



UNIVERSITY  
of ALASKA

Crystal Frank <cafrank@alaska.edu>

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## Curriculum Approved and Signature pages

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Linda Curda <lcurda@alaska.edu>

Mon, Oct 3, 2011 at 10:37 AM

To: Pete Pinney <pppinney@alaska.edu>, Crystal Frank <cafrank@alaska.edu>, Jennifer Carroll <jlcarroll@alaska.edu>, "Steven R. Becker, CEP" <srbecker@alaska.edu>, Diane Erickson <dmerickson@alaska.edu>, Cynthia Hardy <clhardy@alaska.edu>, Christa Bartlett <clbartlett@alaska.edu>, Cathleen Winfree <cmwinfree@alaska.edu>

The following Curriculum materials are approved by the CRCD Academic Council.

CTT - AAS Format 5

CTT 250 - Format 1 and syllabus

DEVS 105 - Format 2 and syllabus

HLTH 207 - Format 2A

TM 140 - Format 1 and syllabus

TM 141 - Format 1 and syllabus

TM 142 - Format 1 and syllabus

Please see attached signature pages - some of these pages need Dept Chair/Program Head signatures before going to the Dean.

If you have any questions, please contact me.

Thank you.

Linda Curda, CRCD Academic Council Chair

786-1630



Linda's Curric.scan.pdf

8225K

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Revision 9/29/11  
CF

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 curriculum & course changes.

**TRIAL COURSE OR NEW COURSE PROPOSAL**

**SUBMITTED BY:**

Department	<b>Indigenous, Community, &amp; Tribal Programs</b>	College/School	<b>CRCD</b>
Prepared by	<b>Steve Becker, CEP</b>	Phone	<b>907-474-5096</b>
Email Contact	<b><a href="mailto:srbecker@alaska.edu">srbecker@alaska.edu</a></b>	Faculty Contact	<b>Steve Becker, CEP</b>

**1. ACTION DESIRED**  
(CHECK ONE): Trial Course  New Course

**2. COURSE IDENTIFICATION:** Dept  Course #  No. of Credits

Justify upper/lower division status & number of credits: **Introductory level survey course. Requires basic computer literacy. No prior GIS or GPS experience required.**

**3. PROPOSED COURSE TITLE:**

**4. To be CROSS LISTED?** YES/NO  If yes, Dept:  Course #   
(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

**5. To be STACKED?** YES/NO  If yes, Dept:  Course #

**6. FREQUENCY OF OFFERING:**   
Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants

**7. SEMESTER & YEAR OF FIRST OFFERING** (if approved)

**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:**  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):**

**TM F140 Introduction to Geospatial Data (1+0)** An introductory survey of tools for the gathering and mapping of both qualitative and quantitative geospatial data for the natural and social sciences. Students will get direct experience with basic tools and techniques for gathering geospatial data, and will incorporate their data into an existing geospatial database. Prerequisites: Basic computer literacy equivalent to CIOS 100 or permission of instructor.

**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**   
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

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

**18. ESTIMATED IMPACT**

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

**Course would be taught by current TM faculty or approved adjunct instructors. Costs associated with offering the course (student books, educational software licenses, instructor travel & shipping of mobile GIS lab) would be recovered through tuition and the proposed course fee.**

**19. LIBRARY COLLECTIONS**

Have you contacted the library collection development officer ([kljensen@alaska.edu](mailto: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  **In previous consultation, CDO indicated further consultation was not required for courses that do not utilize library resources.**

**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)

**CRCD Department of Indigenous, Community, and Tribal Programs, Tribal Management Program. Also may be offered to Early College students at the Effie Kokrine Charter School. Course and course content has been coordinated with Dr. Dave Verbyla in the UAF SNRAS Department of Geography, who teaches upper division courses in GIS and remote sensing.**

**21. POSITIVE AND NEGATIVE IMPACTS**

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

Course is likely to increase student enrollment in other Tribal Management courses and the Tribal Management Program. By offering this training in rural Alaska, this and associated courses may encourage additional students to continue GIS training provided by the UAF SNRAS Department of Geography.

**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.


**Introductory training in Geographic Information Systems (GIS) has been repeatedly requested by Tribal and municipal governments in rural Alaska. Tribal governments get ESRI ArcGIS software free of charge through a distribution agreement between ESRI and the Bureau of Indian Affairs (BIA). Many Tribal governments in rural Alaska have received the software through this agreement, but few have staff capable of operating the software. Although free training is offered to Tribes through the BIA, this training occurs in the Lower 48 (at high travel costs) and is not tailored to topics and conditions in rural Alaska. Training opportunities in GIS through the private sector is limited and expensive, and most Tribes cannot afford the time or expense to send staff to UAF to take semester-based courses in GIS.**


**This course is intended to be the first in a series of on-site GIS courses targeting projects and applications in rural Alaska. These courses are not intended as a substitute for the GIS courses offered through the UAF SNRAS Department of Geography, but rather to complement them by providing lower division, skills-based technical training for students in rural Alaska. TM students who desire professional-level training would be advised to continue study within UAF SNRAS.**

**APPROVALS:**

*Note: See attached email from Jennie Carroll, 10/3/11 CF*

 	Date	 
Signature, Chair, Program/Department of:	 	

	Date	10/2/11
Signature, Chair, College/School Curriculum Council for:	CRCD	

	Date	10/3/11
Signature, Dean, College/School of:	CRCD	

 	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	 	



Crystal Frank <cafrank@alaska.edu>

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## Signature status for Format 1 TM 140 & 141

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Jennifer Carroll <jlcarroll@alaska.edu>

Mon, Oct 3, 2011 at 2:26 PM

To: Crystal Frank <cafrank@alaska.edu>

Hi Crystal, yes, I approve both TM 140 and TM 141. If you need re-sign I can print them out here. Otherwise just go ahead and use the e-mail to document my approval. Thanks, Jennie

Jennifer Carroll  
Department Chair, Indigenous, Community and Tribal Programs  
Interior-Aleutians Campus

[Quoted text hidden]

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

	Date	
Signature, Chair, Program/Department of:		
	Date	
Signature, Chair, College/School Curriculum Council for:		
	Date	
Signature, Dean, College/School of:		

**UNIVERSITY OF ALASKA FAIRBANKS**  
**College of Rural and Community Development**  
**Department of Indigenous, Community, and Tribal Programs**  
**Tribal Management Program**  
Interior – Aleutians Campus  
Harper Building, P.O. Box 756720 Fairbanks, Alaska 99775-6720

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**Tribal Management – TM 140**  
**Introduction to Geospatial Data**

1 cr. (1+0)

**SEMESTER 20XX** Course Syllabus

**Course Meeting Times and Location:**

**DATES, 20XX**

Monday – Wednesday, 9:00 AM – 4:00 PM

**VENUE, VILLAGE**, Alaska

**Prerequisites:** Basic computer literacy equivalent to CIOS 100 or permission of instructor.

**Instructor:** Steve Becker, CEP

Assistant Professor of Tribal Management (Natural Resources & GIS)

122 Harper Building, Fairbanks, Alaska 99775-6720

907-474-5096 (office) \* 888-846-2422 (toll free) \* 907-474-5208 (fax)

[steve.becker@alaska.edu](mailto:steve.becker@alaska.edu)

**Office Hours:** The instructor will also be available for ½ hour before and after each session in order to answer questions and review work on an individual basis.

**Text:** Introduction to Geospatial Data course pack, latest edition (provided by instructor)

Garmin Oregon 500t Owner's Manual (provided by instructor)

ArcGIS Educational/Evaluation License (provided by instructor)

ANKN. 2000. *Guidelines for Respecting Cultural Knowledge*. Alaska Native Knowledge Network.

Available for download at <http://ankn.uaf.edu/publications/knowledge.html>

**Course Description:** An introductory survey of tools for the gathering and mapping of both qualitative and quantitative geospatial data for the natural and social sciences. Students will get direct experience with basic tools and techniques for gathering geospatial data, and will incorporate their data into an existing geospatial database.

**Course Goals:** Students will be introduced to basic field methods for the collection of quantitative and qualitative geospatial data, and will discuss the relative merits and limitations of each. Students will gain hands-on experience in collecting geospatial data and incorporating them into an existing geospatial database. This course is intended to provide a brief introduction to the capabilities of Geographic Information System (GIS) and Global Positioning System (GPS) technologies in community research. As part of the course, students will receive a 1-year Educational/Evaluation License for ArcGIS software to continue practicing skills obtained in the course.

**TM 140: Introduction to Geospatial Data**  
**SEMESTER 20XX Syllabus**

**Student Learning Outcomes:**

On completion of the course the student should be able to:

<b>Students will be able to:</b>	<b>Evaluated by:</b>
1. Identify qualitative and quantitative data.	Group Discussions, Homework #1
2. Present the merits, assumptions, and limitations of different data types.	Group Discussions, Homework #1
3. Define some of the common terms and jargon used in working with geospatial data	Group Discussions, Homework #2
4. Determine the appropriate tools for gathering different types of data.	Group Discussions, Homework #3
5. Demonstrate the use of data gathering tools in the field.	Group Discussions, Homework #4
6. Gather, compile, and prepare data for entry into format for input into geospatial database.	Homework #5, Applied Group Project
7. Input environmental data into an existing geospatial database	Applied Group Project
8. Prepare and present data graphically and geospatially.	Applied Group Project

**Instructional Methods:** Instructional methods will include readings, lecture, group discussions, hands-on exercises using Geographic Information System (GIS) software, and homework conducted primarily in a field setting.

**Course Policies:** Attendance will be taken at the beginning of each class session. Students should arrive early so that class may begin promptly. Active participation in group discussions is expected. Homework assigned is due at the beginning of the class period indicated. Late homework will not be accepted, however exceptions may be made for medical or family emergencies.

**Evaluation and Grading:** This is a letter grade course. Grades will be assigned based on the percentage of the total points possible that a student earned for the course in accordance with the following:

<b>% of Total</b>	<b>Grade</b>
100 – 90	A
89 – 80	B
79 – 70	C
69 – 60	D
< 60	F

Total points possible for the course will be assigned and weighted based on the following:

*Participation (10%):* Group discussions, in-class exercises, the applied group project, and overall class dynamics are an essential part of the learning experience for this course. Students are expected to actively participate in group discussions, exercises, and project in a variety of roles.

*Homework (30%):* Five (5) homework activities will be assigned. These activities are designed to reinforce key points from the course, and will be on the following topics:

- Homework #1: Types of Data
- Homework #2: Definitions and Jargon
- Homework #3: Appropriate Tools for Different Data
- Homework #4: Collection of Field Data
- Homework #5: Compile Field Data for Data Entry



## TM 140: Introduction to Geospatial Data SEMESTER 20XX Syllabus

*In-Class Exercises (30%):* A series of exercises will be conducted during class sessions. The intent of these exercises is to familiarize the student with tools for the collection of geospatial data and the basic use of Geographic Information System (GIS) software.

*Applied Group Project (30%):* As a group project, students will input the data collected during the field laboratory activities into an existing geospatial database, and will prepare and present a summary report of the data in both graphic and geospatial formats.

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TOTAL = 100%

**Student Support Services:** The instructor is available upon appointment for additional assistance outside session hours, and will assist in connecting students with on-campus and off-campus support resources as needed.

The University has many student support programs. If you need assistance please contact any of the following service programs or departments.

UAOnline: <http://uaonline.alaska.edu/>

UAOnline is your resource for transcripts, accounts and other personal information.

Rural Student Services: <http://www.uaf.edu/ruralss/>

Rural Student Services (RSS) is an academic advising department with over 35 years of experience in working with students from all over the state of Alaska. They assist students in achieving student success by linking them to current information pertinent to their education, lifestyle, and goals. RSS is known for its welcoming and friendly environment. They assist students with:

- Academic Requirements
- Registration for Classes
- Finding Financial Aid
- Explaining Housing Options
- Declaring a Major
- Career Exploration

You can contact RSS by mail at: P.O. Box 756320, Fairbanks, AK 99775-6320, by phone at 1-888-478-1452 (Toll Free within Alaska) or (907) 474-7871, or by email at [fyrss@uaf.edu](mailto:fyrss@uaf.edu)

### Math Hot Line

Contact UAF's toll-free Math Hotline for problem solving and math help. Call 866-823-6284 (1-866-UAF-MATH) during fall and spring semesters.

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

The Writing Center is a student-staffed, student-oriented service of the English Department.

801 Gruening Bldg., P.O. Box 755720  
Fairbanks, Alaska 99775-5720  
Phone: (907) 474-5314  
Fax: 1-800-478-5246

The UAF Writing Center and Computer Lab offers free writing tutoring to any student in any subject via telephone and fax or over the Internet. Students can call 907-474-5314 for information on how to fax a paper and have it tutored over the telephone, or engage in an interactive Internet session. Both services are free.

Library Services for Off Campus Students: <http://library.uaf.edu/offcampus>

Off-Campus Library Services is a unit set up to serve rural UAF students and faculty who do not have access to appropriate information resources in their town or village. We work in support of The College of Rural &

**TM 140: Introduction to Geospatial Data**  
**SEMESTER 20XX Syllabus**

Community Development and The Center for Distance Education and Independent Learning. We can supply your information needs for the courses you are taking. For example, if a research paper is required in the teleconference or correspondence course that you are taking, you can contact us, explain your information need, and we will send library materials to you so that you can write your paper. Contact us at:

Off-Campus Services, Elmer E. Rasmuson Library  
310 Tanana Loop, PO Box 756800  
Fairbanks, Alaska USA 99775-6800  
Phone: 1-800-478-5348  
Email: [fyddl@uaf.edu](mailto:fyddl@uaf.edu)

For more off campus help go to:

[http://www.uaf.edu/library/instruction/ls101/other/Distance\\_Resources.html](http://www.uaf.edu/library/instruction/ls101/other/Distance_Resources.html)

**Disability Services:** The UAF 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. Your instructor will work with the Office of Disability Services (203 WHIT, 907-474-7043) to provide reasonable accommodation to students with disabilities.

UAF Disability Services for Distance Students

- a) UAF has a Disability Services office that operates in conjunction with the College of Rural Alaska (CRA) campuses and UAF Center for Distance Education (CDE). Disability Services, a part of UAF Center for Health and Counseling, provides academic accommodations to enrolled students who are identified as being eligible for these services.
- b) If you believe you are eligible, please visit <http://www.uaf.edu/chc/disability.html> on the web or contact a student affairs staff person at your nearest local campus. You can also contact Disability Services on the Fairbanks Campus at (907) 474-7043, [fydso@uaf.edu](mailto:fydso@uaf.edu)

**UNIVERSITY OF ALASKA FAIRBANKS**  
**College of Rural and Community Development**  
**Department of Indigenous, Community, and Tribal Programs**  
**Tribal Management Program**  
 Interior – Aleutians Campus  
 Harper Building, P.O. Box 756720 Fairbanks, Alaska 99775-6720

**TM 140 – Introduction to Geospatial Data**  
**SEMESTER 20XX Course Schedule**

Date	Reading	Chapter/Topic	Exercises	Assignment
Day 1	<ul style="list-style-type: none"> <li>GPS Owner's Manual ANKN 2000</li> </ul>	<ul style="list-style-type: none"> <li>Introduction and Syllabus Review</li> <li>What is Geospatial Data?</li> <li>Basics of Geolocation and GPS</li> <li>LUNCH 12:00 – 1:00</li> <li>Other Common Data Gathering Tools</li> <li>The Importance of Protocols and Procedures</li> <li>Cultural and Intellectual Property Rights</li> </ul>	<ul style="list-style-type: none"> <li>GPS Operation Exercise</li> <li>Use of Other Common Data Gathering Tools</li> </ul>	<ul style="list-style-type: none"> <li>Homework #1: Types of Data</li> <li>Homework #2: Definitions and Jargon</li> <li>Homework #3: Appropriate Tools for Different Data Types</li> <li>Homework #4: Collect Field &amp; Geospatial Data</li> </ul>
Day 2	<ul style="list-style-type: none"> <li>TM 140 Course Pack</li> </ul>	<ul style="list-style-type: none"> <li>Introduction to Geographic Information Systems (GIS)</li> <li>Working with Geospatial Data</li> <li>LUNCH 12:00 – 1:00</li> <li>Working with Geospatial Data (cont'd)</li> <li>Transfer of Field Data into GIS</li> </ul>	<ul style="list-style-type: none"> <li>Basic GIS Navigation, Toolbars, &amp; Commands</li> <li>Locating Pre-existing Data</li> <li>Adding, Modifying, and Deleting Layers</li> <li>Importing Generated Data</li> <li>Creating New Layers from Generated Data</li> </ul>	<ul style="list-style-type: none"> <li>Homework #4 Continued</li> <li>Homework #5: Compile and Enter Field Data</li> </ul>
Day 3	<ul style="list-style-type: none"> <li>TM 140 Course Pack</li> </ul>	<ul style="list-style-type: none"> <li>Techniques for Presenting Geospatial Data</li> <li>Finalize Group Projects</li> <li>LUNCH 12:00 – 1:00</li> <li>Finalize Group Projects (cont'd)</li> <li>Group Presentations to Elders and Instructors</li> </ul>	<ul style="list-style-type: none"> <li>Templates and Layouts</li> <li>North Arrows, Scale Bars, and Legends</li> </ul>	<ul style="list-style-type: none"> <li>Applied Group Projects &amp; Presentation Due</li> </ul>