

FORMAT 1

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).

See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete description of the rules governing

4xx / 8xx

XX XX

curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department

Biology and Wildlife

College/School

CNSM

Prepared by

Donald A. Walker

Phone

X2460

commitments (e.g. those enrolled in the Wildlife Department with summer internships or jobs). Also we will list both courses as University of the Arctic offerings and want to give the students the option of taking either the lecture or the field component (preferably both).

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

12. COURSE REPEATABILITY:

Is this course repeatable for credit?

YES

☐

NO

X

21. POSITIVE AND NEGATIVE IMPACTS

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

This lecture course is part of 3-course curriculum for arctic vegetation science (see cover letter). These courses are much needed. Previously only one 2-hour course was offered in Vegetation Description and Analysis (BIOL 475). A much needed aspect of training students in vegetation science is extensive field experience. Getting students out and observing the plants and vegetation patterns in Nature cannot be

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE COMMANDANT

**Preliminary Syllabus for NEW COURSE,
BIOL 461^{xx} / 661^{xx}, Arctic Plants and Vegetation Ecology: Lecture
Spring 2013**

1. Course information

Title: Special Topic: Arctic Vegetation Ecology: Lecture

Number: BIOL 461 / 661

Credits: 2

Prerequisites: BIOL 115 & 116, Introduction to Plant Biology (BIOL 239) or Principles

Meeting time: TBA

2. Instructor and contact information

Prof. D.A. (Skip) Walker, Alaska Geobotany Center, University of Alaska Fairbanks,

Office hours: Arctic Health Building, Room 254, X 2460, dawalker@alaska.edu.

Generally available, call before coming.

3. Course readings /materials

Numerous papers will be read and are in the assignments listed in the course calendar and will be posted on line at <http://www.geobotany.uaf.edu>. These three references provide a

adaptations, and succession patterns.

2. Snow Ecology component: Two lectures plus a Saturday excursion to Eagle Summit to examine the alpine system in winter conditions. The course will

subnival environments, and the effects of topography and snow distribution patterns on plant habitat distribution.

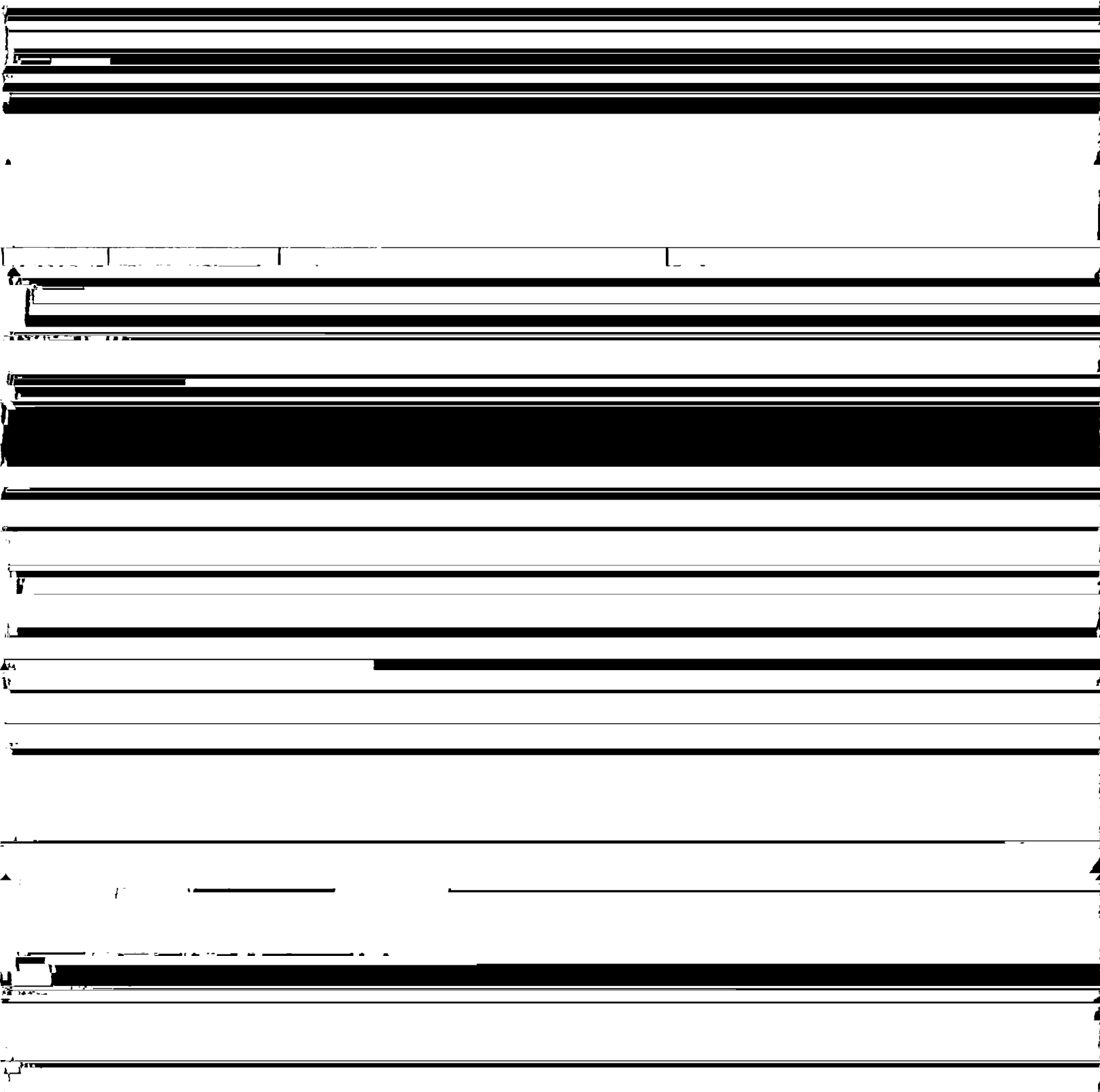
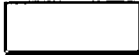
3. Arctic plant identification component: Seven lectures and seven labs. 160 of the most common Arctic species in Alaska, including trees, shrubs, dwarf shrubs, grasses, sedges, rushes, bryophytes, and lichens. Students will be tested on their

Oral presentations:

At the end of the lecture series (Lesson 16-17), students will present 10-minute oral

proceeding critique for the oral presentations

			Biogeosciences. 113:G03S01. 2. Walker, D.A., Kuss, P., Epstein, H.E., Kade, A.N., Vonlanthen, C.M., Raynolds, M.K. Daniels, F.J.A. 2011 in press, Vegetation and patterned-ground relationships along the Arctic bioclimate gradient in North America. Applied Vegetation Science.
8-9	Feb 14, 16	Cumulative effects of oil development on Arctic ecosystems	1. NRC, Orians, G., Albert, T., et al. 2003. Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope. National Academies Press. Washington, D.C.: pp: 288. 2. Walker, D.A., Forbes, B.C., Leibman, M.C. et al. 2011. Cumulative effects of



	May 7-10	Plant identification exam	Graduate student papers due May 10
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8. Course policies:

Academic integrity:

Plagiarism and cheating will not be tolerated. Plagiarism is presenting another's work as new or original without citing your source. For additional detail, see

10. Support Services:

Students are encouraged to contact the instructor with any questions regarding the

lecture or the assignments. I will be happy to review the assignments with you.

September 10, 2011

To: UAF Faculty Senate, Curriculum Review Committee

From: Skip Walker, Department of Biology of Wildlife

Re: New and revised courses for an Arctic Vegetation Science curriculum

During my recent Fulbright sabbatical year I was inspired by the vegetation science

courses being taught by Prof. Miles Chetwood and his colleagues in the Botany and Zoology

NOTES:

- a. In 2013 and even numbered years thereafter, the Arctic Plants and Vegetation Ecology course will be an alternative to satisfy a botany requirement of the Wildlife Biology and Conservation program. Currently BIOL 221 taught

every year by Steffi Ickert-Bond, meets this requirement, but in 2013, Steffi will be on sabbatical, and in even numbered years thereafter she will teach a ~~different course~~ The Arctic Plants and Vegetation Ecology LECTURE

course will be offered as an alternative.

- b. The courses will also be listed as University of the Arctic courses, with possible participation by foreign students interested in Arctic ecosystems.