

18. Political Ecology of Economic “Development” and Globalization

19. Political Ecology and the Sustainability of Indigenous Communities in Contemporary Nation-states

20. Humans and Climate Change


VIII. Suggested Textbooks:


**IX. Bibliography:**


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

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<th>1b. Division</th>
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If a change, mark appropriate boxes:
- Prefix
- Credits
- Title
- Grading Basis
- Course Description
- Text Score Prerequisites
- Other Restrictions
- Repeat Status
- Cross-Listed/Stacked
- Course Prerequisites
- Co-requisites
- Registration Restrictions
- General Education Requirement
- Oral Communication
- Written Communication
- Quantitative Skills
- Humanities
- Fine Arts
- Social Sciences
- Natural Sciences
- Integrative Capstone

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| 10. Grading Basis | A-F | P/NP | NG |

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<td>Paul White</td>
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Initiator Name (typed): Marie Lowe  Initiator Signed Initials: ___________  Date: ___________

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Mark appropriate box:
- Oral Communication
- Written Communication
- Quantitative Skills
- Humanities
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- Integrative Capstone

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<th>15. Course Description (suggested length 20 to 50 words)</th>
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- College  Major  Class  Level

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<th>18. Mark if course is a selected topic course</th>
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<th>19. Justification for Action</th>
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This class has been taught three times as a special topics undergraduate course. A permanent, graduate anthropology course is needed to expose students to contemporary ethnographic studies on the relationship between globalization and sociocultural change. This course will provide graduate students with an ethnography course on subject material outside the domain of Alaska/Arctic anthropology.
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I. **Initiation Date:** March 2013

II. **Course Information**
   A. **College:** College of Arts and Sciences
   B. **Course Title:** Culture and Globalization
   C. **Course Subject/Number:** ANTH A665
   D. **Credit Hours:** 3.0 Credits
   E. **Contact Time:** 3+0 Contact Time
   F. **Grading Information:** A-F
   G. **Course Description:**

   The term, *globalization*, has economic, political, technological, environmental, and sociocultural implications. At a very basic conceptual level, the term describes transnational flows of products, people, and ideas. It is in this context the course situates the culture concept and its evolution in a changing world in conjunction with changes in the discipline and perspective of anthropology. The class will investigate the relationship between culture and globalization by examining global capitalism and ethnographic experiences in the workplace, in the context of transnational migration and diasporas, and through the influence of new information technologies and media on values, beliefs, and practices. Through individual research papers developed over the course of the semester, students will demonstrate both a theoretical and a real world understanding of how people are culturally affected by globalization and how globalization is in turn affected by culture.

   May be stacked with ANTH A465

   H. **Status of course relative to degree or certificate program:**

   Applies to the MA in Anthropology.

   I. **Lab Fees:** No
   J. **Coordination:** None
   K. **Course Prerequisites:** None
   L. **Registration Restrictions:** Student must be enrolled in the UAA MA program

III. **Course Activities**

   Discussions, readings, videos, research paper formulation.
IV. Evaluation

This is a discussion-based course utilizing theoretical and ethnographic readings with a final term paper project. The grading structure is as follows:

A. Attendance (10%), Preparedness/Participation (10%) 20%
B. Short Position Paper Delivered to Class 10%
C. Writing Assignments (5@2%) 10%
D. Mid-Term Paper 20%
E. Final Term Paper 40%

A. Attendance, Preparedness/Participation (20%)

For each reading assignment, students will be given questions to use as a discussion guide. They will be expected to take notes on the discussion guide in addition to participating in the class discussion. Graduate students will be assigned three additional theoretical readings.

B. Assignments (20%)

Position Paper (10%): Each graduate student will be assigned a short position paper to present to the class on one of the three additional theory readings. The student must demonstrate the use of rhetorical argumentation in this paper and will read it to the class to stimulate discussion for that day.

Research Topic (10%): The students will be required to formulate a research topic and paper related to the course material. The topic will be chosen early in the semester after some preliminary theoretical readings followed by ethnographic examples of the course’s main subject material. Subsequent assignments will encompass the construction of a literature review and bibliography (which will include a guest lecture by the anthropology department’s research librarian from the UAA Consortium Library), a paper outline, a paper expansion plan (see below), and short presentations on the term paper topic.

C. Mid-Term Paper (20%)

At mid-term, the students will write a 5-page version of their term papers which will include the full bibliography.

D. Final Research Term Paper (40%)

For the rest of the semester, students will work on expanding that 5-page paper into a respectable 20-page term paper. The instructor will walk the students through the research paper process step by step.
V. Course Level Justification

This course will build on and refine student understanding of historical processes, cultural diversity, and human adaptation to change introduced in lower division anthropology courses. A permanent upper division anthropology course is needed to expose students to contemporary ethnographic studies that investigate and describe the relationship between globalization processes and sociocultural change. This course will provide graduate students with an ethnography course on subject material outside the domain of Alaska/Arctic anthropology. All students will be required to produce a 20 page formal research paper on a topic of their choosing related to the course material. The instructor will mentor students on this assignment in a step-by-step and semester-long reflection and writing process. The goal is to help students develop their writing skills to be ready for thesis projects and post-graduate professional positions.

VI. Course Outline

A. Introductions

1. What is globalization? What is culture? How has anthropology changed within the context of a globalized world?
2. Overview of course subtopics: Development, Mobility, Media.
3. Globalization as Neoliberalism, Cosmopolitanism and Consumption, the Rise of Fundamentalisms, Nationalisms, and Identity Politics.
4. Literature Review Workshop, Consortium Library
5. *Term Paper Topic Selection Decision*

B. Development, Devolution, Discourse

1. Development Theory
4. *Assignment 1: Paper Topic Description*
5. *Assignment 2: Thesis Statement*
6. *Assignment 3: Paper Sections and Title*
7. *Assignment 4: Paper Bibliography Draft Due*

C. Mobility: Migration, Transnationalism, Diasporas

1. Migration Theory.
2. Ethnographic Reading on Migration.
3. *Assignment 5: Full Paper Outline*
4. *Assignment 6: Final Draft Paper Bibliography*
5. *Mid-Term Paper*
6. *Assignment 7: Expansion Plan for Paper Due*
7. *Assignment 8 & 9: Rough Draft of Paper Due*
D. Media, Technology, and Identity

1. Segue from Mobility Component: Identity Theory.
3. Ethnographic reading on Media and Identity: Media and Hegemony; Media and Resistance.
4. Videos “Nanook of the North” and excerpts from “The Fast Runner.”
5. *Assignment 10: Mini Paper Presentations*

E. Conclusions

1. Wrap-up: Cultural Homogenization vs. Cultural Adaptation.
2. *Final Term Paper*

VII. Instructional Goals and Defined Outcomes

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<th>Instructional Goal</th>
<th>Student Outcomes</th>
<th>Assessment Procedures</th>
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<td>Student engagement with course material through spirited and intellectual discussion of course materials; emphasis on rhetorical argument skills.</td>
<td>Rhetorical argument Socratic reasoning skills.</td>
<td>Class attendance, preparedness, participation.</td>
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<tr>
<td>Student familiarity with cultural dimensions of globalization and modernity.</td>
<td>Critical thinking and informed understandings and positions on the history and effects of large drivers of sociocultural change like globalization, what culture is, and the logic of cultural relativism.</td>
<td>Class attendance, preparedness, participation, position paper on theory reading.</td>
</tr>
<tr>
<td>Help students learn the research process.</td>
<td>Ability to construct a literature review, formulate a research question and argument, locate references, build a bibliography, and write by way of drafts.</td>
<td>Five assignments devoted to a step-by-step process for constructing a formal research paper.</td>
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<tr>
<td>Help students produce a formal piece of academic writing.</td>
<td>Academic writing skills.</td>
<td>Term paper.</td>
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<tr>
<td>Prepare students for thesis, professional report writing, and public presentations.</td>
<td>Argumentation, speaking, and writing skills.</td>
<td>Success in completion of the above assignments.</td>
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VIII. Suggested Texts

A. Theoretical Foundations:


Additional readings for the graduate students (excerpts from the following):


B. Under Review (UAA Book of the Year):


C. Ethnographies/Ethnographic Writings (Instructor will update periodically and choose three main works per semester):


**D. Videos:**


Flaherty, Robert J. 1922. Nanook of the North.

Kunuk, Zacharias. 2002. The Fast Runner. (Excerpts in class; full-length on reserve)

**IX. Bibliography and Resources**


Barber, Benjamin 1995  Introduction to *Jihad vs. McWorld*. Times Books.


Miller, Mark Crispin  2002  “What’s Wrong With This Picture”. The Nation, January 7-14:333-8536.


Complete Course Title
Culture and Globalization

Abbreviated Title for Transcript (30 character)

Type of Course
Academic

Type of Action:  Add

Repeat Status No  # of Repeats  Max Credits  3

Grading Basis  A-F  P/NP  NG

Implementation Date  semester/year
From:  Fall/2014  To:  Fall/9999

Cross Listed with  Stacked with  ANTH A665  Cross-Listed Coordination

Initiator Name (typed):  Marie Lowe  Initiator Signed Initials:  

Date: 04-02-13

General Education Requirement
Mark appropriate box:

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

Course Prerequisite(s) (list prefix and number or test code and score)
ANTH A101 or ANTH A202 or ANTH A250 completed with a minimum grade of C.

Course Description (suggested length 20 to 50 words)
Exploration of the relationship between culture and globalization through an examination of global capitalism and ethnographic experiences in the workplace, in the context of transnational migration and diasporas, and through the influence of new information technologies and media on values, beliefs, and practices.

Co-requisite(s) (concurrent enrollment required)

Other Restriction(s)

Mark if course is a selected topic course

Justification for Action
The class has been taught three times as a special topics course. A permanent upper division anthropology course is needed to expose students to contemporary ethnographic studies about the relationship between globalization and sociocultural change. It would fill an ethnography course requirement for department majors and it is also proposed as a capstone option for ANTH and IS majors.
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I.  Initiation Date:  October 2013

II.  Course Information
    A.  College:    College of Arts and Sciences
    B.  Course Title:    Culture and Globalization
    C.  Course Subject/Number:  ANTH A465
    D.  Credit Hours:    3.0 Credits
    E.  Contact Time:    3+0 Contact Time
    F.  Grading Information:   A-F
    G.  Course Description:
        Exploration of the relationship between culture and globalization through an examination of global capitalism and ethnographic experiences in the workplace, in the context of transnational migration and diasporas, and through the influence of new information technologies and media on values, beliefs, and practices.
        Special Note:  Graduate section may be taken if undergraduate section taken.  May be stacked with ANTH A665
    H.  Status of course relative to degree or certificate program:
        Positioned as a capstone option and specified in the BA degree in International Studies as a capstone option.  An International Studies program revision is currently in process as of Fall Semester 2013.
    I.  Lab Fees:    No
    J.  Coordination:    International Studies
    K.  Course Prerequisites:  ANTH A101 or ANTH A202 or ANTH A250
    L.  Registration Restrictions:  Junior Standing

III.  Course Activities
    Discussions, readings, videos, research paper formulation.

IV.  Evaluation
    This is a discussion-based course utilizing theoretical and ethnographic readings with a final term paper project.  The grading structure is as follows:

    A.  Attendance (10%), Preparedness/Participation (10%)    20%
    B.  Assignments (10@2%)    20%
    C.  Mid-Term Paper    20%
    D.  Final Term Paper    40%

    100%
A. Attendance, Preparedness/Participation (20%)

For each reading assignment, students will be given questions to use as a discussion guide. They will be expected to take notes on the discussion guide in addition to participating in the class discussion.

B. Assignments (20%)

The students will be required to formulate a research topic and paper related to the course material. The topic will be chosen early in the semester after some preliminary theoretical readings followed by ethnographic examples of the course’s main subject material. Subsequent assignments will encompass the construction of a literature review and bibliography (which will include a guest lecture by the anthropology department’s research librarian from the UAA Consortium Library), a paper outline, a paper expansion plan (see below), and short presentations on the term paper topic.

C. Mid-Term Paper (20%)

At mid-term, the students will write a 5-page version of their term papers which will include the full bibliography.

D. Final Research Term Paper (40%)

For the rest of the semester, students will work on expanding that 5-page paper into a respectable 20-page term paper. The instructor will walk the students through the research paper process step by step.

V. Course Level Justification

This course will build on and refine student understanding of historical processes, cultural diversity, and human adaptation to change introduced in lower division anthropology courses. A permanent upper division anthropology course is needed to expose students to contemporary ethnographic studies that investigate and examine the relationship between globalization processes and sociocultural change. For department majors, this course would fill an ethnography course requirement for subject material outside the domain of Alaska/Arctic anthropology. For students within the anthropology department and outside the anthropology department (such as INTL Studies), this course will provide them with a cross-cultural perspective on contemporary economic, political, and social issues in our increasingly interconnected world. All students will be required to produce a 20 page formal research paper on a topic of their choosing related to the course material. The instructor will mentor students on this assignment in a step-by-step and semester-long reflection and writing process. The goal is to help students develop their writing skills to be ready for graduate school or post-graduate professional positions.
VI. Course Outline

A. Introductions

1. What is globalization? What is culture? How has anthropology changed within the context of a globalized world?
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4. Literature Review Workshop, Consortium Library
5. *Term Paper Topic Selection Decision*

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1. Development Theory
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5. *Assignment 2: Thesis Statement*
6. *Assignment 3: Paper Sections and Title*
7. *Assignment 4: Paper Bibliography Draft Due*

C. Mobility: Migration, Transnationalism, Diasporas

1. Migration Theory.
2. Ethnographic Reading on Migration.
3. *Assignment 5: Full Paper Outline*
4. *Assignment 6: Final Draft Paper Bibliography*
5. *Mid-Term Paper*
6. *Assignment 7: Expansion Plan for Paper Due*
7. *Assignment 8 & 9: Rough Draft of Paper Due*

D. Media, Technology, and Identity

1. Segue from Mobility Component: Identity Theory.
3. Ethnographic reading on Media and Identity: Media and Hegemony; Media and Resistance.
4. Videos “Nanook of the North” and excerpts from “The Fast Runner.”
5. *Assignment 10: Mini Paper Presentations*

E. Conclusions

1. Wrap-up: Cultural Homogenization vs. Cultural Adaptation.
2. *Final Term Paper*
VII. Instructional Goals and Defined Outcomes

<table>
<thead>
<tr>
<th>Instructional Goal</th>
<th>Student Outcomes</th>
<th>Assessment Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student engagement with course material through spirited and intellectual</td>
<td>Rhetorical argument Socratic reasoning skills.</td>
<td>Class attendance, preparedness, participation.</td>
</tr>
<tr>
<td>discussion of course readings; emphasis on rhetorical argument skills.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student familiarity with cultural dimensions of globalization and modernity.</td>
<td>Critical thinking and informed understandings and positions on the history and</td>
<td>Class attendance, preparedness, participation.</td>
</tr>
<tr>
<td></td>
<td>effects of large drivers of sociocultural change like globalization, what culture is, and the logic of cultural relativism.</td>
<td></td>
</tr>
<tr>
<td>Help students learn the research process.</td>
<td>Ability to construct a literature review, formulate a research question and</td>
<td>Ten assignments devoted to a step-by-step process for constructing a formal research paper.</td>
</tr>
<tr>
<td></td>
<td>argument, locate references, build a bibliography, and write by way of drafts.</td>
<td></td>
</tr>
<tr>
<td>Help students produce a formal piece of academic writing.</td>
<td>Academic writing skills.</td>
<td>Term paper.</td>
</tr>
<tr>
<td>Prepare students for graduate school or professional positions.</td>
<td>Argumentation, speaking, and writing skills.</td>
<td>Success in completion of the above assignments.</td>
</tr>
</tbody>
</table>

VIII. Suggested Texts

A. Theoretical Foundations:


B. Ethnographies/Ethnographic Writings (Instructor will update periodically and choose three main works per semester):


C. **Videos:**

- Flaherty, Robert J. 1922. *Nanook of the North.*
- Kunuk, Zacharias. 2002. *The Fast Runner.* (Excerpts in class; full-length on reserve)

IX. **Bibliography and Resources**

- Barber, Benjamin 1995 Introduction to *Jihad vs. McWorld.* Times Books.
- Miller, Mark Crispin 2002 “What’s Wrong With This Picture”. The Nation, January 7-14:333-8536.


1a. School or College
   AS CAS
1b. Division
   ASSC Division of Social Science
1c. Department
   Anthropology

2. Course Prefix
   ANTH
3. Course Number
   A683
4. Previous Course Prefix & Number
   NA
5a. Credits/CEUs
   4
5b. Contact Hours
   (Lecture + Lab)
   (3+2)

6. Complete Course Title
   Zooarchaeology

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

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

   If a change, mark appropriate boxes:
   Prefix ✓
   Credits ✓
   Title ✓
   Grading Basis ✓
   Course Description ✓
   Test Score Prerequisites ✓
   Automatic Restrictions ✓
   Class Level College Major (please specify)
   Other

9. Repeat Status:
   Choose one:
   # of Repeats Max Credits

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

11. Implementation Date
   Semester/year
   From: Fall/2014 To: Fall/9999

12. Cross Listed with
   ☐
   Stack with A483

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

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

   Impacted Program/Course
   Date of Coordination
   Chair/Coordinator Contacted
   MA Anthropology
   10/31/2013
   Paul White

   13b. Coordination Email
   Date: 10/31/2013
   Submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

   13c. Coordination with Library Liaison
   Date: 10/31/2013

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

15. Course Description (suggested length 20 to 50 words)
   Methods and techniques for, and theoretical approaches to the description, analysis, and interpretation of animal bone assemblages from archaeological sites. Independent research in zooarchaeology involving preparation of comparative osteological materials and/or analysis of an assemblage of archaeological faunal materials.

16a. Course Prerequisite(s) (list prefix and number or test code and score)
16b. Co-requisite(s) (concurrent enrollment required)

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

16d. Registration Restriction(s) (non-codable)
   Graduate standing

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

19. Justification for Action
   Program consolidation and revision, involving streamlining of course offerings for students. The course materials will be taught on a rotating, as needed basis under Anth A680 Analytical Techniques.

   Initiator (faculty only)
   Steve J. Langdon
   Initiator Signed Initials: ___________
   Date: ___________

   Dean/Director of School/College
   Date

   Undergraduate/Graduate Academic Board Chair
   Date

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

1a. School or College
AS CAS

1b. Division
ASSC Division of Social Science

1c. Department
Anthropology

2. Course Prefix
ANTH

3. Course Number
A483

4. Previous Course Prefix & Number
NA

5a. Credits/CEUs
4

5b. Contact Hours
(3+2)

6. Complete Course Title
Archaeology of Animals

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

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

If a change, mark appropriate boxes:
☐ Prefix  ☐ Course Number  ☐ Contact Hours  ☐ Repeat Status  ☐ Grading Basis  ☐ Cross-Listed/Stacked  ☐ Course Description  ☐ Course Prerequisites  ☐ Test Score Prerequisites  ☐ Co-requisites  ☐ Automatic Restrictions  ☐ Registration Restrictions  ☐ General Education Requirement  ☐ Class  ☐ Level  ☐ College  ☐ Major  ☐ Other (please specify)

9. Repeat Status choose one
☐ # of Repeats ☐ Max Credits

10. Grading Basis
☐ A-F  ☐ P/NP  ☐ NG

11. Implementation Date
From: Fall/2014  To: Fall/9999

12. ☐ Cross Listed with
☐ Stacked with ANTH A683

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

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

13b. Coordination Email
Date: 10/31/2013
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison
Date: 10/31/2013

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

15. Course Description (suggested length 20 to 50 words)
Methods and techniques for, and theoretical approaches to, the description, analysis, and interpretation of animal bone assemblages from archaeological sites. Includes identification and quantification of animal remains, paleoenvironmental and dietary reconstruction, seasonality of site occupation, hunting and herding strategies, and the role of animals in the economy and ideology of human societies.

16a. Course Prerequisite(s) (list prefix and number or test code and score)
ANTH A211

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

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

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

17. ☒ Mark if course has fees

18. ☐ Mark if course is a selected topic course

19. Justification for Action
Program consolidation and revision, involving streamlining of course offerings for students. Content of course will be taught on a rotating basis with other archaeological artifact analyses under A480 Analytical Techniques

Initiator Name (typed): Steve J. Langdon  Initiator Signed Initials:  Date:

Initiator (faculty only)

☐ Approved  ☐ Disapproved

Dean/Director of School/College  Date

Steve J. Langdon  Initiator (TYPE NAME)

☐ Approved  ☐ Disapproved

Department Chair  Date

Undergraduate/Graduate Academic  Date

☐ Approved  ☐ Disapproved

Board Chair

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

<table>
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<th>1a. School or College</th>
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<th>1c. Department</th>
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<tr>
<td>AS CAS</td>
<td>ASSC Division of Social Science</td>
<td>Anthropology</td>
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<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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<tr>
<td>ANTH</td>
<td>A685</td>
<td>NA</td>
<td>4</td>
<td>(3+2)</td>
</tr>
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</table>

6. Complete Course Title
Advanced Human Osteology

Abbreviated Title for Transcript (30 character)

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

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

If a change, mark appropriate boxes:
☐ Prefix ☐ Course Number ☐ Contact Hours ☐ Repeat Status
☐ Credits ☐ Grade Basis ☐ Cross-Listed/Stacked ☐ General Education Requirement
☐ Title ☐ Course Description ☐ Course Prerequisites ☐ Registration Restrictions
☐ Grading Basis ☐ Test Score Prerequisites ☐ Co-requisites ☐ Other
☐ Automatic Restrictions ☐ Class ☐ Level ☐ College ☐ Major (please specify)
☐ Other

9. Repeat Status choose one
☐ # of Repeats ☐ Max Credits

10. Grading Basis
☐ A-F ☐ P/NP ☐ NG

11. Implementation Date
From: Fall /2014 To: Fall/9999

12. ☐ Cross Listed with
☒ Stacked with ANTH A485

Cross-Listed Coordination

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

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
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<tr>
<td>Anthropology MA</td>
<td>10/31/2013</td>
<td>Paul White</td>
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<tr>
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Initiator Name (typed): Steve J. Langdon
Initiator Signed Initials: ___________ Date: ___________

13b. Coordination Email
Date: 10/31/2013
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison
Date: 10/31/2013

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

15. Course Description (suggested length 20 to 50 words)
Methods, techniques, and theoretical approaches to human skeletal identification, description, and analysis. Encompasses principles of growth, development, and remodeling as well as identification of age, sex, and racial attributes, and interpretation of pathological changes in human bone. Lecture and laboratory format.

16a. Course Prerequisite(s) (list prefix and number or test code and score)
ANTH A485

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

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

16d. Registration Restriction(s) (non-codable)
Graduate standing

17. ☐ Mark if course has fees

18. ☐ Mark if course is a selected topic course

19. Justification for Action
Program consolidation and revision, involving streamlining of course offerings for students. Course materials will be taught under new format in new course.

Initiator (faculty only)
Date

Steve J. Langdon
Initiator (TYPE NAME)

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

☐ Approved ☐ Disapproved
Undergraduate/Graduate Academic Board Chair Date

☐ Approved ☐ Disapproved
Provost or Designee Date
## Course Action Request

**University of Alaska Anchorage**

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

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<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
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<tbody>
<tr>
<td>AS CAS</td>
<td>ASSC Division of Social Science</td>
<td>Anthropology</td>
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<table>
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<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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<tr>
<td>ANTH</td>
<td>A485</td>
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<td>4</td>
<td>(3+2)</td>
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### 6. Complete Course Title

**Human Osteology**

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

### 7. Type of Course

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

### 8. Type of Action:  

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

**If a change, mark appropriate boxes:**

- [ ] Prefix
- [ ] Credits
- [ ] Title
- [ ] Grading Basis
- [ ] Course Description
- [ ] Test Score Prerequisites
- [ ] Automatic Restrictions
- [ ] Class Level
- [x] College Major
- [ ] Other (please specify)

### 9. Repeat Status

<table>
<thead>
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<th># of Repeats</th>
<th>Max Credits</th>
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### 10. Grading Basis

- [x] A-F
- [ ] P/NP
- [ ] NG

### 11. Implementation Date

<table>
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<th>From:</th>
<th>To:</th>
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<tr>
<td>Fall/2014</td>
<td>Fall/9999</td>
</tr>
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</table>

### 12. Cross Listed with

- [ ] Stacked with A685

**Cross-Listed Coordination Signature**

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

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

<table>
<thead>
<tr>
<th>Impacted Program/Course</th>
<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anth BA/BS</td>
<td>10/31/2013</td>
<td>Paul White</td>
</tr>
<tr>
<td>Anth MA</td>
<td>10/31/2013</td>
<td>Paul White</td>
</tr>
<tr>
<td>Pre-Health Sciences Major</td>
<td>10/31/2013</td>
<td>Quentin Reuer</td>
</tr>
</tbody>
</table>

**Initiator Name (typed): Steve J. Langdon**  
**Initiator Signed Initials:** __________  
**Date:** __________

### 13b. Coordination Email

**Date: 10/31/2013**

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

### 13c. Coordination with Library Liaison

**Date: 10/31/2013**

### 14. General Education Requirement

**Mark appropriate box:**

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

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

Methods of human skeletal identification, description, and analysis. Includes identification of age and sex attributes. Lecture and laboratory format.

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

ANTH A205

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

### 16c. Automatic Restriction(s)

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

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

### 17. Mark if course has fees

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

### 19. Justification for Action

Program consolidation and revision, involving streamlining of course offerings for students. Content will taught in new format under new course.

**Initiator (faculty only): Steve J. Langdon**

**Initiator (TYPE NAME):** __________  
**Date:** __________

**Approved**  
**Disapproved**  
**Dean/Director of School/College**

**Approved**  
**Disapproved**  
**Undergraduate/Graduate Academic Board Chair**

**Approved**  
**Disapproved**  
**Provost or Designee**

---

163
### Course Action Request

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

<table>
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<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>
<td>ASSC Division of Social Science</td>
<td>Anthropology</td>
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<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEUs</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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<td>A686</td>
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<td>(3+0)</td>
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### 6. Complete Course Title
Advanced Applied Human Osteology

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

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

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

**If a change, mark appropriate boxes:**
- [ ] Prefix
- [ ] Credits
- [ ] Course Number
- [ ] Contact Hours
- [ ] Repeat Status
- [ ] Grading Basis
- [ ] Title
- [ ] Cross-Listed/Stacked
- [ ] Course Description
- [ ] Course Prerequisites
- [ ] Co-requisites
- [ ] Registration Restrictions
- [ ] Test Score Prerequisites
- [ ] General Education Requirement
- [ ] Automatic Restrictions
- [ ] Class Level
- [ ] College Major
- [ ] Other
- [ ] (please specify)

### 9. Repeat Status
- [x] Choose one
- [ ] # of Repeats
- [ ] Max Credits

**If applicable:**
- [ ] Grading Basis
  - [x] A-F
  - [ ] P/NP
  - [ ] NG

### 11. Implementation Date
- [ ] Semester/year
  - From: Fall/2014
  - To: Fall/9999

### 12. Cross Listed with
- [ ] ANTH A486
- [ ] Cross-Listed Coordination

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

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

#### Impacted Program/Course
- [ ] Date of Coordination
- [ ] Chair/Coordinator Contacted

<table>
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<tr>
<th>1. Anthropology MA</th>
<th>10/31/2013</th>
<th>Paul White</th>
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<td></td>
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</tbody>
</table>

Initiator Name (typed): **Steve J. Langdon**
Initiator Signed Initials: ______
Date: __________

### 13c. Coordination with Library Liaison
Date: 10/31/2013

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

### 15. Course Description (suggested length 20 to 50 words)
Methods, techniques, and theory of the applications of human osteology, including paleopathology, bioarchaeology, and forensic anthropology. Includes identification and analysis of age, sex, and population attributes from human skeletal remains, and the methods and theory of statistical interpretation of human skeletal data.

### 16a. Course Prerequisite(s)
(please specify)
- ANTH A485 or ANTH A685

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

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

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

### 17. Mark if course has fees
- [ ]

### 18. Mark if course is a selected topic course
- [ ]

### 19. Justification for Action
Program consolidation and revision, involving streamlining of course offerings for students. Course content will be taught with new format under different course.

---

**Initiator (faculty only):**

<table>
<thead>
<tr>
<th>Approved</th>
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Initiator Signed: ______
Date: __________

**Dean/Director of School/College:**

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<th>Disapproved</th>
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Date: __________

**Undergraduate/Graduate Academic Board Chair:**

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Date: __________

**Provost or Designee:**

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<th>Approved</th>
<th>Disapproved</th>
</tr>
</thead>
</table>

Date: __________

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164
Course Action Request  
University of Alaska Anchorage  
Proposal to Initiate, Add, Change, or Delete a Course

1a. School or College  
AS CAS  
1b. Division  
ASSC Division of Social Science  
1c. Department  
Anthropology  

2. Course Prefix  
ANTH  
3. Course Number  
A486  
4. Previous Course Prefix & Number  
NA  
5a. Credits/CEUs  
3  
5b. Contact Hours  
(Lecture + Lab)  
(3+0)

6. Complete Course Title  
Applied Human Osteology

Abbreviated Title for Transcript  
(30 character)  

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

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

If a change, mark appropriate boxes:  
☐ Prefix  ☐ Course Number  ☐ Contact Hours  ☐ Repeat Status  ☐ Grading Basis  
☐ Credits  ☐ Cross-Listed/Stacked  ☐ Course Prerequisites  ☐ Co-requisites  ☐ Registration Restrictions  
☐ Title  ☐ Test Score Prerequisites  ☐ General Education Requirement  ☐ Class  ☐ College  
☐ Grading Basis  ☐ Major  ☐ Level  ☐ Other  ☐ (please specify)  

9. Repeat Status choose one  
☐ # of Repeats  ☐ Max Credits

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

11. Implementation Date  
semester/year  
From: Fall /2014  
To: Fall/9999

12. ☐ Cross Listed with  
☐ Stacked with  
ANTE A686  
Cross-Listed Coordination

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

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<th>Date of Coordination</th>
<th>Chair/Coordinator Contacted</th>
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<tbody>
<tr>
<td>1. Anthropology BA/BS</td>
<td>10/31/2013</td>
<td>Paul White</td>
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<tr>
<td>2. Anthropology MA</td>
<td>10/31/2013</td>
<td>Paul White</td>
</tr>
<tr>
<td>3. Pre-Health Sciences Approved Courses Social Science</td>
<td>10/31/2013</td>
<td>Quentin Reuer</td>
</tr>
</tbody>
</table>

Initiator Name (typed): Steve J. Langdon  
Initiator Signed Initials: ___________________  
Date: __________________

13b. Coordination Email  
Date: 10/13/31  
submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)

13c. Coordination with Library Liaison  
Date: 10/31/2013

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

15. Course Description  
(suggested length 20 to 50 words)  
Methods and techniques of the applications of human osteology, including paelpathology, bioarchaeology, and forensic anthropology. Includes identification and analysis of age, sex, and population attributes from human skeletal remains.

16a. Course Prerequisite(s)  
(list prefix and number or test code and score)  
ANTH A485  

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

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

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

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

19. Justification for Action  
Program consolidation and revision, involving streamlining of course offerings for students.

Initiator (faculty only)  
Steve J. Langdon  
Initiator (TYPE NAME)  
☐ Approved  ☐ Disapproved

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

Undergraduate/Graduate Academic Board Chair  
Date  
☐ Approved  ☐ Disapproved

Provost or Designee  
Date  
☐ Approved  ☐ Disapproved
University of Alaska Anchorage
Credit Hour Review Process
Stage I: Face-to-Face Classes

Developed by the 2013-2014 UAB/GAB Credit Hour Subcommittee

Members: Soren Orley, Chair; Alberta Harder (UAB); Clayton Trotter (GAB)

Ex Officio: Lora Volden (Registrar), Gianna Niva (Publications), Michael Worth (Student Affairs), Susan Kalina (OAA)

In accordance with federal regulations effective in July 2011, both institutions and accrediting agencies are required to come into compliance with regulations regarding the definition and assignment of credit hours under Section 600.2 and 600.24.

Because of those regulations, Northwest Commission on Colleges and Universities (NWCCU) established a Credit Hour Policy (copy attached) in November 2012 by which NWCCU will review:

1. The adoption of a policy on credit hour for all courses and programs at the institution,
2. The process the institution employs to review periodically the application of its policy on credit hour across the institution to assure the credit hour assignments are accurate and reliable,
3. Any variations in the assignment of credit hours to assure that these variations conform to the commonly accepted practices in higher education.

At the request of Office of Academic Affairs (OAA) and the Faculty Senate Executive Board a subcommittee was formed to look at what UAA has in place and to find any gaps in compliance. The subcommittee has representation from Undergraduate Academic Board (UAB), Graduate Academic Board (GAB), the Registrar’s office and OAA.

The subcommittee has determined that UAA already has adopted a policy on credit hour, and UAA is in full compliance with item 1 listed above.

The curriculum process incorporates a review of credit hours for each course, thereby assuring the curriculum paperwork meets the credit hour policy. However, there is no existing process to determine how well the institution is doing in assuring that class scheduling practices meet the credit hours approved by the academic boards. It was decided to first develop a review process for regular face to face classes. Next year this would be followed by a full discussion of how to apply the credit hour review to courses such as distance-delivered courses, internships, practicums, etc. After many meetings and lengthy discussion the subcommittee proposes the following review process for face to face classes to be in compliance with NWCCU’s item 2 listed above:

**Credit-hour Review Process: Face-to-Face Classes**

1. The Registrar’s Office will use a computer program to evaluate whether scheduling for face to face classes meets UAA’s definition of the number of credits assigned to the class in the approved curriculum paperwork. This program will produce an exception list for all classes that
appear to not meet the requirements. The Registrar’s office will send this exception list to the Provost’s Office during the proof stage of developing the course schedule.

2. The Provost’s office will send this list to the colleges for review. The colleges will review, make any needed changes with Publications, and respond to the Provost’s office.

Cycle: Every semester

Timeline: Communication and troubleshooting in F14 with implementation for the F15 schedule
Policy on Credit Hour

Federal Definition of Credit Hour

In accordance with federal regulations effective July 1, 2011, both institutions and accrediting agencies are required to come into compliance with regulations regarding the definition and assignment of credit hours under Section 600.2 and 600.24.

Federal regulations mandate that all candidate and accredited institutions comply with the definition of the credit hour as set forth in Section 600.2, which defines the credit hour as:

Except as provided in 34 CFR 668.8(k) and (l)*, a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

(1) One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

(2) At least an equivalent amount of work as required in paragraph (1) of this definition. For other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Institutional Fulfillment of this Policy

As required by Section 600.24, the Commission will evaluate as part of the Resources and Capacity (Year Three) evaluation the extent to which the institution meets the federal definition by reviewing:

(1) The adoption of a policy on credit hour for all courses and programs at the institution;
(2) The processes the institution employs to review periodically the application of its policy on credit hour across the institution to assure that credit hour assignments are accurate and reliable; and
(3) Any variations in the assignment of credit hours to assure that these variations conform to commonly accepted practices in higher education.

In implementing this policy, evaluation committees will review institutional documentation including the institution’s policy on credit hour and expectations at each degree level, evidence of the implementation of institutional review processes to assure the consistency and accuracy of credit hour assignments in all courses and programs, and through sampling, a variety of course credit assignments.
based on degree level, academic discipline, delivery modes, and types of academic activities. Evaluation committee findings will be included in reports to the Commission and where deficiencies are found, they shall be so noted, and the Commission will act to assure that these deficiencies are addressed through follow-up reporting. If the Commission finds systematic non-compliance with the policy regarding one of more programs at the institution, the Commission will promptly notify the Secretary of Education in addition to any follow-up required by the Commission.

November 2012

* Title 34: Education  CFR 668.8 (k) and (l)
STUDENT ASSISTANCE GENERAL PROVISIONS
Subpart A—General

§ 668.8 Eligible program.

(k) Undergraduate educational program in credit hours. (1) Except as provided in paragraph (k)(2) of this section, if an institution offers an undergraduate educational program in credit hours, the institution must use the formula contained in paragraph (l) of this section to determine whether that program satisfies the requirements contained in paragraph (c)(3) or (d) of this section, and the number of credit hours in that educational program for purposes of the title IV, HEA programs, unless—

(i) The program is at least two academic years in length and provides an associate degree, a bachelor's degree, a professional degree, or an equivalent degree as determined by the Secretary; or

(ii) Each course within the program is acceptable for full credit toward that institution's associate degree, bachelor's degree, professional degree, or equivalent degree as determined by the Secretary provided that—

(A) The institution's degree requires at least two academic years of study; and

(B) The institution demonstrates that students enroll in, and graduate from, the degree program.

(2) A program is considered to be a clock-hour program for purposes of the title IV, HEA programs if—

(i) Except as provided in paragraph (k)(3) of this section, a program is required to measure student progress in clock hours when—

(A) Receiving Federal or State approval or licensure to offer the program; or

(B) Completing clock hours is a requirement for graduates to apply for licensure or the authorization to practice the occupation that the student is intending to pursue;

(ii) The credit hours awarded for the program are not in compliance with the definition of a credit hour in 34 CFR 600.2; or
The institution does not provide the clock hours that are the basis for the credit hours awarded for the program or each course in the program and, except as provided in § 668.4(e), requires attendance in the clock hours that are the basis for the credit hours awarded.

(3) The requirements of paragraph (k)(2)(i) of this section do not apply to a program if there is a State or Federal approval or licensure requirement that a limited component of the program must include a practicum, internship, or clinical experience component of the program that must include a minimum number of clock hours.

(l) Formula. (1) Except as provided in paragraph (l)(2) of this section, for purposes of determining whether a program described in paragraph (k) of this section satisfies the requirements contained in paragraph (c)(3) or (d) of this section, and of determining the number of credit hours in that educational program with regard to the title IV, HEA programs—

(i) A semester hour must include at least 37.5 clock hours of instruction;

(ii) A trimester hour must include at least 37.5 clock hours of instruction; and

(iii) A quarter hour must include at least 25 clock hours of instruction.

(2) The institution's conversions to establish a minimum number of clock hours of instruction per credit may be less than those specified in paragraph (l)(1) of this section, if the institution's designated accrediting agency, or recognized State agency for the approval of public postsecondary vocational institutions, for participation in the title IV, HEA programs has not identified any deficiencies with the institution's policies and procedures, or their implementation, for determining the credit hours, as defined in 34 CFR 600.2, that the institution awards for programs and courses, in accordance with 34 CFR 602.24(f), or, if applicable, 34 CFR 603.24(c), so long as—

(i) The institution's student work outside of class combined with the clock-hours of instruction meet or exceed the numeric requirements in paragraph (l)(1) of this section; and

(ii)(A) A semester hour must include at least 30 clock hours of instruction;

(B) A trimester hour must include at least 30 clock hours of instruction; and

(C) A quarter hour must include at least 20 hours of instruction.

(m) An otherwise eligible program that is offered in whole or in part through telecommunications is eligible for title IV, HEA program purposes if the program is offered by an institution, other than a foreign institution, that has been evaluated and is accredited for its effective delivery of distance education programs by an accrediting agency or association that—

(1) Is recognized by the Secretary under subpart 2 of part H of the HEA; and

(2) Has accreditation of distance education within the scope of its recognition.

(n) For Title IV, HEA program purposes, eligible program includes a direct assessment program approved by the Secretary under § 668.10 and a comprehensive transition and postsecondary program approved by the Secretary under § 668.232.

(Authority: 20 U.S.C. 1070a, 1070a-1, 1070b, 1070c-1, 1070c-2, 1070g, 1085, 1087aa-1087hh, 1088, 1091; 42 U.S.C. 2753)