ED F595P F01: The Wild Side of Education:
Teacher Professional Development Workshop in Yukon-Charley Rivers National Preserve

Overview
This professional development course is aimed at current Kindergarten through twelfth grade educators and post-secondary students in the field of education. Course format is a combination of Fairbanks-based classroom sessions and a five-day / four-night immersion experience at historic Coal Creek Camp in the heart of Yukon-Charley Rivers National Preserve. Areas of emphasis include National Park Service (NPS) history and mission; selected best practices in K-12 curriculum and instruction; place-based natural and cultural history of Yukon-Charley Rivers National Preserve; National Park Service research and monitoring activities; and connections among National Park Service resources and themes, national and state education standards, and curricula across content areas. Independent and small group work will be required before and after the field portion of the course, and participants must submit and present a final project.

3 Credits, Graded Pass / No Pass

Summer 2016

Instructor
Maria Berger
Lead Education Specialist
Fairbanks Alaska Public Lands Information Center
National Park Service

Participating NPS Education and Natural and Cultural Resources staff:
Participation of other NPS staff is to be determined. Two or more natural and/or cultural resource experts representing Yukon-Charley Rivers National Preserve and/or the Central Alaska Inventory and Monitoring Network will participate as their schedules permit.

Contact Information:
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Course Meeting Information
Pre-field course class meetings: (6 hours)
Tuesday, June 28th, 6:00 – 9:00 p.m.
Participants will meet at the Morris Thompson Cultural and Visitors Center for an introduction to the National Park Service, Alaska public lands, and Yukon-Charley Rivers National Preserve and an overview of course structure and performance expectations.

Thursday, June 30th, 6:00-9:00 p.m.
Participants will meet at the Morris Thompson Cultural and Visitors Center for an orientation to the field-based portion of the course, presentation of safety and stewardship information, overview of selected natural and cultural resources topics, and introduction to pertinent curriculum and instruction principles and practices.

Field course: (28 hours)

July 5th-9th
Participants will spend five days / four nights at Coal Creek Camp in Yukon-Charley Rivers National Preserve. Accommodations are rustic cabins operated by the National Park Service. Course fee includes full tuition, cost of travel from Fairbanks to/from Coal Creek Camp via small aircraft and all meals from dinner on July 5th through breakfast on July 9th.

Post-field course class meetings: (6 hours)
Tuesday, July 19th, 6:00 – 9:00 p.m.
Participants will meet at the Morris Thompson Cultural and Visitors Center for a project work session and one-on-one consultation with course instructor.

Thursday, July 21st, 6:00 – 9:00 p.m.
Participants will meet at the Morris Thompson Cultural and Visitors Center to present their projects to the class.

Intended Audience: K-12 educators

Enrollment Restrictions: 12 participant maximum

Course Prerequisite/Co-requisites: No academic pre-requisites apply. However, course participants must be capable of walking up to four miles over difficult terrain and willing to tolerate inclement conditions, including biting and stinging insects and extreme weather conditions.
Link to Standards for Alaska Teachers:
This professional development effort is rooted in the fundamentals of the standards for Alaska Teachers. It is offered to encourage and support practicing educators in attaining, maintaining or surpassing the standards that, as stated in Standards for Alaska’s Teachers, “define the skills and abilities our teachers and administrators need to possess to effectively prepare today’s students for successful lives and productive careers” (http://www.eed.state.ak.us/standards/pdf/teacher.pdf).

Course content aligns with and enhances the following performance standards for Alaska’s teachers (Standards for Alaska’s Teachers, http://www.eed.state.ak.us/standards/pdf/teacher.pdf):

3a: The teacher “incorporate[es] characteristics of the student’s and local community’s culture into instructional strategies that support student learning.”
3c: The teacher “appl[ies] knowledge of Alaska history, geography, economics, governance, languages, traditional life cycles and current issues to the selection of instructional strategies, materials, and resources.”
4d: The teacher “connect[s] the content area to other content areas and to practical situations encountered outside the school.”
4e: The teacher “stay[s] current in the teacher’s content area and demonstrat[es] its relationship with and application to classroom activities, life, work, and community.”
5b: The teacher “creat[es], select[es], adapt[es], and us[es] a variety of instructional resources to facilitate curricular goals and student attainment of performance standards.”
8b: The teacher “maintain[s] and updat[es] both knowledge of the teacher’s content area or areas and best teaching practice.”
8c: The teacher “engag[es] in instructional development activities to improve or update classroom, school, or district programs.”
8d: The teacher “communicat[es], work[s] cooperatively, and develop[s] professional relationships with colleagues.”

Course Design
This course does not apply to any UAF certificate or degree program.

Minimum requirements for completing the course:
- Attendance at four Fairbanks-based classroom sessions (three hours per session, two sessions prior to field portion, two sessions after field portion)
- Twenty-eight hours of active engagement while in attendance at Coal Creek Camp
- Independent work outside of scheduled course time for completing homework, including final project
- Presentation and submission of completed final project
Completion of a pre- and post-course evaluation questionnaire

Instructional Goals and Defined Outcomes

Instructional Goals

The goals of this course include:

- Providing participants with a multi-day, immersive experience in a remote, difficult-to-access National Preserve;
- Exposing participants to one or more current best practices in education* and applying this framework, approach, and/or strategy to design of a place-based lesson plan;
- Affording opportunities for teachers to interact with and learn from National Park Service personnel, potentially including natural and cultural resource specialists, scientists, educators, interpretive rangers, law enforcement rangers, facilities specialists, and field/office support staff;
- Exploring connections among National Park Service and Yukon-Charley Rivers National Preserve themes, content, and resources, district K-12 curricula, and National and State standards, including Common Core State Standards for English Language Arts and Math, Next Generation Science Standards, and the College, Career and Civic Life standards for social studies;
- Increasing participants’ awareness of Alaska-specific and system-wide National Park Service resources for educators and enhancing their abilities to access and effectively use these resources in their classrooms;
- Familiarizing participants with the mission and history of the National Park Service and other federal and state land management agencies operating in Alaska, introducing them to the purposes and services of the Alaska Public Lands Information Centers, and encouraging reflection on issues related to public lands management, stewardship, and conservation;
- Cultivating a community of practice and facilitating exchange of ideas and products among participants and National Park Service personnel;
- Applying specified curriculum development frameworks and criteria in developing a final project based on course content and experiences. The final project will include a place-based, standards-aligned lesson plan, supporting materials from National Park Service sources, and a written reflection on the curriculum development process.

* The 2016 course will emphasize inquiry learning models and strategies.

Defined Outcomes

By the end of the course, students should be able to:

- Articulate which aspects of the Yukon-Charley immersion experience were most enjoyable, most valuable and the aspect that was most challenging, and express verbally and in writing why the field experience was personally meaningful and/or memorable;
• Apply an established inquiry cycle framework and other specified best educational practices to developing and implementing a place-based lesson plan, and explain this type of approach and how it differs from “traditional” instructional practices;
• Interact in person with at least four National Park Service employees affiliated with Yukon-Charley Rivers National Preserve, describe the basic duties and responsibilities of their positions, and articulate the educational and/or vocational training required to hold this type of position;
• Identify at least one connection between course content and their established curriculum and at least one connection between course content and a national and/or state standard addressed in their classroom, and explain how course content aligns with these curriculum goals and standards;
• Identify three or more types of National Park Service resources (e.g. personnel, data, maps, photos, video, brochures, fact sheets, web pages, curriculum, in-person programs and events) that could be used to support classroom instruction; explain where/how to access these resources; and provide a specific example of how a particular NPS resource could be incorporated into their teaching;
• Summarize the mission of the National Park Service and compare and contrast its mission and activities with at least one other federal land management agency and at least one Alaska state land management agency;
• Share at least one new educational concept, practice, perspective, product, or resource with another course participant or instructor, and identify at least one new educational concept, practice, perspective, product, or resource shared by another course participant or instructor; and
• Present and submit a final project that meets or exceeds “fully successful” criteria for all elements identified in the project grading rubric.

Instructional Methods
Instructional strategies may include presentations, group discussion, journaling, hands-on scientific inquiry, and independent exploration. 2016 curriculum and instruction emphasis will be on inquiry cycle format and methods.

Writing Style Requirements
Participants’ writing will reflect the clarity, conciseness and creativity expected of post-baccalaureate-certified educators.

Attendance and Make-up Policy
Students are expected to actively and collegially participate in all course sessions as a contributing member of a learning community. Attendance is required for the full course, including two pre-trip and two post-trip classroom sessions in Fairbanks. (Webinar/video-
teleconference for pre- and post-trip sessions only may be available for participants outside of the Fairbanks-North Star Borough.)

In case of illness or other extenuating circumstance, students should contact the instructor immediately to discuss potential alternatives for meeting the course participation requirement.

**Course Assignments, Assessment of Learning, and Grading System**

Course grading will be assigned on a Pass/No Pass basis. A final grade of 70% or higher is required for a grade of Pass. Assessment rubrics will be provided at the first course session and will include criteria for the following performance elements:

- **Participation and collegial support** 50% of final grade
  Participants are expected to engage in all course content and activities as a community of learners, actively and respectfully participating during all seminars and activities, including both indoor and outdoor sessions. A commitment to collegial sharing, collaboration, and support by participants, instructors, and support staff is a critical element of this course and comprises a significant portion of the final grade.

- **Final project** 40% of final grade
  Participants are expected to present and submit a final project consisting of a place-based, inquiry lesson plan with supporting materials. The lesson plan is to be based on course content, including experiences in Yukon-Charley; incorporate National Park Service resources and/or themes; align with designated national and state standards; and incorporate specific curriculum development models and considerations identified in the assignment description. Participants are encouraged to share their lesson plans and supporting materials with Fairbanks-based NPS educators and other educators in and external to the course.

- **Evaluation** 10% of final grade
  Participants are expected to complete pre- and post-course knowledge and attitude surveys and other course evaluations.

**Course Calendar/Schedule**

**Tuesday, June 28th, 6:00-9:00 p.m. and**
**Thursday, June 30th, 6:00-9:00 p.m.**

*Two classroom sessions (three hours each) at the Morris Thompson Cultural and Visitors Center (or via WebEx for participants outside of local commuting area) will include:*
• review of course schedule, logistics, goals, completion requirements, performance expectations, and grading criteria;
• pre-course survey against which to assess student learning and effectiveness of course content and structure;
• introduction to NPS mission, history, and scope; purpose and significance of Yukon-Charley Rivers National Preserve; and public lands and land management agencies in Alaska;
• basic outdoor safety and stewardship orientation, including bear awareness, resource stewardship principles, and recommended practices for self-care in remote settings;
• overview of curriculum and instruction topics to be emphasized throughout the course and incorporated into final projects; and
• introduction to natural and cultural history of Yukon-Charley Rivers National Preserve.

Tuesday, July 5th*
• Travel from Fairbanks to Eagle by commercial aircraft (time TBA)
• Travel by motor boat on Yukon River to Slaven’s Roadhouse / Coal Creek Camp
• Orientation to Coal Creek Camp facilities and protocols
• Evening field session: Weather and climate monitoring
  Ken Hill, Physical Scientist, National Park Service
  Arctic and Central Alaska Inventory and Monitoring Networks

Wednesday, July 6th*
• Field Sessions & presentations: Gold mining history and technologies
  Chris Allan, Historian, Ph.D., National Park Service
  Yukon-Charley Rivers National Preserve
  Gates of the Arctic National Park and Preserve
• Educational applications discussion and group work session
• Free time for independent exploration, socializing, project work, etc.

Thursday, July 7th*
• Morning field session: Stream monitoring and aquatic ecology
  Trey Simmons, Aquatic Ecologist, National Park Service
  Central Alaska Inventory and Monitoring Network
• Afternoon field session: Boreal forest natural history and plant adaptations
  David Swanson, Ecologist, National Park Service
  Arctic Inventory and Monitoring Network
• Free time for independent exploration, socializing, project work, etc.

Friday, July 8th*
• Morning field session: Vegetation and soils monitoring field work
David Swanson, Ecologist, National Park Service
Arctic Inventory and Monitoring Network

- Educational applications discussion and one-on-one project planning meetings with course instructor
- Free time for independent exploration, socializing, project work, etc.

**Friday, July 9th**
- Morning: Group choice activity or free time
- Travel from Coal Creek Camp to Fairbanks by commercial charter flight (time TBA)

*All on-site activities in Yukon-Charley are subject to change according to weather, staff availability, and other logistical constraints.*

**Tuesday, July 19th, 6:00 – 9:00 p.m. and Thursday, July 21st, 6:00-9:00 p.m.**

Two classroom sessions (three hours each) at the Morris Thompson Cultural and Visitors Center (or via WebEx for participants outside of local commuting area) will include:

- Review of course content and clarification of final project expectations;
- Project time including peer review, one-on-one consultation with instructor, and pair/group work;
- Final project presentations;
- Post-course questionnaire and UAF course evaluation;
- Summary of Fairbanks-based and other NPS education opportunities and youth programs; and
- Submission of final projects to instructor.
Course Policies:
Audit Policy
Auditors must complete written work.

ADA Policy
The University of Alaska Fairbanks is committed to providing equal access for students with disabilities. 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. We will work with the Office of Disabilities Services (203 WHIT, 474-7043) to provide reasonable accommodation to students with disabilities. If you have a physical or leaning disability, please advise us in writing of any special consideration necessary by the beginning of the class. We will do everything possible to accommodate you in accordance with the Americans with Disabilities Act.

Academic Dishonesty Policy
Academic integrity is a basic principle that requires all students to take credit only for the ideas and efforts that are their own. Cheating, plagiarism and other forms of academic dishonesty are defined as the submission of materials in assignments, exams or other academic work that is based on sources prohibited by the faculty member. Academic dishonesty is defined further in the “Student Code of Conduct.” In addition to any adverse academic action that may result from the academically dishonest behavior, the University specifically reserves the right to address and sanction the conduct involved through student judicial review procedures and the Academic Dispute Resolution Procedure specified in the University catalog.

Professional and Ethical Behavior
University of Alaska Fairbanks College of Education students are expected to abide by the State of Alaska Code of Ethics of the Education Profession and professional teaching standards as they concern students, the public and the profession. The standards, adopted by the Professional Teaching Practices Commission, govern all members of the teaching profession. A violation of the code of ethics and professional teaching standards are grounds for revocation or suspension of teaching certification.

Technology Integration
University of Alaska Fairbanks College of Education students are expected to (a) demonstrate sound understanding of technology operation and concepts; (b) plan and design effective learning environments and experiences supported by technology; (c) implement curriculum plans that include technology applications in methods and strategies to maximize student learning; (d) facilitate a variety of effective assessment and evaluation strategies; (e) use technology to enhance productivity and professional practice; and (f) understand the social, ethical and human issues surrounding use of technology in PreK-12 schools and apply those principles in practice.

Support Services
Student Support Services are available at UAF. The office is located at 512 Gruening Building and the phone number is 474-6844. You may also obtain additional information about support services at: http://www.uaf.edu/sssp/.
Supplemental materials

No textbooks are required. Instructors will assign and/or suggest more specific reference materials throughout the course and will provide access to all required reading materials. The following electronic and print reference materials are provided for those students who wish to pursue additional, optional research related to the course content.

Electronic resources

Yukon-Charley Rivers National Preserve Website (www.nps.gov/yuch):
  Learn About the Park
    Significant Values of Yukon-Charley Rivers
      Nature
      Animals
      Plants
    Environmental Factors: Fire Regime
    Natural Features and Ecosystems: Geologic Formations, Permafrost
  History & Culture: People, Places, Stories
Central Alaska Inventory & Monitoring Network web site (science.nature.nps.gov/im/units/cakn/index.cfm)

Print resources


**Indicated publications are available free of charge at the National Park Service Fairbanks Administrative Center, 4175 Geist Rd., Fairbanks, AK. Contact the instructor for assistance obtaining these materials.**