

41-GNC

(sig)

FORMAT 1

Submit original with signatures + 1 copy + electronic copy to UAF Governance.

See <http://www.uaf.edu/uafgov/faculty/cd> for a complete description of the rules governing curriculum & course changes.

## TRIAL COURSE OR NEW COURSE PROPOSAL

## SUBMITTED BY:

Department	ANTHROPOLOGY	College/School	CLA
Prepared by	MARK SICOLI	Phone	474-884
Email Contact	msicoli@alaska.edu	Faculty Contact	Mark Sicoli

## 1. ACTION DESIRED

(CHECK ONE):

Trial Course

New Course

X

## 2. COURSE IDENTIFICATION:

Dept

ANTH

Course #

659

No. of Credits

3

Justify upper/lower division status &amp; number of credits:

This is a graduate seminar with a high reading load and expectations of students' participation in round-table discussions.

## 3. PROPOSED COURSE TITLE:

Language and Prehistory

## 4. To be CROSS LISTED?

YES/NO

Yes

If yes, Dept:

LING

Course #

659

(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

## 5. To be STACKED?

YES/NO

No

If yes, Dept:

Course #

## 6. FREQUENCY OF OFFERING:

Offered Fall Even-Numbered Years

Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants

## 7. SEMESTER &amp; YEAR OF FIRST OFFERING (if approved)

Fall 2012

## 8. COURSE FORMAT:

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the core review committee.

COURSE FORMAT:

(check all that apply)

☐

1

☐

2

☐

3

☐

4

☐

5

☒

6 weeks to full semester

OTHER FORMAT (specify)

Mode of delivery (specify lecture, field trips, labs, etc)

## 9. CONTACT HOURS PER WEEK:

3

LECTURE hours/weeks

☐

LAB hours/week

☐

PRACTICUM hours/week

Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See <http://www.uaf.edu/uafgov/faculty/cd/credits.html> for more information on number of credits.

OTHER HOURS (specify type)

## 10. COMPLETE CATALOG DESCRIPTION including dept., number, title and credits (50 words or less, if possible):

ANTH F659 Language and Prehistory

3 Credits Offered FALL EVEN-NUMBERED YEARS

What can we learn about the past through the comparison of languages? This course surveys the theory and methods that use linguistic data to reconstruct prehistory. We will study the evolutionary frameworks of case studies that make efforts to integrate the subfields of anthropology on questions of culture change. Students will work on a term project that uses computational methods of phylogenetics. **Prerequisites: Graduate Student Enrollment or Permission of Instructor.** Cross-listed with LING F659 (3+0)

**11. COURSE CLASSIFICATIONS:** (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities ☐

S = Social Sciences ☐

Will this course be used to fulfill a requirement for the baccalaureate core?

YES ☐

NO ☒

IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6 ☐

W = Writing Intensive, Format 7 ☐

Natural Science, Format 8 ☐

**12. COURSE REPEATABILITY:**

Is this course repeatable for credit?

YES ☐

NO ☒

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

How many times may the course be repeated for credit?

TIMES

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS

**13. GRADING SYSTEM:** Specify only one.

LETTER: ☒

PASS/FAIL: ☐

**RESTRICTIONS ON ENROLLMENT (if any)**

**14. PREREQUISITES**

Graduate Student Enrollment or Permission of Instructor.

These will be required before the student is allowed to enroll in the course.

**15. SPECIAL RESTRICTIONS, CONDITIONS**

**16. PROPOSED COURSE FEES**

\$

Has a memo been submitted through your dean to the Provost & VCAS for fee approval?

Yes/No

**17. PREVIOUS HISTORY**

Has the course been offered as special topics or trial course previously?

Yes/No

No ☐

If yes, give semester, year, course #, etc.:

**18. ESTIMATED IMPACT**

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

This class will need a seminar classroom

**19. LIBRARY COLLECTIONS**

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No ☐

Yes ☒

Library has been contacted (2/14) and the one book from the required texts that is not yet part of the collections has been requested. Granted.

**20. IMPACTS ON PROGRAMS/DEPTS**

What programs/departments will be affected by this proposed action?

Include information on the Programs/Departments contacted (e.g., email, memo)

This course increases the graduate offerings in Linguistic Anthropology.

**21. POSITIVE AND NEGATIVE IMPACTS**

Please specify positive and negative impacts on other courses, programs and departments resulting from the

proposed action.


This course will form part of the graduate offerings in Linguistic Anthropology that addresses requests of graduate students to develop linguistic anthropological courses that could be directly integrated into theses and dissertation topics for graduate students in Archaeology and Physical/Biological Anthropology. It will also be of value for graduate students in linguistics and mathematics.

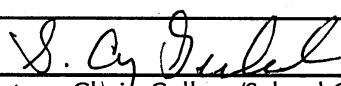
#### JUSTIFICATION FOR ACTION REQUESTED


The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

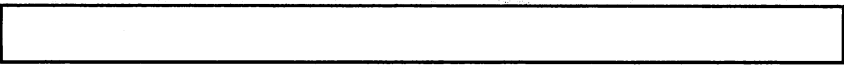
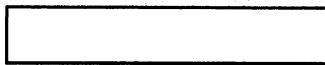
The last 10 years have seen an rapid increase in the development of computational methods in linguistics and anthropology that are interfacing the work of biologists, archaeologists and linguistic, and cultural anthropologists. This course surveys both the history of such interactions between the anthropological subfields and the new turn toward bioinformatic methods which has revolutionized the field. This course is designed to be a rigorous introduction that develops students' the knowledge and experience with the theory and methods needed to undertake a linguistic phylogenetic project as part of the work of the term.

#### APPROVALS:

 Date 11-23-2011  
Signature, Chair, Program/Department of: Linguistics

 Date 11/23/2012  
Signature, Chair, College/School Curriculum Council for: CLA


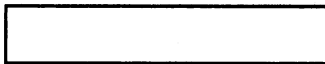
 Date 02-09-2012  
Signature, Dean, College/School of: CLA

 Date 

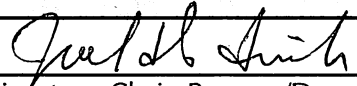
Signature of Provost (if applicable)

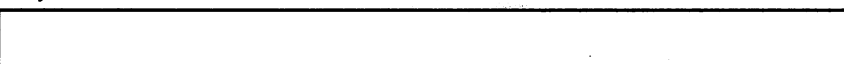
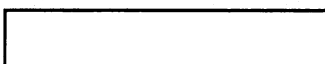
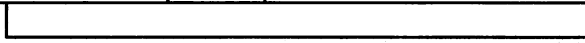
Offerings above the level of approved programs must be approved in advance by the Provost.


#### ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

 Date   
Signature, Chair, UAF Faculty Senate Curriculum Review Committee

#### ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

 Date 11/23/11  
Signature, Chair, Program/Department of: ANTHRO

 Date   
Signature, Chair, College/School Curriculum Council for: 

 Date 02-09-12  
Signature, Dean, College/School of: CLA

**ATTACH COMPLETE SYLLABUS (as part of this application).**

Note: The guidelines are online: <http://www.uaf.edu/uafgov/faculty/cd/syllabus.html>

The department and campus wide curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course change will be denied.

**SYLLABUS CHECKLIST FOR ALL UAF COURSES**

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

**1. Course information:**

☒ Title, ☒ number, ☒ credits, ☒ prerequisites, ☒ location, ☒ meeting time  
(make sure that contact hours are in line with credits).

**2. Instructor (and if applicable, Teaching Assistant) information:**

☒ Name, ☒ office location, ☒ office hours, ☒ telephone, ☒ email address.

**3. Course readings/materials:**

☒ Course textbook title, ☒ author, ☒ edition/publisher.  
☒ Supplementary readings (indicate whether ☒ required or ☒ recommended) and  
☒ any supplies required. *NT*

**4. Course description:**

☒ Content of the course and how it fits into the broader curriculum;  
☒ Expected proficiencies required to undertake the course, if applicable.  
☒ Inclusion of catalog description is *strongly* recommended, and  
☒ Description in syllabus must be consistent with catalog course description.

**5. ☒ Course Goals (general), and (see #6)**

**6. ☒ Student Learning Outcomes (more specific)**

**7. Instructional methods:**

☒ Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

**8. Course calendar:**

☒ A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say "lab". Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

**9. Course policies:**

☒ Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

**10. Evaluation:**

☒ Specify how students will be evaluated, ☒ what factors will be included, ☒ their relative value, and  
☒ how they will be tabulated into grades (on a curve, absolute scores, etc.)

**11. Support Services:**

☒ Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

**12. Disabilities Services:**

The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials.

☒ State that you will work with the Office of Disabilities Services (208 WHIT, 474-5655) to provide reasonable accommodation to students with disabilities."

## SYLLABUS

### COURSE INFORMATION

Title: Language and Prehistory

Number: ANTH 659 / LING 659

Credits: 3.0 CR

Prerequisites: Graduate Student Enrollment or Permission of Instructor

Location: TBA

Meeting Time: TBA

INSTRUCTOR	TEACHING ASSISTANT
Instructor: Dr. Mark Sicoli Office Location: 312D Eielson Office Hours: TBA Telephone: 474-6884 Email: msicoli@alaska.edn	TBA Office Location: TBA Office Hours: TBA Telephone: TBA Email: TBA

### REQUIRED TEXTS:

Mace, Ruth, Clare J. Holden and Stephen Shennan (eds). 2005. *The Evolution of Cultural Diversity: A Phylogenetic Approach*. Left Coast Press.

Cavalli-Sforza, Luiga Luca. 2000. *Genes, Peoples, and Languages*. North Point Press.

All other required and recommended readings will be made available through Blackboard

### COURSE DESCRIPTION:

What can we learn about the prehistoric past from the comparison of languages? In testing hypotheses about culture change in the past, how can linguistic data interface with data from archaeology, biological/physical anthropology, and cultural studies of kinship and mythology? This course surveys the history and current direction of theory and methods that use linguistic data in the reconstruction of prehistory, cultural diversification, and diffusion between cultures. As an independent subfield of anthropology, linguistic anthropology interfaces with each of the other subfields in the unique ways that we will survey. We will study comparative and typological linguistics and evolutionary frameworks for biology, material culture, and language and work with case studies that use statistical and bioinformatic methods to test hypotheses of language change and language relatedness and make efforts to integrate the subfields of anthropology on questions of culture change in the past. Students will work on a term project that uses computational methods of phylogenetics.

#### CATALOG DESCRIPTION:

##### **ANTH F659 Language and Prehistory**

**3 Credits**      Offered Fall Even-Numbered Years

What can we learn about the past through the comparison of languages? This course surveys the theory and methods that use linguistic data to reconstruct prehistory. We will study the evolutionary frameworks of case studies that make efforts to integrate the subfields of anthropology on questions of culture change. Students will work on a term project that uses computational methods of phylogenetics. **Prerequisites: Graduate Student Enrollment or Permission of Instructor.** Cross-listed with LING F659. (3+0)

#### COURSE GOALS

The goal of this seminar is to engage the study of prehistory through the application of linguistic methods. Students will become familiar with the history of this field, its successes and its critiques.

#### STUDENT LEARNING OUTCOMES:

- Students will develop an understanding of the role of linguistic analysis in multi-disciplinary approaches to cultural change and the reconstruction of human prehistory.
- Students will evaluate different modes of evidence and units of analysis in the reconstruction of prehistory and how scholars have attempted to bring together the anthropological subfields around questions of prehistory.
- By the end of the course students will be able to critically assess different scientific and popular theories on human migrations and relationships between the world's languages.
- Student will develop knowledge and skills to conduct phylogenetic and network analysis on different types of data producing novel studies as a part of this course.

#### INSTRUCTIONAL METHODS:

The course is a seminar and will consist primarily of seminar discussions around topics of assigned readings. Students will submit written responses to the reading for peer-review and lead two class discussions: one as a team member with another student and one solo. Students will also conduct individualized research for the term paper and give a 20-minute oral presentation of the results. There will also be several homework assignments and practical exercises.

### STUDENT EVALUATION:

Students will be evaluated on the bases of class participation, reading responses, homework/practical exercises, leading two seminar meetings, a research paper, and a long presentation of research results.

### COURSE REQUIREMENTS:

- Class participation: Students are expected to attend class regularly and arrive on time. There are typically 3-5 reading assignments per week that are required, as well as supplementary readings for which they will be responsible.
- Homework assignments/practical exercises: Students will be assigned several homework assignments to build skills in comparative linguistics doing phylogenetic analysis.
- Six short written reading responses: These are one or two page response papers to the readings for a given week. Students are expected to summarize the readings and briefly discuss how they are in dialogue with each other and with the course flow.
- Leading two seminar discussions: Each student will lead two seminar sessions.
- Research Paper: Graduate students will write a 25-page research paper based on readings from the course and that develops a novel project using phylogenetic or network analysis.
- Oral Presentation: Graduate Students will give a 45-minute presentation of your research paper to the class.

### GRADING (by absolute score):

ANTHILING 659	
Class Participation:	10%
Response Papers:	15%
Leading Two Seminars:	10%
Homework:	20%
Research Paper:	30%
Oral Presentation:	15%
<hr/>	
TOTAL	100%

Grading is based on the following scale. No pluses or minuses will be given:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
59% and below	F

#### ACADEMIC INTEGRITY:

Plagiarism is a form of cheating in which you use anyone else's ideas and/or words (both published or personally communicated) without proper citation of the source. Whether from a printed source, the Internet, a lecture or a friend or family member, you must cite the source properly, if you got the idea from someone else—and this is true even if you are not using the Source's exact wording. Be aware of the University's policies on academic dishonesty.

When academic dishonesty is documented on any assignment or exam, you will receive a zero and the matter may be turned over to the Dean of Students for inquiry, with a failing grade in the course.

You should familiarize yourself with the Student Code of Conduct ([http://www.uaf.edu/catalog/current/academics/regs3.html#Student\\_Conduct](http://www.uaf.edu/catalog/current/academics/regs3.html#Student_Conduct)) and the University statement on Plagiarism (<http://library.uaf.edu/lis101-plagiarism>).

For information on how to properly cite sources see: <http://library.uaf.edu/lis101-citing>

#### SUPPORT SERVICES:

Student Support Services are available at UAF: <http://www.uaf.edu/sssp/>

These services include: free tutorial services; academic advising, mentoring, and personal support; direct financial assistance to qualified low-income participants; use of laptop computers, labs, and other technology resources; and cultural and social engagement. The office is located at 512 Groening building, and the phone number is 474-6884.

See also [http://www.uaf.edu/catalog/catalog\\_10-11/services/serv01.html](http://www.uaf.edu/catalog/catalog_10-11/services/serv01.html)

#### WRITING CENTER:

Students can get help with their writing at The Writing Center (801 Gruening):

<http://www.alaska.edu/english/studentresources/writing/>

You can make an appointment (474-5314) to go over a paper with someone at any stage in the writing process, from rough outline to final draft. You can also print up to 25 pages at a time for free. This is an excellent service to take advantage of at any stage of your student career.



**DISABILITY SERVICES:**

The University of Alaska is committed to providing equal access for students with disabilities. If you experience a disability and will need special accommodations, please contact me during my office hours. The UAF Disability Services office is located in the Whitaker Building, room 208 and can be contacted by email at [uaf-disabilityservices@alaska.edu](mailto:uaf-disabilityservices@alaska.edu), by phone at (907)474-5655, or by TTY at (907)474-1827.

## COURSE SCHEDULE

### WEEK 1 Introduction: Questions, Theories, Methods

Evolutionary Anthropology and the integration of the Anthropological Subfields

Mace, Ruth. "Introduction: A phylogenetic approach to the evolution of genetic diversity" in *The Evolution of Cultural Diversity: A Phylogenetic Approach*

### WEEK 2 Setting up a Common Ground

What are the units of analysis in:

- a. Historical Linguistics, b. Archaeology, c. Genetics, d. Comparative Osteology, e. Kinship, f. Mythology

Cavalli-Sforza, Luca Luca. 2000. *Genes, Peoples, and Languages*

Ch. 1 Genes and History, Ch. 4 Technological Revolutions and Gene Geography  
Ch 5. Genes and Languages

### WEEK 3 Lexical Reconstruction, Family Trees, and Material Reference

Campbell, Lyle. "Linguistic Contributions to Guatemalan Prehistory

Kaufman, Terrence and John Justeson "Historical Linguistics and Precolumbian Mesoamerica,

Sicoli, Mark. 2000. Loanwords and Contact-Induced Change in Lachixio Zapotec.

### WEEK 4 Geolinguistics and Homelands

Kari, James 2010. "The concept of Geolinguistic Conservatism in Na-Dene Prehistory.

Sapir, Edward. 1936. Internal linguistic evidence suggestive of the northern emergence of the Navajo *American Anthropologist* 38.2:224-235.

- Kaufman, Terrence. 1985. "Otomanguean Homelands"

### WEEK 5 The Early Days: Lexicostatistics and Glottochronology

Swadesh, Morris. 1952 "Lexicostatistic Dating of Prehistoric Ethnic Contacts, APS- p 96:452-63.

Swadesh, Morris. 1955. "Toward a greater Accuracy in Lexicostatistic Dating, IJAL 21: 121-37.

Gudschinsky, Sarah. 1956. "The ABC's of Lexicostatistics, Word 12: 175-210.

Dobson, Annette et al. 1972. The Mathematics of Glottochronology Revisited.

WEEK 6 Bioinformatic Methods of Phylogenetics

- Cavalli-Sforza, Luca Luca 2000. *Genes, Peoples, and Languages* Ch. 6 Cultural Transmission and Evolution.
- Grey, Bryant, and Greenhill 2010 "On the Shape and Fabric of Human History"
- D.Bryant, F.Filimon, R.D.Gray; "Untangling our Past: Languages, trees, splits and networks"
- Holder and Shennan "How Tree-like is Cultural Evolution"

WEEK 7 Bioinformatic Methods of Phylogenetics (cont)

- Dunn et al. 2005 "Structural Phylogenetics and the Reconstruction of Ancient Language History"
- Holden, Meade and Pagel "Comparison of Maximum Parsimony and Bayesian Bantu Language Trees"
- Atkinson, Q.D., Nicholls, G., Welch, D. and Gray, R. D. (2005). From Words to Dates: Water into wine, mathemagic or phylogenetic inference? *Transactions of the Philological Society*, 103(2), 193-219.
- Mace, Ruth "On the Use of Phylogenetic Comparative Methods to Test Co-evolutionary Hypotheses across Cultures"

WEEK 8 Case Study: Austronesian

- Greenhill, Simon, and Russel Gray "Testing Population Dispersal Hypotheses: Pacific Settlement, Phylogenetic Trees and Austronesian languages.
- Gray, Russel and Fiona Jordan. 2000. Language trees support the express-train sequence of Austronesian expansion. *Nature* 405 1052-1055.
- Greenhill, Simon and Russel Gray. 2009. Austronesian language phylogenies: Myths and misconceptions about Bayesian computational methods.

WEEK 9 Case Study: Indo-European

- Campbell, Lyle "Indo-European Linguistic Prehistory"
- Nelson-Sathi et al 2010 "Networks uncover hidden lexical borrowing in Indo-European language evolution."
- Gray, Russell D.; Atkinson, Quentin D. (2003). "Language-tree divergence times support the Anatolian theory of Indo-European origin" *Nature* 426 (6965):pp.435-439
- Nakhley, Luay et al 2005. A comparison of Phylogenetic reconstruction methods on an Indo-European Dataset. *Transactions of the Philological Society* Volume 103:2. 171-192.

WEEK 10 Case Study: Dene-Yeneseic

Kari and Potter "Introduction: The Dene-Yeniseian Connection"

Part 1: The evidence for Dene-Yeniseian"

Comrie, Bernard "The Dene-Yeniseian Hypothesis"

Vajda, Edward "A Siberian Link with Na-Dene Languages"

Vajda, Edward "Yeniseian, Na-Dene, and Historical Linguistics"

Rubicz, Rohina et al. 2005. "Genetic evidence for the phylogenetic relationship between Na-Dene and Yeniseian Speakers." Human Biology

WEEK 11 THANKSGIVING RECESS

WEEK 12 Case Study: Dene-Yeneseic (cont)

Potter, Ben "Archaeological Patterning in Northeast Asia and Northwest North America"

Scott, Richard and Dennis Q'Rouke "Genes across Beringia"

Ives, John et al. "Dene-Yeniseian and Processes of Deep Change in Kin Terminologies"

Kim-Maloney "Comparison of a Pair of Ket and Diné (Navajo) Myth Motifs.

WEEK 13 Case Study: Dene-Yeneseic (cont)

Fortescue, Michael 2010. "Yeniseian: Siberian Intruder or Remnant? Testing the Hypotheses using computational phylogenetics; Into America or Out of America? This week presents original research by Sicoli to test four hypotheses laid out in Fortescue 2010 using computational linguistic methods.

WEEK 14 Student Presentations

Students present their research projects to the class. Instructor feedback given.

WEEK 15 Student Presentations

Students present their research projects to the class. Instructor feedback given.

WEEK 16 FINALS WEEK -Final Projects due.