

Language Reclamation & Technology on St. Lawrence Island



CS / YUP F493 • 3 Credits • Fall 2025 • TR 2:00pm-3:30pm • Room: Duckering 535
Instructor: Lane Woodrose Schwartz • lane.schwartz@alaska.edu • [907-474-6104](tel:907-474-6104)
Office Hours: Monday through Friday 3:30-4:00pm in Duckering 543

Language reclamation is a core framework within which the needs, desires, and priorities of Indigenous communities are centered. Ethical work on Indigenous language revitalization and any work involving language data or language technology for any Indigenous language must necessarily take place within this framework.

This course formally presents language reclamation within the context of language revitalization and language technology development currently taking place on St. Lawrence Island.

Within this ethical framework, students will gain hands-on skills in various language technologies, including regular-expressions, corpus search, and finite-state morphological analyzers and word-builders.

The course is designed with a programming-based project component for upper-level CS students and a non-programming project for students coming from Alaska Native Studies, Yupik, or other non-CS majors.

Course catalog description:

Examines modern language technologies in active development and use with St. Lawrence Island Yupik within the ethical framework of language reclamation. Includes regular-expressions, corpus search, and morphological analyzers and word-builders. Students will complete a project, either coding-based or not depending on the student's background. Prior programming experience is welcome but not required.

Representative Course Readings/Materials:

Maanillu, Akmanillu: Community-led, Iterative Development of Tools for Language Documentation and Reclamation (Hunt, 2025) - a very recent doctoral dissertation on this topic, freely available for download

Supplementary readings (required):

A Grammar of the St. Lawrence Island / Siberian Yupik Language.
Steven A. Jacobson (2001), Alaska Native Language Center.

Student Learning Outcomes:

Students who satisfactorily complete this class will be able to clearly

- describe the key aspects of **language reclamation**
- contrast language reclamation with **language revitalization**
- discuss **key ethical issues** involved in developing language technology for Indigenous languages
- demonstrate understanding and use of **language technology** such as regular-expressions, corpus search, and morphological analyzers and word-builders

Instructional methods:

Lectures with case studies and small group discussions

Course calendar:

Week	Tuesday	Thursday	
1	<ul style="list-style-type: none">● Learning contract, milestones, and grading● Language reclamation● Language revitalization		
2	<ul style="list-style-type: none">● Akuzipik – the St. Lawrence Island Yupik language● Language priorities on St. Lawrence Island● Existing language technology on St. Lawrence Island		
3			
4	<ul style="list-style-type: none">● Optical character recognition & legacy digitization● Regular expressions & corpus search● Speech technology & read-along books● Digital lexicography & archival XML		
5			
6			
7	<ul style="list-style-type: none">● Finite-state acceptors & transducers● Polysynthetic morphology● Morphological analyzers● Word-builders & sentence-builders		
8			
9			
10	<ul style="list-style-type: none">● Indigenous languages & large language models● Machine translation● Automatic speech recognition● Speech synthesis		
11			
12			
13	<ul style="list-style-type: none">● Project work● Project discussions● Project reports● Project presentations● Self-assessment		Thanksgiving Break
14			
15			
16	Finals Week		

Course policies:

Students will regularly attend class and fully participate in class discussions and projects.

Evaluation:

Student evaluation will be based on the overarching principles of [Ungrading \(Blum et al, 2020\)](#). Within the ungrading framework, significant focus during the semester is placed on the instructor providing frequent high-quality feedback to the student, specifically tailored to “encourage and support mastery levels of learning and methods that enable students to take charge of their own learning even after the class ends” ([Sorenson-Unruh, 2020](#)).

1. At the beginning of the semester, each student will meet individually with the instructor. The result of this meeting will be a jointly crafted **learning contract** ([Inoue, 2022](#)) which will:
 - document **the student’s desired letter grade goal** for class,
 - document **specific assessed student milestones** required to obtain that goal,
 - explicitly referring to the course learning objectives, and
 - explicitly referring to the [UAF Grading Policy](#) definitions document.
2. Throughout the semester, milestones will be completed by the student.
 - The instructor will provide timely and detailed feedback on student work
 - Work will be marked as either **satisfactorily completed** or **not yet satisfactory**
 - Work that is *not yet satisfactory* may be re-submitted and re-assessed
 - In order to pass the course, all milestones must be satisfactorily completed
3. At the end of the semester, the student will meet with the instructor to discuss the learning contract.
 - The student will provide a written self-assessment that includes a recommended overall grade with justifications.
 - The instructor will provide a final evaluation that includes summative feedback and a letter grade with justifications.

University information

Student protections statement: The university respects and upholds the principles of due process and a fair and equitable process as specified in the Board of Regents' Policy 09.02 Student Rights and Responsibilities. For more information regarding the rights and responsibilities of students, refer to the Office of Rights, Compliance and Accountability website. You are encouraged to read the Board of Regents' policy carefully to fully understand your responsibilities to our community.

We strive to create a safe and respectful environment for all members of our community. If you have questions about expectations of you as a student or believe your rights are being violated, we encourage you to reach out to the Office of Rights, Compliance and Accountability for help. UAF reserves the right to suspend, expel or take other necessary and appropriate action in cases where a student is unable or unwilling to uphold community standards and campus safety.

For more information on your rights as a student and the resources available to you to resolve problems, please go to the following site:

<https://catalog.uaf.edu/academics-regulations/students-rights-responsibilities/>.

Disability services statement: I will work with the Office of Disability Services to provide reasonable accommodation to students with disabilities.

ASUAF advocacy statement: The Associated Students of the University of Alaska Fairbanks, the student government of UAF, offers advocacy services to students who feel they are facing issues with staff, faculty, and/or other students specifically if these issues are hindering the ability of the student to succeed in their academics or go about their lives at the university. Students who wish to utilize these services can contact the Student Advocacy Director by visiting the ASUAF office or emailing asuaf.office@alaska.edu.

Student Academic Support:

- Communication Center (907-474-7007, uaf-commcenter@alaska.edu, Student Success Center, 6th Floor Room 677 Rasmuson Library)
- Writing Center (907-474-5314, uaf-writing-center@alaska.edu, Student Success Center, 6th Floor Room 677 Rasmuson Library)
- UAF Math Services (907-474-7332, uaf-traccloud@alaska.edu)
 - Drop-in tutoring, Student Success Center, 6th Floor Room 672 Rasmuson Library
 - 1:1 tutoring ([by appointment only](#)), 6th Floor Room 677 Rasmuson Library
 - Online tutoring (by appointment only) available
 - <https://www.uaf.edu/dms/mathlab/>, available at the Student Success Center
- Developmental Math Lab (Gruening 406, <https://www.uaf.edu/deved/math/>)
- The Debbie Moses Learning Center at CTC (907-455-2860, 604 Barnette St, Room 102, <https://www.ctc.uaf.edu/student-services/student-success-center/>)

- For more information and resources, please see the Academic Advising Resource List <https://www.uaf.edu/advising/students/index.php>

Student Resources:

- Disability Services (907-474-5655, uaf-disability-services@alaska.edu, 110 Eielson Building)
- Student Health & Counseling [**free counseling sessions available**] (907-474-7043, <https://www.uaf.edu/chc/appointments.php>, Whitaker Building, Room 206, Health, Safety & Security Bldg - same building as Fire and Police)
- Office of Rights, Compliance and Accountability (907-474-7300, uaf-orca@alaska.edu, 3rd Floor, Constitution Hall)
- Associated Students of the University of Alaska Fairbanks (ASUAF) or ASUAF Student Government (907-474-7355, asuaf.office@alaska.edu, Wood Center 119)

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For more information, contact:

UAF Office of Rights, Compliance and Accountability
1692 Tok Lane
3rd floor, Constitution Hall, Fairbanks, AK 99775
907-474-7300
uaf-orca@alaska.edu

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University Sponsored Off-Campus Programs and Research Activities

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3. There are supportive measures available to individuals that may have experienced

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4. University of Alaska's Board of Regents' Policy & University Regulations (UA BOR P&R) 01.02.020 Nondiscrimination and 01.04 Sex and Gender-Based Discrimination Under Title IX, go to:
<http://alaska.edu/bor/policy-regulations/>.
5. UA BOR Policies & University Regulations apply at all university owned or operated sites, university sanctioned events, clinical sites and during all academic or research related travel that are university sponsored.

For further information on your rights and resources [visit the student placement guidelines page of the equity and compliance site](#).