

Graduate Academic Board

Agenda

September 12, 2014

ADM 204

9:30 to 11:30

I. Roll Call

() Arlene Schmuland

() Cindy Knall

() Jervette Ward

() FS CAS

() Anthony Paris

() Dennis Drinka

() FS at Large

() Peter Olsson

() Clayton Trotter

() FS at Large

() Hsing-Wen Hu

() Sam Thiru

() FS at Large

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 STATA403)(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
() Susan Garton
() Greg Protasel
(x) Dennis Drinka
(x) Jervette Ward

(x) Hsing-Wen Hu
(x) Peter Olsson
(x) Anthony Paris
(x) Patricia Sandberg
(x) Clayton Trotter

(x) Sam Thiru
(x) Cindy Knall
() GSA Vacancy
() FSAL vacancy

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



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

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: CHOOSE ONE or Graduate: Master of Science This program is a Gainful Employment Program: <input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No			
4. Type of Action: <table style="width: 100%;"><tr><td style="width: 50%;">PROGRAM <input type="checkbox"/> Add <input checked="" type="checkbox"/> Change <input type="checkbox"/> Delete</td><td style="width: 50%;">PREFIX <input type="checkbox"/> Add <input type="checkbox"/> Change <input type="checkbox"/> Inactivate</td></tr></table>		PROGRAM <input type="checkbox"/> Add <input checked="" type="checkbox"/> Change <input type="checkbox"/> Delete	PREFIX <input type="checkbox"/> Add <input type="checkbox"/> Change <input type="checkbox"/> Inactivate
PROGRAM <input type="checkbox"/> Add <input checked="" type="checkbox"/> Change <input type="checkbox"/> Delete	PREFIX <input type="checkbox"/> Add <input type="checkbox"/> Change <input type="checkbox"/> 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.uaa.alaska.edu) Date: 3-31-14			
6c. Coordination with Library Liaison Date: 3/31/2014			
7. Title and Program Description - Please attach the following: <div style="text-align: center;"><input checked="" type="checkbox"/> Cover Memo <input checked="" type="checkbox"/> Catalog Copy in Word using the track changes function</div>			
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.			
<table style="width: 100%;"><tr><td style="width: 50%;"><input type="checkbox"/> Approved Initiator (faculty only) _____ Date _____ Jill Janke Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____</td><td style="width: 50%;"><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____</td></tr></table>		<input type="checkbox"/> Approved Initiator (faculty only) _____ Date _____ Jill Janke Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____	<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____
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SCHOOL OF NURSING

Health Sciences Building (HSB), Room 101, (907) 786-4550

www.uaa.alaska.edu/schoolofnursing

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 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 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

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SCHOOL OF NURSING

Health Sciences Building (HSB), Room 101, (907) 786-4550
www.uaa.alaska.edu/schoolofnursing

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 500, 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.
- Maintain 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.

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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
- ~~The~~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
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**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~~ 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 time frame 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

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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 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
- ~~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 E~~ 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 G~~ 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.~~
- ~~2-4. 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:

- ~~1. Hold and maintain an Current~~ active unencumbered license ~~sure~~ as an advanced practice nurse in the state of Alaska. ~~*must be maintained.*~~
- ~~2. Provide D~~ 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.

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Comment [JRJ2]: why did we delete the november 1 application? They still need to apply to graduate school for us to admit them to graduate student status in the fall?

- 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, 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

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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

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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.*

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

1a. School or College CH College of Health	1b. Department NUR		
2. Complete Program Title/Prefix Nursing Graduate Certificate			
3. Type of Program Choose one from the appropriate drop down menu: Undergraduate: CHOOSE ONE or Graduate: Graduate Certificate This program is a Gainful Employment Program: <input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No			
4. Type of Action: PROGRAM PREFIX <input type="checkbox"/> Add <input type="checkbox"/> Add <input checked="" type="checkbox"/> Change <input type="checkbox"/> Change <input type="checkbox"/> Delete <input type="checkbox"/> 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.uaa.alaska.edu) Date: 3-31-14			
6c. Coordination with Library Liaison Date: 3/31/2014			
7. Title and Program Description - Please attach the following: <input checked="" type="checkbox"/> Cover Memo <input checked="" type="checkbox"/> 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.			
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Initiator (faculty only) _____ Date _____ Jill Janke Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____ </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____ </td> </tr> </table>		Initiator (faculty only) _____ Date _____ Jill Janke Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____	<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____
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SCHOOL OF NURSING

Health Sciences Building (HSB), Room 101, (907) 786-4550

www.uaa.alaska.edu/schoolofnursing

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 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 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

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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

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- Maintain professional and academic standards at all times.
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- Maintain 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.

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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.

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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;
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- ~~The~~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:

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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
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**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~~ 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 time frame 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

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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 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
- ~~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 E~~ 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 G~~ 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.~~
- ~~2-4. 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:~~

- ~~1. Hold and maintain an Current~~ active unencumbered license ~~sure~~ as an advanced practice nurse in the state of Alaska. ~~*must be maintained.*~~
- ~~2. Provide D~~ 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.

Comment [JRJ1]: why did we delete the november 1 application? They still need to apply to graduate school for us to admit them to graduate student status in the fall?

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Comment [JRJ2]: why did we delete the november 1 application? They still need to apply to graduate school for us to admit them to graduate student status in the fall?

- 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, 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

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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

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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.*

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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 A651	4. Previous Course Prefix & Number N/A	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Advanced Applied Microbiology <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input type="checkbox"/> Change or <input checked="" type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <div><input type="checkbox"/> Class <input type="checkbox"/> Level</div> <div><input type="checkbox"/> College <input type="checkbox"/> Major</div> </div> <input type="checkbox"/> Other (please specify) </div> <div style="width: 45%;"> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats Max Credits														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date <small>semester/year</small> From: Fall/2015 To: Fall/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input type="checkbox"/> Stacked with _____ <div style="text-align: right; font-size: small;">Cross-Listed Coordination Signature</div>														
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 border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 40%;">Impacted Program/Course</th> <th style="width: 20%;">Date of Coordination</th> <th style="width: 40%;">Chair/Coordinator Contacted</th> </tr> </thead> <tbody> <tr><td>1.</td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td></tr> </tbody> </table>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1.			2.			3.		
Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted															
1.																	
2.																	
3.																	
Initiator Name (typed): <u>Khrys Duddleston</u> Initiator Signed Initials: _____ Date: _____																	
13b. Coordination Email Date: <u>6Jan14</u> <small>submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)</small>			13c. Coordination with Library Liaison Date: <u>6Jan14</u>														
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <i>Mark appropriate box:</i> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone																	
15. Course Description (<i>suggested length 20 to 50 words</i>)																	
16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>)			16b. Co-requisite(s) (<i>concurrent enrollment required</i>)														
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>)														
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> Mark if course is a selected topic course														
19. Justification for Action This course has been under-enrolled.																	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Initiator (faculty only) _____ Date _____ <u>Khrys Duddleston</u> Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ College/School Curriculum Committee Chair _____ Date _____ </div> <div style="width: 45%;"> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Provost or Designee _____ Date _____ </div> </div>																	



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 A663	4. Previous Course Prefix & Number N/A	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)	
6. Complete Course Title Advanced Molecular Biology of Cancer Adv Mol Biology Cancer Abbreviated Title for Transcript (30 character)					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete If a change, mark appropriate boxes: <input type="checkbox"/> Prefix <input type="checkbox"/> Course Number <input type="checkbox"/> Credits <input type="checkbox"/> Contact Hours <input checked="" type="checkbox"/> Title <input type="checkbox"/> Repeat Status <input type="checkbox"/> Grading Basis <input type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input checked="" type="checkbox"/> Other CCG (please specify)			9. Repeat Status No # of Repeats Max Credits 10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG 11. Implementation Date semester/year From: Fall/2015 To: Fall/9999 12. <input type="checkbox"/> Cross Listed with _____ <input type="checkbox"/> Stacked with _____ Cross-Listed Coordination Signature		
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at www.uaa.alaska.edu/governance .					
Impacted Program/Course		Date of Coordination		Chair/Coordinator Contacted	
1.					
2.					
3.					
Initiator Name (typed): <u>Khrys Duddleston</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>6Jan14</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>6Jan14</u>		
14. General Education Requirement Mark appropriate box: <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> 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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input checked="" type="checkbox"/> Level			16d. Registration Restriction(s) (non-codable) Graduate Standing		
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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.					

Initiator (faculty only)		Date	<input type="checkbox"/> Approved		
<u>Khrys Duddleston</u>			<input type="checkbox"/> Disapproved	Dean/Director of School/College	Date
Initiator (TYPE NAME)					
<input type="checkbox"/> Approved			<input type="checkbox"/> Approved	Undergraduate/Graduate Academic	Date
<input type="checkbox"/> Disapproved	Department Chair	Date	<input type="checkbox"/> Disapproved	Board Chair	
<input type="checkbox"/> Approved			<input type="checkbox"/> Approved		
<input type="checkbox"/> Disapproved	College/School Curriculum Committee Chair	Date	<input type="checkbox"/> Disapproved	Provost or Designee	Date

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

I. Date of Initiation: Spring 2014

II. Curriculum Action Request

A. College: College of Arts and Sciences
 B. Course Prefix: BIOL
 C. Course Number: 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

Student Learning Outcomes: Upon completion of this course, the student will be able to:	Assessment Measures
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.	TBL exercises, written assignments, in class discussions
2. Demonstrate the mechanisms by which genetic and environmental factors promote or	Written assignments, presentations, in class discussions

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

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

Kleinsmith, L. J. Principles of Cancer Biology. Benjamin Cummings. 2005.

Weinberg R. A. The Biology of Cancer. 2nd ed. Taylor & Francis Group. 2013.

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

VII. Bibliography

Floor S.L., Dumont J.E., Maenhaut C., and Raspe E. 2012. Hallmarks of cancer: of all cancer cells, all the time? Trends Mol. Med. 18(9):509-15.

Hanahan D. and Weinberg R.A. 2011. Hallmarks of Cancer: the next generation. Cell 144(5):646-74.



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 A665	4. Previous Course Prefix & Number A661L	5a. Credits/CEUs 4	5b. Contact Hours (Lecture + Lab) (2+4)	
6. Complete Course Title Experiential Learning: Advanced Molecular Biology EL: Adv. Mol. Biology Abbreviated Title for Transcript (30 character)					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete If a change, mark appropriate boxes: <input type="checkbox"/> Prefix <input checked="" type="checkbox"/> Course Number <input checked="" type="checkbox"/> Credits <input checked="" type="checkbox"/> Contact Hours <input checked="" type="checkbox"/> Title <input type="checkbox"/> Repeat Status <input type="checkbox"/> Grading Basis <input type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> General Education Requirement <input type="checkbox"/> College <input type="checkbox"/> Major <input checked="" type="checkbox"/> Other CCG (please specify)			9. Repeat Status No # of Repeats Max Credits		
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date semester/year From: Fall/2015 To: Fall/9999		
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with BIOL A465 _____ Signature _____ 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 .					
Impacted Program/Course		Date of Coordination		Chair/Coordinator Contacted	
1.					
2.					
3.					
Initiator Name (typed): <u>Khrys Duddleston</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>6Jan14</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>6Jan14</u>		
14. General Education Requirement Mark appropriate box: <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> 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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input checked="" type="checkbox"/> Level			16d. Registration Restriction(s) (non-codable) Graduate Standing		
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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).					

<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Disapproved</div>	
<div>Initiator (faculty only) Khrys Duddleston</div>		<div>Dean/Director of School/College</div>	
<div>Initiator (TYPE NAME)</div>		<div>Date</div>	
<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Approved</div>	
<div><input type="checkbox"/> Disapproved</div>		<div>Undergraduate/Graduate Academic</div>	
<div>Department Chair</div>		<div>Board Chair</div>	
<div>Date</div>		<div>Date</div>	
<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Approved</div>	
<div><input type="checkbox"/> Disapproved</div>		<div>Provost or Designee</div>	
<div>College/School Curriculum Committee Chair</div>		<div>Date</div>	

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

I. Date of Initiation: Spring 2014

II. Curriculum Action Request

A. College: College of Arts and Sciences
 B. Course Prefix: BIOL
 C. Course Number: 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

Student Learning Outcomes: Upon completion of this course, the student will be able to:	Assessment Measures
1. Develop an experimental research plan, including the elaboration of research aims and experimental	Oral literature summary, written proposal, group discussion and peer review.

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)

Barker K. At the Bench: A Laboratory Navigator. CSHL Press, Woodbury, NY. 1998.

Gallagher SR, Wiley EA. Essential Laboratory Protocols. 2nd ed. John Wiley and sons, Hoboken, NJ. 2012.

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:

Ashburner M, Golic K, Hawley S. Drosophila: a laboratory handbook. CSHL Press, Woodbury, NY. 2004.

Simpson R, Adams P, Golemis E. Basic Methods in Protein Purification and Analysis: A Laboratory Manual. CSHL Press, Woodbury, NY. 2009.

Strange K. *C. elegans* Methods and Applications. Humana Press, Totowa, NJ. 2006.



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 A465	4. Previous Course Prefix & Number A461L	5a. Credits/CEUs 4	5b. Contact Hours (Lecture + Lab) (2+4)	
6. Complete Course Title Experiential Learning: Molecular Biology EL: Molecular Biology Abbreviated Title for Transcript (30 character)					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete If a change, mark appropriate boxes: <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Prefix <input checked="" type="checkbox"/> Credits <input checked="" type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Class <input type="checkbox"/> Level </div> <input type="checkbox"/> College <input type="checkbox"/> Major <input checked="" type="checkbox"/> Other CCG (please specify) </div> <div> <input checked="" type="checkbox"/> Course Number <input checked="" type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats Max Credits		
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date semester/year From: Fall/2015 To: Fall/9999		
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with BIOL A665 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 .					
Impacted Program/Course		Date of Coordination		Chair/Coordinator Contacted	
1.					
2.					
3.					
Initiator Name (typed): <u>Khrys Duddleston</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>6Jan14</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>6Jan14</u>		
14. General Education Requirement Mark appropriate box:			<input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> 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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (non-codable)		
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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).					

<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Approved</div>	
<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Disapproved</div>	
Initiator (faculty only)		Date		Dean/Director of School/College	
Date		Date		Date	
<u>Khrys Duddleston</u>				Undergraduate/Graduate Academic	
Initiator (TYPE NAME)				Board Chair	
<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Approved</div>	
<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Disapproved</div>	
Department Chair		Date		Provost or Designee	
Date		Date		Date	
<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Approved</div>	
<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Disapproved</div>		<div><input type="checkbox"/> Disapproved</div>	
College/School Curriculum Committee Chair		Date		Date	
Date		Date		Date	

**University of Alaska Anchorage
College of Health
Course Content Guide**

I. Date of Initiation: Spring 2014

II. Curriculum Action Request

A. College: College of Arts and Sciences
 B. Course Prefix: BIOL
 C. Course Number: 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
 O. 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

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

similar research proposals.	
2. Demonstrate competency in molecular laboratory technique including, in vitro DNA/RNA protein methods, genomics and gene expression analysis.	Laboratory exercises 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 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)

Barker K. At the Bench: A Laboratory Navigator. CSHL Press, Woodbury, NY. 1998.

Gallagher SR, Wiley EA. Essential Laboratory Protocols. 2nd ed. John Wiley and sons, Hoboken, NJ. 2012.

VII. Bibliography:

Journal articles from the primary literature (Journal of Cell Science, Journal of Cell Biology, Journal of Biological Chemistry, Science, Nature, Cell and Molecular Biology, etc) related to student research projects.

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:

Harris EH, Stern DB, Witman GB. The Chlamydomonas Sourcebook 2nd ed. Elsevier, Burlington, MA. 2008.

Strange K. *C. elegans* Methods and Applications. Humana Press, Totowa, NJ. 2006.



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 Adv. Biological Oceanog. <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input checked="" type="checkbox"/> Add or <input type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <div><input type="checkbox"/> Class <input type="checkbox"/> College <input type="checkbox"/> Other</div> <div><input type="checkbox"/> Level <input type="checkbox"/> Major (please specify)</div> </div> </div> <div style="width: 45%;"> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats Max Credits														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date <small>semester/year</small> From: Fall/2015 To: Fall /9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with BIOL A478 _____ <small>Signature</small> <small>Cross-Listed Coordination</small>														
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 border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width:40%;"><i>Impacted Program/Course</i></th> <th style="width:20%;"><i>Date of Coordination</i></th> <th style="width:40%;"><i>Chair/Coordinator Contacted</i></th> </tr> </thead> <tbody> <tr><td>1.</td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td></tr> </tbody> </table>						<i>Impacted Program/Course</i>	<i>Date of Coordination</i>	<i>Chair/Coordinator Contacted</i>	1.			2.			3.		
<i>Impacted Program/Course</i>	<i>Date of Coordination</i>	<i>Chair/Coordinator Contacted</i>															
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3.																	
Initiator Name (typed): <u>Khrys Duddleston</u> Initiator Signed Initials: _____ Date: _____																	
13b. Coordination Email Date: <u>6Jan14</u> <small>submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)</small>			13c. Coordination with Library Liaison Date: <u>6Jan14</u>														
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <i>Mark appropriate box:</i> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone																	
15. Course Description (<i>suggested length 20 to 50 words</i>) 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) (<i>list prefix and number or test code and score</i>)			16b. Co-requisite(s) (<i>concurrent enrollment required</i>)														
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input checked="" type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) Graduate Standing														
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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.																	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Initiator (faculty only) _____ Date _____ <u>Khrys Duddleston</u> Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____ </div> <div style="width: 45%;"> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____ </div> </div>																	

**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

Student Learning Outcomes: Upon completion of this course, the student will be able to:	Assessment Measures
1. Identify major planktonic organisms, their ecology, global distributions and contributions to nutrient and chemical dynamics	Written assignments and examinations
2. Identify major benthic organisms, their ecology, global distributions and contributions to sediment/ water chemical dynamics	Written assignments and examinations
3. Communicate their understanding of the ocean environment with reference to organisms to peers	Written assignments, in class presentation
4. Synthesize and analyze primary literature	In class presentation, written assignments
5. Create and present a novel hypothesis as a	Written assignment

grant proposal	
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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
 - i. 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**

Miller, C. B. and P. A. Wheeler. Biological Oceanography, 2nd edition. Wiley-Blackwell. 2012.

Mann, K.H. and J.R.N. Lazier. Dynamics of Marine Ecosystems. Wiley-Blackwell. 2006.

VII. **Bibliography**

Gage, J.D. and P.A. Tyler. Deep-Sea Biology: A natural history of the organisms at the deep-sea floor. Cambridge University Press. 1999.

Van Dover, C.L. The Ecology of Deep-sea Hydrothermal Vents. Princeton University Press. 2000.

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

1a. School or College AS CAS		1b. Division AMSC Division of Math Science		1c. Department Biological Sciences													
2. Course Prefix BIOL	3. Course Number A478	4. Previous Course Prefix & Number N/A	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Biological Oceanography Biological Oceanography <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Prefix <input checked="" type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input checked="" type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Class <input checked="" type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input checked="" type="checkbox"/> Other CCG (please specify)</div><div><input type="checkbox"/> Course Number <input checked="" type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input checked="" type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement</div></div>			9. Repeat Status No # of Repeats Max Credits														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date <small>semester/year</small> From: Fall/2015 To: Fall/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with BIOL A678 Cross-Listed Coordination <small>Signature</small>														
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 border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 40%;">Impacted Program/Course</th><th style="width: 20%;">Date of Coordination</th><th style="width: 40%;">Chair/Coordinator Contacted</th></tr></thead><tbody><tr><td>1. Civil Engineering, MS AEST</td><td>6Jan14</td><td>Osama Abaza, oabaza@uaa.alaska.edu</td></tr><tr><td>2.</td><td></td><td></td></tr><tr><td>3.</td><td></td><td></td></tr></tbody></table>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1. Civil Engineering, MS AEST	6Jan14	Osama Abaza, oabaza@uaa.alaska.edu	2.			3.		
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2.																	
3.																	
Initiator Name (typed): <u>Khrys Duddleston</u> Initiator Signed Initials: _____ Date: _____																	
13b. Coordination Email Date: <u>6Jan14</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>6Jan14</u>														
14. General Education Requirement <i>Mark appropriate box:</i> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Oral Communication <input type="checkbox"/> Fine Arts</div><div><input type="checkbox"/> Written Communication <input type="checkbox"/> Social Sciences</div><div><input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Natural Sciences</div><div><input type="checkbox"/> Humanities <input type="checkbox"/> Integrative Capstone</div></div>																	
15. Course Description (<i>suggested length 20 to 50 words</i>) 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) (<i>list prefix and number or test code and score</i>)			16b. Co-requisite(s) (<i>concurrent enrollment required</i>)														
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input checked="" type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) Junior standing														
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> Mark if course is a selected topic course														
19. Justification for Action 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.																	
<div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div><div>Initiator (faculty only) <u>Khrys Duddleston</u> Initiator (TYPE NAME)</div><div>Department Chair</div><div>College/School Curriculum Committee Chair</div></div><div><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div>Dean/Director of School/College</div><div>Undergraduate/Graduate Academic Board Chair</div><div>Provost or Designee</div></div><div><div>Date</div><div>Date</div><div>Date</div><div>Date</div></div></div>																	

**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:

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

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
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- D. Benthic environments
 - 1. Organismal diversity
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 - 3. Special environments: Hydrothermal vents, hydrocarbon seeps, methane ice, cold
i. water corals, seamounts
- E. Biogeography
 - 1. Pelagic biogeography
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 - 4. Benthic biogeography
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VI. Suggested Texts

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Marine Ecology Progress Series, Inter-Research



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 601	4. Previous Course Prefix & Number n/a	5a. Credits/CEUs 3.0	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Advanced Statistical Methods <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input checked="" type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input checked="" type="checkbox"/> Other Course Content Guide (please specify)</div><div><input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input checked="" type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input checked="" type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement</div></div>			9. Repeat Status No # of Repeats n/a Max Credits n/a														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date semester/year From: Fall/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A401 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): <u>Kanapathi Thiru</u> Initiator Signed Initials: _____ Date: _____																	
13b. Coordination Email Date: <u>03/11/2014</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>03/18/2014</u>														
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <i>Mark appropriate box:</i> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone																	
15. Course Description (<i>suggested length 20 to 50 words</i>) 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) (<i>list prefix and number or test code and score</i>) n/a		16b. Co-requisite(s) (<i>concurrent enrollment required</i>) n/a															
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level		16d. Registration Restriction(s) (<i>non-codable</i>) Graduate standing															
17. <input checked="" type="checkbox"/> Mark if course has fees		18. <input type="checkbox"/> Mark if course is a selected topic course															
19. Justification for Action Update, change title, and stack with undergraduate course.																	
<div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div><div>Initiator (faculty only) <u>Kanapathi Thiru</u> Initiator (TYPE NAME)</div><div>Department Chair _____ Date _____</div><div>College/School Curriculum Committee Chair _____ Date _____</div></div><div><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div>Dean/Director of School/College _____ Date _____</div><div>Undergraduate/Graduate Academic Board Chair _____ Date _____</div><div>Provost or Designee _____ Date _____</div></div></div>																	

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**

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

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Justify a selection of nonparametric test over the parametric alternative.	Exams and Mini Projects

2.	Perform hypothesis tests for designed experiments or reliable observational studies and understand the results.	Exams and Mini Projects
3.	Demonstrate proficiency in the tools of regression analysis and use variable selection techniques in regression.	Exams and Mini projects
4.	Write reports summarizing statistical analysis.	Mini Projects
5.	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. 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

Dowdy S., Wearden S. & Chilko D. 2004. *Statistics for Research*, 3rd edition. Wiley

Kleinbaum D.G., Kupper L.L., Nizam A. & Rosenberg E.S. 2013. *Applied Regression Analysis and other Multivariate Methods*, 5th edition. Cengage.

VII Bibliography

* Ostle B. & Malone L. 1988. *Statistics in Research*. Iowa State University Press.

Ott R.L. & Longnecker M.T. 2008. *Introduction to Statistical Methods and Data Analysis*, 6th edition. Cengage.

Rao R.V. 1998. *Statistical Research Methods in Life Sciences*. Duxbury.

* 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 A401	4. Previous Course Prefix & Number n/a	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Statistical Methods <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
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			11. Implementation Date <small>semester/year</small> From: Spring/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A601 Cross-Listed Coordination <small>Signature</small>														
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13b. Coordination Email Date: <u>03/11/2014</u> <small>submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)</small>			13c. Coordination with Library Liaison Date: <u>03/28/2014</u>														
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <i>Mark appropriate box:</i> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone																	
15. Course Description (<i>suggested length 20 to 50 words</i>) 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.																	
16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>) (STAT A253 or STAT A308) with minimum grade of C		16b. Co-requisite(s) (<i>concurrent enrollment required</i>) n/a															
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level		16d. Registration Restriction(s) (<i>non-codable</i>) n/a															
17. <input checked="" type="checkbox"/> Mark if course has fees		18. <input type="checkbox"/> 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.																	
<div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div><div>Initiator (faculty only) <u>Kanapathi Thiru</u> Initiator (TYPE NAME)</div><div>Department Chair _____ Date _____</div><div>College/School Curriculum Committee Chair _____ Date _____</div></div><div><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div>Dean/Director of School/College _____ Date _____</div><div>Undergraduate/Ggraduate Academic Board Chair _____ Date _____</div><div>Provost or Designee _____ Date _____</div></div></div>																	

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**

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

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

	regression.	
4.	Write reports summarizing statistical analysis.	Mini Projects

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

Dowdy S., Wearden S. & Chilko D. 2004. *Statistics for Research*, 3rd edition. Wiley.

Kleinbaum D.G., Kupper L. L., Nizam A. & Rosenberg E.S. 2013. *Applied Regression Analysis and other Multivariate Methods*, 5th edition. Cengage.

VII Bibliography

* Ostle B. & Malone L. 1988. *Statistics in Research*. Iowa State University Press.

Ott R. L. & Longnecker M. T. 2008. *Introduction to Statistical Methods and Data Analysis*, 6th edition. Cengage.

Rao R.V. 1998. *Statistical Research Methods in Life Sciences*. Duxbury.

* 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 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 <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input checked="" type="checkbox"/> Add or <input type="checkbox"/> Change or <input type="checkbox"/> Delete <small>If a change, mark appropriate boxes:</small> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other (please specify)</div><div><input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement</div></div>			9. Repeat Status No # of Repeats n/a Max Credits n/a														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date semester/year From: Fall/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A402 Cross-Listed Coordination Signature _____														
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. <small>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.</small>																	
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 40%;">Impacted Program/Course</th><th style="width: 20%;">Date of Coordination</th><th style="width: 40%;">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></td><td></td></tr></tbody></table>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1. MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601	03/19/2014	John Olofsson	2. MS in Civil Engineering	03/19/2014	Osama Abaza	3.		
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Initiator Name (typed): <u>Kanapathi Thiru</u> Initiator Signed Initials: _____ Date: _____																	
13b. Coordination Email Date: <u>03/11/2014</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>03/18/2014</u>														
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <small>Mark appropriate box:</small> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> 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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level		16d. Registration Restriction(s) (non-codable) Graduate standing															
17. <input checked="" type="checkbox"/> Mark if course has fees		18. <input type="checkbox"/> Mark if course is a selected topic course															
19. Justification for Action Support MS in AEST, MS in CE, and interdisciplinary graduate degrees.																	
<div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div><div>Initiator (faculty only) <u>Rieken Venema</u> Initiator (TYPE NAME)</div><div>Department Chair _____ Date _____</div><div>College/School Curriculum Committee Chair _____ Date _____</div></div><div><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div>Dean/Director of School/College _____ Date _____</div><div>Undergraduate/Graduate Academic Board Chair _____ Date _____</div><div>Provost or Designee _____ Date _____</div></div></div>																	

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

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

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Describe how to design and implement the steps that are required to conduct a sample survey.	Exams

2.	Distinguish between and describe advantages and disadvantages of various sampling methods.	Exams
3.	Compute parameter estimates and standard errors for various sampling schemes.	Exams and Mini Projects
4.	Use appropriate software for complex sampling designs.	Mini Projects
5.	Conduct literature review, establish the goals of a survey, determine the sample, choose interview methodology, create questionnaire, administer the survey, analyze the data, write a report, and make a presentation in a public forum.	Major Project, Research Summary Paper, Presentation

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
7. Estimation of Wildlife Population 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

Scheaffer R.L., Mendenhall W., Ott R.L. & Gerow K.G. 2012. *Elementary Survey Sampling*, 7th edition. Cengage.

Thompson S.K. 2002. *Sampling*, 2nd edition. John Wiley.

VII Bibliography

- * Cochran W. 1990. *Sampling Techniques*, 3rd edition. John Wiley.
- * Efron B. 1986. *The Jackknife, the Bootstrap and Other Resampling Plans*. Siam.
- Ross S. 2002. *Simulation*, 3rd edition. Elsevier.
- Tryfos P. 1996. *Sampling Methods for Applied Research*. John Wiley.
- * 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 <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major </div> <input checked="" type="checkbox"/> Other Course Content Guide (please specify) </div> <div style="width: 45%;"> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input checked="" type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats n/a Max Credits n/a														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date <small>semester/year</small> From: Spring/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A602 Cross-Listed Coordination <small>Signature</small>														
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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16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>) (STAT A252 or STAT A253 or STAT A307) with minimum grade of C			16b. Co-requisite(s) (<i>concurrent enrollment required</i>) n/a														
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) n/a														
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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.																	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <div style="margin-bottom: 10px;"> Initiator (faculty only) _____ Date _____ Rieken Venema Initiator (TYPE NAME) </div> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ </div> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____ </div> </div> <div style="width: 45%;"> <div style="margin-bottom: 10px;"> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ </div> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Undergraduate/Graduate Academic Board Chair _____ Date _____ </div> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____ </div> </div> </div>																	

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 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**

A.	Instructional Goals. The instructor will:
1.	Explain survey methodology, execution and analysis.
2.	Describe a wide variety of sampling methods, estimation procedures, and sample size calculations.
3.	Explain Monte Carlo simulation of random variables, estimation of standard error and bias using bootstrapping, and other re-sampling methods.

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Describe how to design and implement the steps that are required to conduct a sample survey.	Exams
2.	Distinguish between and describe advantages and disadvantages of various sampling methods.	Exams
3.	Compute parameter estimates and standard errors for various sampling schemes.	Exams and Mini Projects

4.	Use appropriate software for complex sampling designs.	Mini Projects
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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
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 - c. Allocations
 - d. Selection of sample size
 - e. Stratification after selection of the sample
3. Ratio, Regression, and Difference Estimation
4. Systematic Sampling
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5. Quota Sampling
6. Cluster Sampling
 - a. Introduction
 - b. Estimation of population parameters
 - c. Selection of sample size
7. Estimation of Wildlife Population Size
 - a. Direct sampling
 - b. Inverse sampling
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9. Monte Carlo Simulation of Random Variables
10. Bootstrap, Jackknife, and Cross validation

VI. **Suggested Texts**

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Tryfos P. 1996. *Sampling Methods for Applied Research*. John Wiley.

* 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 A603	4. Previous Course Prefix & Number n/a	5a. Credits/CEUs 3.0	5b. Contact Hours (Lecture + Lab) (3+0)	
6. Complete Course Title Advanced Regression Analysis <small>Abbreviated Title for Transcript (30 character)</small>					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input checked="" type="checkbox"/> Add or <input type="checkbox"/> Change or <input type="checkbox"/> Delete <small>If a change, mark appropriate boxes:</small>			9. Repeat Status No # of Repeats n/a Max Credits n/a		
<input type="checkbox"/> Prefix <input type="checkbox"/> Course Number <input type="checkbox"/> Credits <input type="checkbox"/> Contact Hours <input type="checkbox"/> Title <input type="checkbox"/> Repeat Status <input type="checkbox"/> Grading Basis <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Description <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other (please specify)			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG 11. Implementation Date semester/year From: Fall/2015 To: 99/9999 12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A403 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 .					
<i>Impacted Program/Course</i>		<i>Date of Coordination</i>		<i>Chair/Coordinator Contacted</i>	
1. MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601		03/19/2014		John Olofsson	
2.					
3.					
Initiator Name (typed): <u>Kanapathi Thiru</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>03/11/2014</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>03/18/2014</u>		
14. General Education Requirement <i>Mark appropriate box:</i>			<input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone		
15. Course Description (<i>suggested length 20 to 50 words</i>) 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.					
16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>) n/a			16b. Co-requisite(s) (<i>concurrent enrollment required</i>) n/a		
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) Graduate Standing		
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> Mark if course is a selected topic course		
19. Justification for Action Support MS in AEST, and interdisciplinary graduate degrees					
Initiator (faculty only) <u>Rieken Venema</u> Initiator (TYPE NAME)			<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College Date		
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair Date			<input type="checkbox"/> Approved Undergraduate/Graduate Academic Date <input type="checkbox"/> Disapproved Board Chair		
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair Date			<input type="checkbox"/> Approved <input type="checkbox"/> 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 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**

A.	Instructional Goals. The instructor will:	
1.	Introduce simple linear regression, polynomial regression, multiple regression, and nonlinear regression models.	
2.	Discuss methods for checking model adequacy and provide remedial measures to improve model adequacy.	
3.	Present variable selection and model building.	
4.	Guide with literature review and writing research papers.	

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Investigate and model the relationship between variables.	Exams
2.	Fit and check appropriate regression models.	Exams and Mini Projects

3.	Investigate the adequacy of conjectured models with many different techniques.	Exams and Mini Projects
4.	Select a suitable remedial measure to improve model adequacy.	Exams and Mini Projects
5.	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 Papers, Presentation

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**

Neter J., Kutner M.H., Nachtsheim C.J. & Neter J. 2004. *Applied Linear Regression Models*, 4th edition. Irwin.

Montgomery C.M., Peck E.A. & Vining G G. 2013. *Introduction to Linear Regression Analysis*, 5th edition. Wiley.

VII **Bibliography**

Chatterjee S. & Hadi S.A. 2012. *Regression Analysis by Example*, 5th edition. Wiley.

Draper N.R. & Smith H. 1998. *Applied Regression Analysis*, 3rd edition. Wiley.



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 A403	4. Previous Course Prefix & Number n/a	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Regression Analysis <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input checked="" type="checkbox"/> Other Course Content Guide (please specify)</div><div><input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input checked="" type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement</div></div>			9. Repeat Status No # of Repeats n/a Max Credits n/a														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date <small>semester/year</small> From: Spring/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A603 Cross-Listed Coordination <small>Signature</small>														
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. <small>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.</small>																	
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 40%;">Impacted Program/Course</th><th style="width: 20%;">Date of Coordination</th><th style="width: 40%;">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.</td><td></td><td></td></tr><tr><td>3.</td><td></td><td></td></tr></tbody></table>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1. MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601	03/19/2014	John Olofsson	2.			3.		
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Initiator Name (typed): <u>Kanapathi Thiru</u> Initiator Signed Initials: _____ Date: _____																	
13b. Coordination Email Date: <u>3/11/2014</u> <small>submitted to Faculty Listserv: uaa-faculty@lists.uaa.alaska.edu</small>			13c. Coordination with Library Liaison Date: <u>03/18/2014</u>														
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <i>Mark appropriate box:</i> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone																	
15. Course Description (<i>suggested length 20 to 50 words</i>) 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.																	
16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>) STAT A308 with minimum grade of C			16b. Co-requisite(s) (<i>concurrent enrollment required</i>) n/a														
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) n/a														
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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																	
<div style="display: flex; justify-content: space-between;"><div><div>Initiator (faculty only) <u>Rieken Venema</u> Initiator (TYPE NAME) <input type="checkbox"/> Approved _____ Date _____ <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved _____ Date _____ <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____</div><div><input type="checkbox"/> Approved _____ Date _____ <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____</div></div></div>																	

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**

A.	Instructional Goals. The instructor will:
1.	Introduce simple linear regression, polynomial regression, multiple regression, and nonlinear regression models.
2.	Discuss methods for checking model adequacy and provide remedial measures to improve model adequacy.
3.	Present variable selection and model building.

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Investigate and model the relationship between variables.	Exams and Mini Projects
2.	Fit and check appropriate regression models.	Exams and Mini Projects
3.	Investigate the adequacy of conjectured models with many different techniques.	Exams and Mini Projects
4.	Select a suitable remedial measure to improve model adequacy.	Exams and Mini Projects

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**

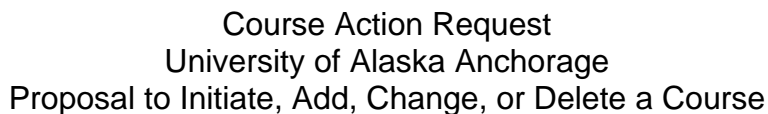
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Course Content Guide
University of Alaska Anchorage
College of Arts and Sciences
Mathematics & Statistics Department

I. **Initiation Date:** Spring 2014

II. **Course Information**

- A. **College:** College of Arts and Sciences
- B. **Course Subject/Number:** STAT 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**

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

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Recognize a practical problem in order to design an experiment.	Exams and Mini Projects
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	Exams and Mini Projects

	measured.	
3.	Understand the rationale behind the use of blocking and other noise-reducing designs.	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. 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

Kutner M.H., Nachtsheim C.J., Neter J. & Li W. 2005. *Applied Linear Statistical Models*, 5th edition. McGraw-Hill/Irwin.

Montgomery D.C. 2013. *Design and Analysis of Experiments*, 8th edition. Wiley.

IX. Bibliography

* Cochran G.C. & Cox G.M. 1991. *Experimental Design*, 5th edition. Wiley.

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* 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 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 <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <small>If a change, mark appropriate boxes:</small> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input checked="" type="checkbox"/> Other Course Content Guide (please specify)</div><div><input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input checked="" type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement</div></div>			9. Repeat Status No # of Repeats n/a Max Credits n/a														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date <small>semester/year</small> From: Spring/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A604 Cross-Listed Coordination <small>Signature</small>														
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. <small>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.</small>																	
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14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <small>Mark appropriate box:</small> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone																	
15. Course Description (<i>suggested length 20 to 50 words</i>) 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.																	
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17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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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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**

A.	Instructional Goals. The instructor will:
1.	Introduce guidelines for designing experiments.
2.	Discuss experiments with single-factor, multi-factor, blocks, and nested or hierarchical designs with fixed, random or mixed effects.
3.	Discuss model adequacy checking and choice of sample size.

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Recognize a practical problem in order to design an experiment.	Exams and Mini projects
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.	Exams and Mini Projects
3.	Understand the rationale behind the use of blocking and other noise-reducing designs.	Exams and Mini Projects

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
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 - 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)

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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 A607	4. Previous Course Prefix & Number n/a	5a. Credits/CEUs 3.0	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Advanced Time Series Analysis <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input checked="" type="checkbox"/> Add or <input type="checkbox"/> Change or <input type="checkbox"/> Delete <small>If a change, mark appropriate boxes:</small> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other (please specify)</div><div><input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement</div></div>			9. Repeat Status No # of Repeats n/a Max Credits n/a														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date semester/year From: Fall/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A407 Cross-Listed Coordination Signature _____														
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. <small>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.</small>																	
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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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level		16d. Registration Restriction(s) (non-codable) Graduate standing															
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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 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:	Assessment Method
1.	Recognize time series data, be able to use descriptive	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**

Chatfield C. 2004. *The Analysis of Time Series*, 6th edition, Chapman & Hall.

Diebold F. 2006. *Elements of Forecasting*, 4th edition. Cengage.

VII **Bibliography**

Box G.E.P., Jenkins G.M. & Reinsel G.C. 2008. *Time Series Analysis: Forecasting and Control*, 4th edition. Wiley.

Cryer J.D. & Chan K. 2008. *Time Series Analysis With Applications in R*, 2nd edition. Springer.

Shumway Robert. 2004. *Applied Statistical Time Series Analysis*. Springer.



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 A407	4. Previous Course Prefix & Number n/a	5a. Credits/CEUs 3.0	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Time Series Analysis <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major </div> <input checked="" type="checkbox"/> Other Course Content Guide (please specify) </div> <div> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input checked="" type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats n/a Max Credits n/a														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date semester/year From: Spring/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A607 Cross-Listed Coordination <small>Signature</small>														
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 border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 40%;">Impacted Program/Course</th> <th style="width: 20%;">Date of Coordination</th> <th style="width: 40%;">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.</td> <td></td> <td></td> </tr> <tr> <td>3.</td> <td></td> <td></td> </tr> </tbody> </table>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1. MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601	03/19/2014	John Olofsson	2.			3.		
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15. Course Description (<i>suggested length 20 to 50 words</i>) 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.																	
16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>) (STAT A307 or STAT A308) with minimum grade of C			16b. Co-requisite(s) (<i>concurrent enrollment required</i>) n/a														
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) n/a														
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> Mark if course is a selected topic course														
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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 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**

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.	

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Recognize time series data, be able to use descriptive methods, and decompose a series into different components.	Exams
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
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V. Topical Course Outline

1. Simple Descriptive Techniques
 - a. Decomposition of time series
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VI. **Suggested Texts**

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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 A608	4. Previous Course Prefix & Number n/a	5a. Credits/CEUs 3.0	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Advanced Multivariate Statistics Advanced Multivariate Stat Abbreviated Title for Transcript (30 character)																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input checked="" type="checkbox"/> Add or <input type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <div><input type="checkbox"/> Class <input type="checkbox"/> College <input type="checkbox"/> Other</div> <div><input type="checkbox"/> Level <input type="checkbox"/> Major (please specify)</div> </div> </div> <div style="width: 45%;"> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status choose one # of Repeats Max Credits														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date semester/year From: Fall/2015 To: 99/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with STAT A408 Cross-Listed Coordination Signature _____														
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at www.uaa.alaska.edu/governance . <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width:40%;">Impacted Program/Course</th> <th style="width:20%;">Date of Coordination</th> <th style="width:40%;">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. _____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3. _____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1. MS in AEST/STAT A402, A403, A404, A405, A407, A408, A601	03/19/2014	John Olofsson	2. _____	_____	_____	3. _____	_____	_____
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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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level		16d. Registration Restriction(s) (non-codable) Graduate standing															
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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 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

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 A408, and complete a major research project.

IV. **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:	Assessment Method
1.	Demonstrate understanding of the difference	Exams

	between univariate and multivariate statistics.	
2.	Perform multivariate estimation and hypothesis tests.	Exams
3.	Demonstrate understanding of variable reduction techniques and be able to solve classification problems.	Exams and Mini Projects
4.	Estimate and investigate canonical correlation between two sets of variables.	Mini Projects
5.	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. 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**

Raykov T. & Marcoulides G.A. 2008. *An Introduction to Applied Multivariate Analysis*. Routledge.

Spencer N.H. 2013. *Essentials of Multivariate Analysis*. Chapman and Hall/CRC.

VII **Bibliography**

Johnson R. A. & Wichern D. W. 2007. *Applied Multivariate Statistical Analysis*, 6th edition. Pearson.

Manly B. 2004. *Multivariate Statistical Methods: A Primer*, 3rd edition. Chapman & Hall.

Morrison D. F. 2005. *Multivariate Statistical Methods*, 4th edition. Cengage.

Rencher A.V. and Christensen W. F. 2012. *Methods of Multivariate Analysis*, 3rd edition. Wiley.



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 A408	4. Previous Course Prefix & Number n/a	5a. Credits/CEUs 3.0	5b. Contact Hours (Lecture + Lab) (3+0)													
6. Complete Course Title Multivariate Statistics <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
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16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>) STAT A308 with minimum grade of C			16b. Co-requisite(s) (<i>concurrent enrollment required</i>) n/a														
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) n/a														
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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.																	
<div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div><div style="display: flex; justify-content: space-between;"><div>Initiator (faculty only) <u>Kanapathi Thiru</u> Initiator (TYPE NAME)</div><div>Date _____</div></div><div style="display: flex; justify-content: space-between;"><div>Department Chair</div><div>Date _____</div></div><div style="display: flex; justify-content: space-between;"><div>College/School Curriculum Committee Chair</div><div>Date _____</div></div></div><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</div><div><div style="display: flex; justify-content: space-between;"><div>Dean/Director of School/College</div><div>Date _____</div></div><div style="display: flex; justify-content: space-between;"><div>Undergraduate/Graduate Academic Board Chair</div><div>Date _____</div></div><div style="display: flex; justify-content: space-between;"><div>Provost or Designee</div><div>Date _____</div></div></div></div>																	

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**

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.

B.	Student Learning Outcomes: Students will be able to:	Assessment Method
1.	Demonstrate understanding of difference between univariate and multivariate statistics.	Exams
2.	Perform multivariate estimation and hypothesis tests.	Exams
3.	Demonstrate understanding of variable reduction techniques and be able to solve classification problems.	Exams and Mini Projects

4.	Estimate and investigate canonical correlation between two sets of variables.	Mini Projects
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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

Raykov T. & Marcoulides G.A. 2008. *An Introduction to Applied Multivariate*

Analysis. Routledge.

Spencer N.H. 2013. *Essentials of Multivariate Analysis*. Chapman and Hall/CRC.

VII **Bibliography**

Johnson R. A. & Wichern D.W. 2007. *Applied Multivariate Statistical Analysis*, 6th edition. Pearson.

Manly B. 2004. *Multivariate Statistical Methods: A Primer*, 3rd edition. Chapman & Hall.

Morrison D. F. 2005. *Multivariate Statistical Methods*, 4th edition. Cengage.

Rencher A.V. and Christensen W. F. 2012. *Methods of Multivariate Analysis*, 3rd edition. Wiley.



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

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: CHOOSE ONE or Graduate: Master of Arts This program is a Gainful Employment Program: <input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No			
4. Type of Action: PROGRAM PREFIX <input type="checkbox"/> Add <input type="checkbox"/> Add <input checked="" type="checkbox"/> Change <input type="checkbox"/> Change <input type="checkbox"/> Delete <input type="checkbox"/> 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: _____ Date: _____			
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: <input checked="" type="checkbox"/> Cover Memo <input checked="" type="checkbox"/> 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.			
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Initiator (faculty only) _____ Date _____ Steve J. Langdon Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ College/School Curriculum Committee Chair _____ Date _____ </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Provost or Designee _____ Date _____ </td> </tr> </table>		Initiator (faculty only) _____ Date _____ Steve J. Langdon Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ College/School Curriculum Committee Chair _____ Date _____	<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Provost or Designee _____ Date _____
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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 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 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.

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 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:

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: 9

ANTH A645	Advanced Evolution of Humans and Disease (3)	
ANTH A655	Advanced Medical Anthropology (3)	
ANTH A657	Nutritional Anthropology (3)	
ANTH A695	Anthropology Practicum (3)	

Cultural Resource Management Track

- a. Complete the following:

ANTH A675	Cultural Resource Management	3
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- b. Complete 6 credits from the following: 6

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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COLLEGE OF ARTS AND SCIENCES

ANTHROPOLOGY

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600 level elective courses		11-17
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2. A total of 30 credits are required for the degree.

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1. Complete the following:

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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
2. Complete one of the following tracks:

Applied Cultural Anthropology Track

Complete the following courses (9 credits):

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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: 9

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
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- b. Complete 6 credits from the following: 6

ANTH A631	Field Methods in Archaeology (1-8)*	
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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

[Alan Boraas, Professor \(KPC campus\), IFASB@uaa.alaska.edu](#)

[Sarah Carraher, Assistant professor, scarrahe@uaa.alaska.edu](#)

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~~[David Yesner, Professor, AFDY@uaa.alaska.edu](#)~~

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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 A615	4. Previous Course Prefix & Number N/A	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)	
6. Complete Course Title Advanced Applied Anthropology <small>Abbreviated Title for Transcript (30 character)</small>					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input checked="" type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major </div> <input type="checkbox"/> Other (please specify) </div> <div> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats Max Credits		
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date semester/year From: Fall/2014 To: Fall/9999		
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with A415 _____ 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 .					
Impacted Program/Course		Date of Coordination		Chair/Coordinator Contacted	
1. Anthropology MA		10/31/2013		Paul White	
2.					
3.					
Initiator Name (typed): <u>Sally Carraher</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>10/31/2013</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>10/31/2013</u>		
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <i>Mark appropriate box:</i> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone					
15. Course Description (<i>suggested length 20 to 50 words</i>) 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.					
16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>) Anth 202 completed with minimum grade of C			16b. Co-requisite(s) (<i>concurrent enrollment required</i>)		
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) Graduate standing		
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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 (ANTH202).					
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Initiator (faculty only) Date <u>Sally Carraher</u> Initiator (TYPE NAME) </div> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Dean/Director of School/College Date </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Department Chair Date </div> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Undergraduate/Graduate Academic Board Chair Date </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ College/School Curriculum Committee Chair Date </div> <div> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Provost or Designee Date </div> </div>					

UNIVERSITY OF ALASKA ANCHORAGE

COURSE CONTENT GUIDE

- 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, providing illustrations of both appropriate and unethical activity in the field.
4. Serve as a project facilitator and a mediator between students and 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:

Beck & Maida. 2013. *Toward Engaged Anthropology*.

Ervin. 2004. *Applied Anthropology: Tools and Perspectives for Contemporary Practice*, 2nd edition.

Podolefsky, Brown, & Lacy, eds. 2013. *Applying Cultural Anthropology: An Introductory Reader*, 9th edition.

Benard. 2006. *Research Methods in Anthropology*, 4th edition.

VIII. Bibliography:

American Anthropological Association Ethical Guidelines.

1998. <http://www.aaanet.org/committees/ethics/ethcode.html>.

Baer, Singer & Susser. 2003. *Medical Anthropology and the World System*.

Denzin, Lincoln, & Smith. 2008. *Handbook of Critical and Indigenous Methodologies*.

Douglas, Mary. 1992. The Normative Debate and the Origins of Culture. In *Risk and Blame: Essays in Cultural Theory*. Pp. 125-148.

Feldman, Langdon & Natcher. 2005. Northern Engagement: Alaskan Society and Applied Cultural Anthropology, 1973-2003. *Alaska Journal of Anthropology* 3(1):121-155.

- Hale, Charles R. 2006. Activist Research vs. Cultural Critique: Indigenous Land Rights and the Contradictions of Politically Engaged Anthropology. *Cultural Anthropology* 21(1):96-120.
- Henry & Manoochehri. 2010. On Becoming an Applied Anthropologist: Collaboration and Clients in the Classroom. *Practicing Anthropology* 32(2):26-30.
- Hill & Baba, eds. 2000. The Unity of Theory and Practice in Anthropology: Rebuilding a Fractured Synthesis. *NAPA Bulletin* No. 18.
- Rylko-Bauer, Singer & Willingen. 2006. Reclaiming Applied Anthropology: Its Past, Present, and Future. *American Anthropologist* 108(1):178-190.
- Sillitoe, Paul. 1998. The Development of Indigenous Knowledge: A New Applied Anthropology. *Current Anthropology* 39(2):223-252.
- US Department of Health, Education, and Wealth. 2010. The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research. <http://ohsr.od.nih.gov/guidelines/belmont.html>.
- Wheeler & Thorton. 2005. Subsistence Research in Alaska: A Thirty Year Retrospective. *Alaska Journal of Anthropology* 3(91)69-103.



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 A415	4. Previous Course Prefix & Number N/A	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)	
6. Complete Course Title Applied Anthropology <small>Abbreviated Title for Transcript (30 character)</small>					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <small>If a change, mark appropriate boxes:</small>			9. Repeat Status No # of Repeats Max Credits		
<input type="checkbox"/> Prefix <input type="checkbox"/> Course Number <input type="checkbox"/> Credits <input type="checkbox"/> Contact Hours <input type="checkbox"/> Title <input type="checkbox"/> Repeat Status <input type="checkbox"/> Grading Basis <input type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Description <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> General Education Requirement <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other (please specify)			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG 11. Implementation Date semester/year From: Fall/2014 To: Fall/9999 12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with A615 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 .					
<i>Impacted Program/Course</i>		<i>Date of Coordination</i>		<i>Chair/Coordinator Contacted</i>	
1. BA/BS Anthropology		10/31/2013		Paul White	
2.					
3.					
Initiator Name (typed): <u>Sally Carraher</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>10/31/2013</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>10/31/2013</u>		
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities Mark appropriate box: <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> 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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (non-codable)		
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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).					
Initiator (faculty only) _____ Date _____ <u>Sally Carraher</u> Initiator (TYPE NAME)			<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____		
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____			<input type="checkbox"/> Approved Undergraduate/Graduate Academic _____ Date _____ <input type="checkbox"/> Disapproved Board Chair		
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____			<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____		

UNIVERSITY OF ALASKA ANCHORAGE

COURSE CONTENT GUIDE

- 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, providing illustrations of both appropriate and unethical activity in the field.
4. Serve as a project facilitator and a mediator between students and 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:
 - Beck & Maida. 2013. Toward Engaged Anthropology.
 - Ervin. 2004. Applied Anthropology: Tools and Perspectives for Contemporary Practice, 2nd edition.
 - Podolefsky, Brown, & Lacy, eds. 2013. Applying Cultural Anthropology: An Introductory Reader, 9th edition.
- VII. Bibliography:
 - American Anthropological Association Ethical Guidelines.
1998. <http://www.aaanet.org/committees/ethics/ethcode.html>.
 - Baer, Singer & Susser. 2003. Medical Anthropology and the World System.
 - Benard. 2006. Research Methods in Anthropology, 4th edition.
 - Denzin, Lincoln, & Smith. 2008. Handbook of Critical and Indigenous Methodologies.
 - Feldman, Langdon & Natcher. 2005. Northern Engagement: Alaskan Society and Applied Cultural Anthropology, 1973-2003. *Alaska Journal of Anthropology* 3(1):121-155.
 - Henry & Manoochehri. 2010. On Becoming an Applied Anthropologist: Collaboration and Clients in the Classroom. *Practicing Anthropology* 32(2):26-30.
 - Hill & Baba, eds. 2000. The Unity of Theory and Practice in Anthropology: Rebuilding a Fractured Synthesis. *NAPA Bulletin* No. 18.
 - US Department of Health, Education, and Wealth. 2010. The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research. <http://ohsr.od.nih.gov/guidelines/belmont.html>.
 - Wheeler & Thorton. 2005. Subsistence Research in Alaska: A Thirty Year Retrospective. *Alaska Journal of Anthropology* 3(91)69-103.



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 A654	4. Previous Course Prefix & Number N/A	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)	
6. Complete Course Title Advanced Culture and Ecology <small>Abbreviated Title for Transcript (30 character)</small>					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input checked="" type="checkbox"/> Add or <input type="checkbox"/> Change or <input type="checkbox"/> Delete <small>If a change, mark appropriate boxes:</small>			9. Repeat Status No # of Repeats Max Credits		
<input type="checkbox"/> Prefix <input type="checkbox"/> Course Number <input type="checkbox"/> Credits <input type="checkbox"/> Contact Hours <input type="checkbox"/> Title <input type="checkbox"/> Repeat Status <input type="checkbox"/> Grading Basis <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Description <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Other Restrictions <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other (please specify) <input type="checkbox"/> General Education Requirement			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date semester/year From: Spring/2014 To: Fall/9999		
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked 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 .					
<i>Impacted Program/Course</i>		<i>Date of Coordination</i>		<i>Chair/Coordinator Contacted</i>	
1. Anthropology MA		10/20/2013		Paul White	
2.					
3.					
Initiator Name (typed): <u>Steve J. Langdon</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>10/31/2013</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>10/31/2013</u>		
14. General Education Requirement <i>Mark appropriate box:</i>			<input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone		
15. Course Description (<i>suggested length 20 to 50 words</i>) 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) (<i>list prefix and number or test code and score</i>) Anth 202 completed with minimum C grade			16b. Co-requisite(s) (<i>concurrent enrollment required</i>)		
16c. Other Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input checked="" type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) Graduate standing		
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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.					

<div><div></div><div>Initiator (faculty only) Steve J. Langdon Initiator (TYPE NAME)</div></div>		<div><div></div><div></div></div>	<div><div></div><div></div></div>
<div><div></div><div>Approved</div></div>		<div><div></div><div>Approved</div></div>	
<div><div></div><div>Disapproved</div></div>	<div><div>Department Chair</div><div>Date</div></div>	<div><div></div><div>Disapproved</div></div>	<div><div>Dean/Director of School/College</div><div>Date</div></div>
<div><div></div><div>Approved</div></div>		<div><div></div><div>Approved</div></div>	<div><div>Undergraduate/Graduate Academic Board Chair</div><div>Date</div></div>
<div><div></div><div>Disapproved</div></div>	<div><div>College/School Curriculum Committee Chair</div><div>Date</div></div>	<div><div></div><div>Disapproved</div></div>	<div><div>Provost or Designee</div><div>Date</div></div>

**UNIVERSITY OF ALASKA ANCHORAGE
COURSE CONTENT GUIDE**

I. Date of Initiation Date: Fall 2013

II. Course Information

- | | |
|--|---|
| A. College: | College of Arts and Sciences |
| B. Course Prefix | ANTH |
| C. Course Number | A654 |
| D. Number of Credits | 3 |
| E. Contact Hours | 3+0 |
| F. Course Title: | Advanced Studies in Culture and Ecology |
| G. Grading Basis: | A-F |
| H. Implementation Date | Fall 2014 |
| I. Course Description: | 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. |
| J. Status of Course Relative to a Degree or Certificate Program: | Elective in the MA Anthropology |
| K. Course Fees: | No |
| L. Registration Restrictions: | Graduate Standing |
| M. Stacking | ANTH A454 |

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
11. Human Biodemography: Human Population Dynamics, Population Growth, and Population Regulation
12. Nutrient Cycles and Human Populations; Adaptation and Malnutrition
13. Human Impact on Environments: Hunter-gatherers, Farmers, Urban and Industrial Societies
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
21. Environmental Ethics and the Future of Human Ecology

Suggested Textbooks:

Fundamentals of Human Ecology, by Edward J. Kormondy and Daniel E. Brown
(Prentice Hall; Upper Saddle River, NJ; 1998)

The environment in anthropology: A reader in ecology, culture, and sustainable living. Edited by Haenn, N., & Wilk, R. R. New York University Press: 2006.

Environmental anthropology: From pigs to policies (2nd ed.). By Townsend, P. K.
Waveland Press: 2009.

Human adaptability: An introduction to ecological anthropology (3rd ed.). By Moran, E. F. Westview Press: 2008.

Introduction to cultural ecology (3rd ed.). By Sutton, M. Q., & Anderson, E. N.
AltaMira Press: 2013.

Environmental anthropology: A historical reader. By Dove, M., & Carpenter, C.
Malden, MA: Blackwell Pub.: 2008

VIII. Bibliography:

Argyrou, V. (2005). *The logic of environmentalism: Anthropology, ecology, and postcoloniality*. New York: Berghahn Books.

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- Molnar, S., & Molnar, I. M. (2000). *Environmental change and human survival: Some dimensions of human ecology*. Upper Saddle River, NJ: Prentice Hall.

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- Oldfield, M. L., & Alcorn, J. B. (1991). *Biodiversity: Culture, conservation, and ecodevelopment*. Boulder: Westview Press.
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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 A454	4. Previous Course Prefix & Number ANTH A354	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)	
6. Complete Course Title Culture and Ecology <small>Abbreviated Title for Transcript (30 character)</small>					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input type="checkbox"/> Add or <input checked="" type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Other Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <div><input type="checkbox"/> Class <input type="checkbox"/> Level</div> <div><input type="checkbox"/> College <input type="checkbox"/> Major</div> </div> <input type="checkbox"/> Other (please specify) </div> <div> <input checked="" type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input checked="" type="checkbox"/> Cross-Listed/Stacked <input checked="" type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats Max Credits		
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date <small>semester/year</small> From: Spring/2014 To: Fall/1999		
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with ANTH A654 Cross-Listed Coordination <small>Signature</small>		
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 .					
<i>Impacted Program/Course</i>		<i>Date of Coordination</i>		<i>Chair/Coordinator Contacted</i>	
1. Integrative Capstone (Tier 3 GER), p. 87 2012-13 catalog		10/31/2013		Faculty List Serv	
2. Environment and Society BA/BS, p. 106, 2012-13 catalog		10/31/2013		Dorn Van Dommelen	
3.					
Initiator Name (typed): <u>Steve J. Langdon</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>10/31/2013</u> <small>submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)</small>			13c. Coordination with Library Liaison Date: <u>10/31/2013</u>		
14. General Education Requirement <i>Mark appropriate box:</i>			<input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input checked="" type="checkbox"/> Integrative Capstone		
15. Course Description (<i>suggested length 20 to 50 words</i>) 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) (<i>list prefix and number or test code and score</i>) ANTH A202 minimum grade of C			16b. Co-requisite(s) (<i>concurrent enrollment required</i>)		
16c. Other Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>)		
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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.					

<div><div></div><div>Initiator (faculty only) Steve J. Langdon Initiator (TYPE NAME)</div></div>		<div><div></div><div></div></div>	<div><div></div><div></div></div>
<div><div></div><div>Approved</div></div>		<div><div></div><div>Approved</div></div>	
<div><div></div><div>Disapproved</div></div>	<div><div>Department Chair</div><div>Date</div></div>	<div><div></div><div>Disapproved</div></div>	<div><div>Dean/Director of School/College</div><div>Date</div></div>
<div><div></div><div>Approved</div></div>		<div><div></div><div>Approved</div></div>	<div><div>Undergraduate/Graduate Academic Board Chair</div><div>Date</div></div>
<div><div></div><div>Disapproved</div></div>	<div><div>College/School Curriculum Committee Chair</div><div>Date</div></div>	<div><div></div><div>Disapproved</div></div>	<div><div>Provost or Designee</div><div>Date</div></div>

UNIVERSITY OF ALASKA ANCHORAGE

COURSE CONTENT GUIDE

I.	Date of Initiation Date:	Fall 2013
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 Degree or Certificate Program:	GER Integrative Capstone 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

Student Learning Outcomes: Upon completion of this course, the student will be able to:	Assessment Measures
1. Apply fundamental ecological concepts to human societies	Examinations, student journals/reflections, daily questions, and/or class discussion
2. Analyze environmental changes during human prehistory and history, and their impacts on human societies	Examinations, student journals/reflections, daily questions, and/or class discussion
3. Analyze long-term impacts of human societies on their environments, from prehistory to the present	Examinations, student journals/reflections, daily questions, and/or class discussion
4. Interpret different approaches of societies to nature, and the differences and similarities between indigenous environmental knowledge and that of contemporary Western societies	Examinations, student journals/reflections, daily questions, and/or class discussion

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
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19. Political Ecology and the Sustainability of Indigenous Communities in Contemporary Nation-states
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21. Environmental Ethics and the Future of Human Ecology

VIII. Suggested Textbooks:

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- Haenn, N., & Wilk, R. R. (eds.) (2006). *The environment in anthropology: A reader in ecology, culture, and sustainable living*. New York: New York University Press.
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- Lewis, I. M., Höhne, M. V., & Luling, V. (2010). *Peace and milk, drought and war: Somali culture, society, and politics: Essays in honour of I.M. Lewis*. New York: Columbia University Press.

- Lockyer, J., & Veteto, J. R. (2013). *Environmental anthropology engaging ecotopia: Bioregionalism, permaculture, and ecovillages*. New York: Berghahn Books.
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- Sillitoe, P. (2007). *Local science vs. global science: Approaches to indigenous knowledge in international development*. New York: Berghahn Books.
- Smith, E. A. and Wishnie, M. (2000). Conservation and subsistence in small-scale societies. *Annual Review of Anthropology*, 29, 493-524.
- Walters, B. B. (2008). *Against the grain: The Vayda tradition in human ecology and ecological anthropology*. Lanham, MD: Altamira Press.

Wenzel, G. W. (2004). From TEK to IQ: Inuit Qaujimajatuqangit and Inuit cultural ecology. *Arctic Anthropology*, 41(2), 238-250.

White, R. D. (1985). American environmental history: The development of a new historical field. *Pacific Historical Review*, 54, 297-335.

White, R. D. (2004). *Controversies in environmental sociology*. New York: Cambridge University Press.

Winterhalder, B. (2002). Behavioral and other human ecologies: Critique, response and progress through criticism. *Journal of Ecological Anthropology*, 6, 4-23.



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 A665	4. Previous Course Prefix & Number None	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)	
6. Complete Course Title Advanced Culture and Globalization Abbreviated Title for Transcript (30 character)					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input checked="" type="checkbox"/> Add or <input type="checkbox"/> Change or <input type="checkbox"/> Delete If a change, mark appropriate boxes: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Other Restrictions <div style="display: flex; font-size: small;"> <div><input type="checkbox"/> Class <input type="checkbox"/> Level</div> <div><input type="checkbox"/> College <input type="checkbox"/> Major</div> </div> <input type="checkbox"/> Other (please specify) </div> <div style="width: 50%;"> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats Max Credits		
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date semester/year From: Fall/2014 To: Fall/9999		
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with ANTH A465 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 .					
Impacted Program/Course		Date of Coordination		Chair/Coordinator Contacted	
1. Anthropology MA		04/02/2013		Paul White	
2.					
3.					
Initiator Name (typed): <u>Marie Lowe</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>04-02-13</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>04-02-13</u>		
14. General Education Requirement Mark appropriate box:			<input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone		
15. Course Description (suggested length 20 to 50 words) Advanced 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.					
16a. Course Prerequisite(s) (list prefix and number or test code and score) Anth 202 completed with minimum of C			16b. Co-requisite(s) (concurrent enrollment required)		
16c. Other Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input checked="" type="checkbox"/> Level			16d. Registration Restriction(s) (non-codable) MA Program Acceptance		
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> Mark if course is a selected topic course		
19. Justification for Action 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.					

<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Disapproved</div>	
<div>Initiator (faculty only) Marie E. Lowe</div>		<div>Dean/Director of School/College</div>	
<div>Date</div>		<div>Date</div>	
<div>Initiator (TYPE NAME)</div>			
<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Approved</div>	
<div><input type="checkbox"/> Disapproved</div>		<div>Undergraduate/Graduate Academic Board Chair</div>	
<div>Department Chair</div>		<div>Date</div>	
<div>Date</div>		<div><input type="checkbox"/> Disapproved</div>	
<div><input type="checkbox"/> Approved</div>		<div><input type="checkbox"/> Approved</div>	
<div><input type="checkbox"/> Disapproved</div>		<div>Provost or Designee</div>	
<div>College/School Curriculum Committee Chair</div>		<div>Date</div>	
<div>Date</div>		<div>Date</div>	

UNIVERSITY OF ALASKA ANCHORAGE
COURSE CONTENT GUIDE

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	<u>40%</u>
	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. 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
2. Videos: “Life and Debt” (IMF and Impact of Structural Adjustment Policies); David Graeber on the History of Debt.
3. Ethnographic reading on Capitalism and the Modern Workplace.
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.
2. Media and New Technology 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

Instructional Goal	Student Outcomes	Assessment Procedures
Student engagement with course material through spirited and intellectual discussion of course materials; emphasis on rhetorical argument skills.	Rhetorical argument Socratic reasoning skills.	Class attendance, preparedness, participation.
Student familiarity with cultural dimensions of globalization and modernity.	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.	Class attendance, preparedness, participation, position paper on theory reading.
Help students learn the research process.	Ability to construct a literature review, formulate a research question and argument, locate references, build a bibliography, and write by way of drafts.	Five assignments devoted to a step-by-step process for constructing a formal research paper.
Help students produce a formal piece of academic writing.	Academic writing skills.	Term paper.
Prepare students for thesis, professional report writing, and public presentations.	Argumentation, speaking, and writing skills.	Success in completion of the above assignments.

VIII. Suggested Texts

A. Theoretical Foundations:

Lewellen, Ted C. 2002. The Anthropology of Globalization: Cultural Anthropology Enters the 21st Century. Bergin and Garvey.

Additional readings for the graduate students (excerpts from the following):

Appadurai, Arjun. 1996. Modernity at Large: Cultural Dimensions of Globalization. Minneapolis: University of Minnesota Press.

Graeber, David. 2011. Debt: The First 5,000 Years. New York: Melville House.

Tsing, Anna Lowenhaupt. 2004. Friction: An Ethnography of Global Connections. Princeton: Princeton University Press.

B. Under Review (UAA Book of the Year):

Gladstone, Brooke. 2013. The Influencing Machine. New York: W.W. Norton and Company.

C. Ethnographies/Ethnographic Writings (Instructor will update periodically and **choose three main works** per semester):

Chavez, Leo. 1998. Shadowed Lives: Undocumented Immigrants in American Society. Wadsworth.

Chernoff, John. Hustling is not Stealing: Stories of an African Bar Girl. Chicago: University of Chicago Press.

Farrar, James. 2002. Opening Up: Youth, Sex, Culture and Market Reform in Shanghai. Chicago: University of Chicago Press.

Freeman, Carla. High Tech and High Heels in the Global Economy: Women, Work and Pink Collar Identities in the Caribbean Durham: Duke University Press.

Ginsburg, Faye. 2002. "Screen Memories: Resignifying the Traditional in Indigenous Media." In Media Worlds, Ginsburg, Abu-Lughod, and Larkin, eds. Berkeley: University of California Press. Pp. 39-57.

Holtzman, Jon D. 2008. Nuer Journeys, Nuer Lives: Sudanese Refugees in Minnesota. Boston: Pearson.

Hirsch, Jennifer. 2003. A Courtship After Marriage: Sexuality and Love in Mexican Transnational Families. Berkeley: University of California Press.

LaBennett, Oneka. 2011. She's Mad Real: Popular Culture and West Indian Girls in Brooklyn. New York: NYU Press.

Mazzarella, William. 2003. Shoveling Smoke: Advertising and Globalization in Contemporary India. Durham: Duke University Press.

Ntarangwi, Mwenda. 2009. East African Hip Hop: Youth Culture and Globalization. Champaign, IL: University of Illinois Press.

Mills, Mary Beth. 1999. Thai Women in the Global Labor Force. New Brunswick: Rutgers University Press.

Ngai, Pun. 2005. Made in China: Women Factory Workers in a Global Workplace. Durham: Duke University Press.

Rudnykyj, Daromir. 2010. Spiritual Economies: Islam, Globalization, and the Afterlife of Development. Ithaca: Cornell University Press.

Said, Edward. 1997. Covering Islam: How the Media and the Experts Determine How We See the Rest of the World. New York: Vintage.

Xiang, Biao. 2007. Global "Body Shopping": An Indian Labor System in the Information Technology Industry. Princeton: Princeton University Press.

D. Videos:

Black, Stephanie. 2001. Life and Debt.

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

Cole, Jennifer and Deborah Durham. 2006. Generations And Globalization: Youth, Age, and Family in the New World Economy. Indiana University Press.

Giddens, Anthony. 2003. Runaway World: How Globalization is Reshaping Our Lives. Routledge.

- Barber, Benjamin 1995 Introduction to *Jihad vs. McWorld*. Times Books.
- Bell, Wendell 2004 "Humanity's Common Future: Seeking a Positive Future". *The Futurist*.
- Bucholtz, Mary 2002 "Youth and Cultural Practice". *Annual Review of Anthropology*, 31:525-52.
- Friedman, Thomas 2005 "It's a Flat World, After All". *The New York Times Magazine*, April 3, 2005.
- Juergensmeyer, Mark 2004 "Holy Orders: Religious Opposition to Modern States". *Harvard International Review*, Winter 2004: 34-38.
- Knudson, Tom 2004 "Shifting the pain: World's resources feed California's growing appetite". *The Sacramento Bee*, April 27, 2003.
- Miller, Mark Crispin 2002 "What's Wrong With This Picture". *The Nation*, January 7-14:333-8536.
- Sklair, Leslie 2004 "Sociology of the Global System". In *The Globalization Reader*, Lechner and Boli, eds. Malden, MA: Blackwell Publishing. Pp. 70-76.
- Ramdas, Kavita 2006 "Feminists and Fundamentalists". *Current History*, 99-104.
- Ruthven, Malise. 2007. Fundamentalism: A Very Short Introduction. New York: Oxford University Press.
- Snyder, David Pearce 2004 "Five Meta-Trends Changing the World". *The Futurist*, July/August 2004.
- Stiglitz, Joseph E. 2002 "Globalism's Discontents". *The American Prospect*, 13(1):1-14.
- Vise, David A. 2005 "What Lurks in Its Soul?" *The Washington Post*, November 13, 2005.
- Wilson, Chris 2006 "The Century Ahead". *Daedalus*, Winter 2006.



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 A465	4. Previous Course Prefix & Number None	5a. Credits/CEUs 3	5b. Contact Hours (Lecture + Lab) (3+0)	
6. Complete Course Title Culture and Globalization <small>Abbreviated Title for Transcript (30 character)</small>					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input checked="" type="checkbox"/> Add or <input type="checkbox"/> Change or <input type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Other Restrictions <div style="display: flex; font-size: small;"> <div><input type="checkbox"/> Class <input type="checkbox"/> Level</div> <div><input type="checkbox"/> College <input type="checkbox"/> Major</div> </div> <input type="checkbox"/> Other (please specify) </div> <div style="width: 50%;"> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status No # of Repeats Max Credits 3		
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date semester/year From: Fall/2014 To: Fall/9999		
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with ANTH A665 _____ Signature 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 .					
<i>Impacted Program/Course</i>		<i>Date of Coordination</i>		<i>Chair/Coordinator Contacted</i>	
1. Anthropology BA/BS		n/a		Steve Langdon	
2. International Studies		02-12-13		Dorn Vandommelen	
3.					
Initiator Name (typed): <u>Marie Lowe</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>04-02-13</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>04-02-13</u>		
14. General Education Requirement <i>Mark appropriate box:</i>			<input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input checked="" type="checkbox"/> Integrative Capstone		
15. Course Description (<i>suggested length 20 to 50 words</i>) 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.					
16a. Course Prerequisite(s) (<i>list prefix and number or test code and score</i>) ANTH A101 or ANTH A202 or ANTH A250 completed with a minimum grade of C.			16b. Co-requisite(s) (<i>concurrent enrollment required</i>)		
16c. Other Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input checked="" type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) Junior Standing		
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> Mark if course is a selected topic course		
19. 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.					

<div><div><input type="checkbox"/> Approved</div><div><input type="checkbox"/> Disapproved</div></div>		<div><div><input type="checkbox"/> Approved</div><div><input type="checkbox"/> Disapproved</div></div>	
<div><div>Initiator (faculty only)</div><div>Dr. Marie E. Lowe</div><div>Initiator (TYPE NAME)</div></div>		<div><div>Dean/Director of School/College</div><div></div><div>Date</div></div>	
<div><div><input type="checkbox"/> Approved</div><div><input type="checkbox"/> Disapproved</div></div>		<div><div><input type="checkbox"/> Approved</div><div><input type="checkbox"/> Disapproved</div></div>	
<div><div>Department Chair</div><div></div><div>Date</div></div>		<div><div>Undergraduate/Graduate Academic Board Chair</div><div></div><div>Date</div></div>	
<div><div><input type="checkbox"/> Approved</div><div><input type="checkbox"/> Disapproved</div></div>		<div><div><input type="checkbox"/> Approved</div><div><input type="checkbox"/> Disapproved</div></div>	
<div><div>College/School Curriculum Committee Chair</div><div></div><div>Date</div></div>		<div><div>Provost or Designee</div><div></div><div>Date</div></div>	

UNIVERSITY OF ALASKA ANCHORAGE
COURSE CONTENT GUIDE

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	<u>40%</u>
	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?
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
2. Videos: “Life and Debt” (IMF and Impact of Structural Adjustment Policies); David Graeber on the History of Debt.
3. Ethnographic reading on Capitalism and the Modern Workplace.
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.
2. Media and New Technology 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

Instructional Goal	Student Outcomes	Assessment Procedures
Student engagement with course material through spirited and intellectual discussion of course readings; emphasis on rhetorical argument skills.	Rhetorical argument Socratic reasoning skills.	Class attendance, preparedness, participation.
Student familiarity with cultural dimensions of globalization and modernity.	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.	Class attendance, preparedness, participation.
Help students learn the research process.	Ability to construct a literature review, formulate a research question and argument, locate references, build a bibliography, and write by way of drafts.	Ten assignments devoted to a step-by-step process for constructing a formal research paper.
Help students produce a formal piece of academic writing.	Academic writing skills.	Term paper.
Prepare students for graduate school or professional positions.	Argumentation, speaking, and writing skills.	Success in completion of the above assignments.

VIII. Suggested Texts

A. Theoretical Foundations:

Lewellen, Ted C. 2002. The Anthropology of Globalization: Cultural Anthropology Enters the 21st Century. Westport, CT: Bergin and Garvey.

B. Ethnographies/Ethnographic Writings (Instructor will update periodically and **choose three main works** per semester):

Bestor, Theodore C. Tsukiji: The Fish Market at the Center of the World. Berkeley: University of California Press.

Chavez, Leo. 1998. Shadowed Lives: Undocumented Immigrants in American Society. Wadsworth.

Chernoff, John. Hustling is not Stealing: Stories of an African Bar Girl. Chicago: University of Chicago Press.

Farrar, James. 2002. Opening Up: Youth, Sex, Culture and Market Reform in Shanghai. Chicago: University of Chicago Press.

Freeman, Carla. High Tech and High Heels in the Global Economy: Women, Work and Pink Collar Identities in the Caribbean Durham: Duke University Press.

Ginsburg, Faye. 2002. "Screen Memories: Resignifying the Traditional in Indigenous Media." In Media Worlds, Ginsburg, Abu-Lughod, and Larkin, eds. Berkeley: University of California Press. Pp. 39-57.

Holtzman, Jon D. 2008. Nuer Journeys, Nuer Lives: Sudanese Refugees in Minnesota. Boston: Pearson.

Hirsch, Jennifer. 2003. A Courtship After Marriage: Sexuality and Love in Mexican Transnational Families. Berkeley: University of California Press.

LaBennett, Oneka. 2011. She's Mad Real: Popular Culture and West Indian Girls in Brooklyn. New York: NYU Press.

Mazzarella, William. 2003. Shoveling Smoke: Advertising and Globalization in Contemporary India. Durham: Duke University Press.

Ntarangwi, Mwenda. 2009. East African Hip Hop: Youth Culture and Globalization. Champaign, IL: University of Illinois Press.

Mills, Mary Beth. 1999. Thai Women in the Global Labor Force. New Brunswick: Rutgers University Press.

Ngai, Pun. 2005. Made in China: Women Factory Workers in a Global Workplace. Durham: Duke University Press.

Pai, Hsiao-Hung. 2012. Scattered Sand: The Story of China's Rural Migrants. Verso: London.

Rudnykyj, Daromir. 2010. Spiritual Economies: Islam, Globalization, and the Afterlife of Development. Ithaca: Cornell University Press.

Said, Edward. 1997. Covering Islam: How the Media and the Experts Determine How We See the Rest of the World. New York: Vintage.

Walsh, Andrew. 2012. Made in Madagascar: Sapphires, Ecotourism, and the Global Bazaar. Toronto: University of Toronto Press.

Xiang, Biao. 2007. Global "Body Shopping": An Indian Labor System in the Information Technology Industry. Princeton: Princeton University Press.

C. Videos:

Black, Stephanie. 2001. Life and Debt.

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

Cole, Jennifer and Deborah Durham 2006 Generations And Globalization: Youth, Age, and Family in the New World Economy. Indiana University Press.

Giddens, Anthony 2003 Runaway World: How Globalization is Reshaping Our Lives. Routledge.

Barber, Benjamin 1995 Introduction to *Jihad vs. McWorld*. Times Books.

Bell, Wendell 2004 "Humanity's Common Future: Seeking a Positive Future". *The Futurist*.

Bucholtz, Mary 2002 "Youth and Cultural Practice". *Annual Review of Anthropology*, 31:525-52.

Friedman, Thomas 2005 "The World is Flat". New York: Farrar, Strauss, and Giroux.

Juergensmeyer, Mark 2004 "Holy Orders: Religious Opposition to Modern States". *Harvard International Review*, Winter 2004: 34-38.

Knudson, Tom 2004 "Shifting the pain: World's resources feed California's growing appetite". *The Sacramento Bee*, April 27, 2003.

Miller, Mark Crispin 2002 "What's Wrong With This Picture". *The Nation*, January 7-14:333-8536.

- Sklair, Leslie 2004 "Sociology of the Global System". In *The Globalization Reader*, Lechner and Boli, eds. Malden, MA: Blackwell Publishing. Pp. 70-76.
- Ramdas, Kavita 2006 "Feminists and Fundamentalists". *Current History*, 99-104.
- Rivoli, Pietra. 2009. The Travels of a T-Shirt in the Global Economy. Hoboken, NJ: Wiley.
- Ruthven, Malise. 2007. Fundamentalism: A Very Short Introduction. New York: Oxford University Press.
- Schiller, Nina Glick and Thomas Faist. 2010. Migration, Development, and Transnationalization. New York: Berghahn Books.
- Snyder, David Pearce 2004 "Five Meta-Trends Changing the World". *The Futurist*, July/August 2004.
- Stiglitz, Joseph E. 2002 "Globalism's Discontents". *The American Prospect*, 13(1):1-14.
- Vise, David A. 2005 "What Lurks in Its Soul?" *The Washington Post*, November 13, 2005.
- Wilson, Chris 2006 "The Century Ahead". *Daedalus*, Winter 2006.



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 A683	4. Previous Course Prefix & Number NA	5a. Credits/CEUs 4	5b. Contact Hours (Lecture + Lab) (3+2)	
6. Complete Course Title Zooarchaeology <small>Abbreviated Title for Transcript (30 character)</small>					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action: <input type="checkbox"/> Add or <input type="checkbox"/> Change or <input checked="" type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other (please specify)</div><div><input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement</div></div>			9. Repeat Status choose one # of Repeats Max Credits		
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date semester/year From: Fall/2014 To: Fall/9999		
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with A483 _____ Cross-Listed Coordination Signature		
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. <small>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.</small>					
Impacted Program/Course		Date of Coordination		Chair/Coordinator Contacted	
1. MA Anthropology		10/31/2013		Paul White	
2.					
3.					
Initiator Name (typed): <u>Steve J. Langdon</u> Initiator Signed Initials: _____ Date: _____					
13b. Coordination Email Date: <u>10/31/2013</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>10/31/2013</u>		
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <i>Mark appropriate box:</i> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone					
15. Course Description (<i>suggested length 20 to 50 words</i>) 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) (<i>list prefix and number or test code and score</i>)			16b. Co-requisite(s) (<i>concurrent enrollment required</i>)		
16c. Automatic Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (<i>non-codable</i>) Graduate standing		
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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.					
<div style="display: flex; justify-content: space-between;"><div><div>Initiator (faculty only) _____ Date _____ <u>Steve J. Langdon</u> Initiator (TYPE NAME)</div><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____</div></div><div><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____</div><div><input type="checkbox"/> Approved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____</div></div></div>					

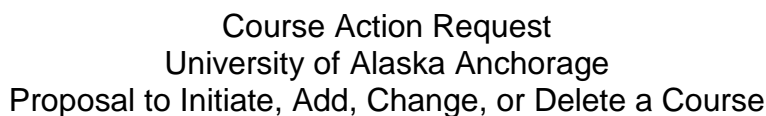


Course Action Request

University of Alaska Anchorage

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

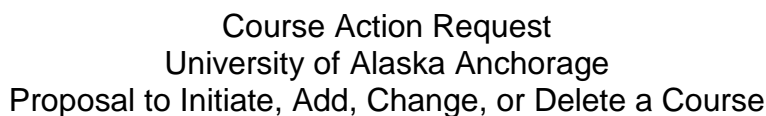
1a. School or College AS CAS		1b. Division ASSC Division of Social Science		1c. Department Anthropology													
2. Course Prefix ANTH	3. Course Number A483	4. Previous Course Prefix & Number NA	5a. Credits/CEUs 4	5b. Contact Hours (Lecture + Lab) (3+2)													
6. Complete Course Title Archaeology of Animals <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input type="checkbox"/> Change or <input checked="" type="checkbox"/> Delete <small>If a change, mark appropriate boxes:</small>			9. Repeat Status choose one # of Repeats Max Credits														
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major </div> <input type="checkbox"/> Other (please specify) </div> <div style="width: 45%;"> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			10. Grading Basis <input type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date semester/year From: Fall/2014 To: Fall/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with ANTH A683 Cross-Listed Coordination Signature _____														
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. Please type into fields provided in table. If more than three entries, submit a separate table. A template is available at www.uaa.alaska.edu/governance . <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 40%;">Impacted Program/Course</th> <th style="width: 20%;">Date of Coordination</th> <th style="width: 40%;">Chair/Coordinator Contacted</th> </tr> </thead> <tbody> <tr> <td>1. Anthropology BA/BS</td> <td>10/31/2013</td> <td>Paul White</td> </tr> <tr> <td>2. Anthropology MA</td> <td>10/31/2013</td> <td>Paul White</td> </tr> <tr> <td>3.</td> <td></td> <td></td> </tr> </tbody> </table>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1. Anthropology BA/BS	10/31/2013	Paul White	2. Anthropology MA	10/31/2013	Paul White	3.		
Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted															
1. Anthropology BA/BS	10/31/2013	Paul White															
2. Anthropology MA	10/31/2013	Paul White															
3.																	
Initiator Name (typed): <u>Steve J. Langdon</u> Initiator Signed Initials: _____ Date: _____																	
13b. Coordination Email Date: <u>10/31/2013</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>10/31/2013</u>														
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities Mark appropriate box: <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> 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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (non-codable)														
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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																	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Initiator (faculty only) _____ Date _____ <u>Steve J. Langdon</u> Initiator (TYPE NAME) <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____ </div> <div style="width: 45%;"> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____ </div> </div>																	

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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 A485	4. Previous Course Prefix & Number NA	5a. Credits/CEUs 4	5b. Contact Hours (Lecture + Lab) (3+2)													
6. Complete Course Title Human Osteology <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input type="checkbox"/> Change or <input checked="" type="checkbox"/> Delete <i>If a change, mark appropriate boxes:</i> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <div style="display: flex; justify-content: space-between; font-size: small;"> <div><input type="checkbox"/> Class <input type="checkbox"/> Level</div> <div><input type="checkbox"/> College <input type="checkbox"/> Major</div> </div> <input type="checkbox"/> Other (please specify) </div> <div style="width: 45%;"> <input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement </div> </div>			9. Repeat Status choose one # of Repeats Max Credits														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date semester/year From: Fall/2014 To: Fall/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with A685 _____ <div style="text-align: right; font-size: small;">Cross-Listed Coordination Signature</div>														
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 border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width:40%;">Impacted Program/Course</th> <th style="width:20%;">Date of Coordination</th> <th style="width:40%;">Chair/Coordinator Contacted</th> </tr> </thead> <tbody> <tr> <td>1. Anth BA/BS</td> <td>10/31/2013</td> <td>Paul White</td> </tr> <tr> <td>2. Anth MA</td> <td>10/31/2013</td> <td>Paul White</td> </tr> <tr> <td>3. Pre-Health Sciences Major</td> <td>10/31/2013</td> <td>Quentin Reuer</td> </tr> </tbody> </table>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1. Anth BA/BS	10/31/2013	Paul White	2. Anth MA	10/31/2013	Paul White	3. Pre-Health Sciences Major	10/31/2013	Quentin Reuer
Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted															
1. Anth BA/BS	10/31/2013	Paul White															
2. Anth MA	10/31/2013	Paul White															
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14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities Mark appropriate box: <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> 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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (non-codable)														
17. <input checked="" type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> 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.																	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <div style="margin-bottom: 10px;"> Initiator (faculty only) _____ Date _____ <u>Steve J. Langdon</u> Initiator (TYPE NAME) </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Department Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved College/School Curriculum Committee Chair _____ Date _____ </div> <div style="width: 45%;"> <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Dean/Director of School/College _____ Date _____ <input type="checkbox"/> Approved Undergraduate/Graduate Academic Board Chair _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved Provost or Designee _____ Date _____ </div> </div> </div> </div>																	

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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 <small>Abbreviated Title for Transcript (30 character)</small>																	
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Preparatory/Development <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development																	
8. Type of Action: <input type="checkbox"/> Add or <input type="checkbox"/> Change or <input checked="" type="checkbox"/> Delete <small>If a change, mark appropriate boxes:</small> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Prefix <input type="checkbox"/> Credits <input type="checkbox"/> Title <input type="checkbox"/> Grading Basis <input type="checkbox"/> Course Description <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Automatic Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other (please specify)</div><div><input type="checkbox"/> Course Number <input type="checkbox"/> Contact Hours <input type="checkbox"/> Repeat Status <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> General Education Requirement</div></div>			9. Repeat Status choose one # of Repeats Max Credits														
			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG														
			11. Implementation Date semester/year From: Fall /2014 To: Fall/9999														
			12. <input type="checkbox"/> Cross Listed with _____ <input checked="" type="checkbox"/> Stacked with ANTH A686 Cross-Listed Coordination Signature _____														
13a. Impacted Courses or Programs: List any programs or college requirements that require this course. <small>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.</small>																	
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 40%;">Impacted Program/Course</th><th style="width: 20%;">Date of Coordination</th><th style="width: 40%;">Chair/Coordinator Contacted</th></tr></thead><tbody><tr><td>1. Anthropology BA/BS</td><td>10/31/2013</td><td>Paul White</td></tr><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>						Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted	1. Anthropology BA/BS	10/31/2013	Paul White	2. Anthropology MA	10/31/2013	Paul White	3. Pre-Health Sciences Approved Courses Social Science	10/31/2013	Quentin Reuer
Impacted Program/Course	Date of Coordination	Chair/Coordinator Contacted															
1. Anthropology BA/BS	10/31/2013	Paul White															
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3. Pre-Health Sciences Approved Courses Social Science	10/31/2013	Quentin Reuer															
Initiator Name (typed): <u>Steve J Langdon</u> Initiator Signed Initials: _____ Date: _____																	
13b. Coordination Email Date: <u>10/13/31</u> submitted to Faculty Listserv: (uaa-faculty@lists.uaa.alaska.edu)			13c. Coordination with Library Liaison Date: <u>10/31/2013</u>														
14. General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <small>Mark appropriate box:</small> <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone																	
15. Course Description (suggested length 20 to 50 words) Methods and techniques of the applications of human osteology, including paelopathology, 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) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level			16d. Registration Restriction(s) (non-codable)														
17. <input type="checkbox"/> Mark if course has fees			18. <input type="checkbox"/> Mark if course is a selected topic course														
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<div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <u>Steve J. Langdon</u> Date _____ <small>Initiator (TYPE NAME)</small></div><div><input type="checkbox"/> Approved _____ Date _____ <input type="checkbox"/> Disapproved Dean/Director of School/College</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Date _____ <small>Department Chair</small></div><div><input type="checkbox"/> Approved _____ Date _____ <input type="checkbox"/> Disapproved Undergraduate/Graduate Academic Board Chair</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Approved <input type="checkbox"/> Disapproved _____ Date _____ <small>College/School Curriculum Committee Chair</small></div><div><input type="checkbox"/> Approved _____ Date _____ <input type="checkbox"/> Disapproved Provost or Designee</div></div>																	

**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

(iii) 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)

[59 FR 22421, Apr. 29, 1994]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 668.8, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.