



Curriculum Proposal

Withdrawn

(new original)

456

Please type or select the requested information. Print completed forms, add appropriate paper attachments, and route through MSU's curricular process for recommendations and decisions.

		(Check all that apply):		Proposal #	46
College:	Social and Behavioral Sciences	<input checked="" type="checkbox"/>	Undergraduate	Effective Date of Change:	
Department:	Geography	<input checked="" type="checkbox"/>	Graduate ✓	Academic Year	06-07
Program:			CIP #	(For Office Use Only)	
Type of Change	COURSE PROPOSALS			Course Designator	Number of
Proposed:	Change in Title			and Number	Credits
Title Current:	ADVANCED REMOTE SENSING			GEOG 458/558	4
Title Proposed:	REMOTE SENSING OF THE ENVIRONMENT				
24-Char. Abbrev:				(if applicable)	

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):

This course provides undergraduate and graduate students the opportunity to develop further knowledge of remote sensing. Emphasis will be placed on advanced theories and techniques of remote sensing for digital image processing and environmental analysis.

Rationale or Justification for change:

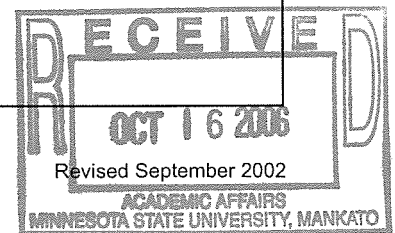
This course is focused on environmental analysis using remote sensing. Therefore, use of the name "Remote Sensing of the Environment" will be more appropriate.

*****For General Education or Cultural Diversity Courses Only*****

General Education Course:		Cultural Diversity Course:
GE Category #	GE Category Name (Maximum of 3 Categories)	(Please check one.)
N/A		<input type="checkbox"/> Core (At least 75% devoted to topics of race, gender, sexual orientation, age, class, and disabilities as they occur in United States Society.)
N/A		<input type="checkbox"/> Related (At least 25% devoted to the above topics or to a global perspective on topics related to African American, Asian, Hispanic, and Native American inhabitants of the United States.)
N/A		
<p>? For Writing Intensive Courses, attach a description of the kind and quantity of writing.</p> <p>? For Upper Division Courses, include a description of the respects in which it is broad and general rather than narrow and specific, and so suitable as GE.</p> <p>Attach paper copies of the following:</p> <p>a. Syllabus or course outline.</p> <p>b. Course's student learning outcomes associated with each GE competency or CD designation.</p> <p>c. List of strategies to be used to assess students' achievement of each GE competency or CD designation.</p>		

*****For New Courses*****

(Check all that apply):	Instructional Type: <input type="text" value="Lecture"/>	Course will be offered:
<input type="checkbox"/> Course is an elective.	Grading Format: <input type="checkbox"/> Grade <input type="checkbox"/> P/N	<input type="checkbox"/> Fall Semester
<input type="checkbox"/> Course is required for program		<input type="checkbox"/> Spring Semester
<input type="checkbox"/> Pre- or Co-requisites:		<input type="checkbox"/> Summer Session
<input type="checkbox"/> Other courses are being changed or eliminated. (Explain.)		
<input type="checkbox"/> Course content or title is similar to courses in other departments. (Attach copy of letter of agreement with other program(s) contacted. Indicate the nature of the discussions and/or resolution of differences or potential conflicts.)		
Attach paper copies of the following:		
a. Syllabus or course outline.		
b. Course's student learning outcomes.		
c. A list of resources required to offer and support this course.		
d. A description of how teaching this course will affect department staffing.		
e. If 400/500 level course, an explanation of added expectations of graduate students.		





Minnesota State University, Mankato
Curriculum Proposal

Signature Page

Department
 Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)
 _____ Department Chair _____ Date 2 May 2006

Comments: Name change only - will better reflect course content.

College Curriculum Committee
 Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)
 _____ Committee Chair _____ Date 9-27-06

Comments: Pending receipt of new first pg. specifying under 'Type of Change' and 'Proposed'.

College Dean
 Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)
 _____ Dean _____ Date 10/12/06

Comments: * would like more information about the course. Thanks.

General Education Subcommittee
 Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)
 _____ General Education Subcommittee Chair _____ Date

Comments:

Undergraduate Curriculum and Academic Policy Committee
 Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)
 _____ UCAP Faculty Chair _____ Date

Comments:

Faculty Association Graduate Committee
 Recommended
 Not Recommended
 _____ Faculty Association Graduate Chair _____ Date

Comments:

Graduate Dean
 Recommended
 Not Recommended
 _____ Graduate Dean _____ Date

Comments:

Academic Affairs Council
 Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)
 _____ Assistant Vice President _____ Date

Comments:

Senior Vice President and Vice President for Academic Affairs
 Approved (Category/ies _____)
 Not Approved (Category/ies _____)
 _____ Sr. Vice President / Vice Pres. Academic Affairs _____ Date

Comments:

Advanced Remote Sensing

GEOG 475/575, Fall 2006
Department of Geography
Minnesota State University – Mankato

Instructor: Fei Yuan, Department of Geography

Office & Office hour: AH 7F (M, 2:00 – 3:00p.m.; T, Th 10:30 – 11:30 a.m. or by appointment)

Email & Phone: fei.yuan@mnsu.edu (2376)

Lecture & Lab: 1:00-2:40 p.m.

Place: AH 11

Prerequisite:

GEOG 474/574: Introduction to Remote Sensing

Credit: 4

Course Objectives and Description:

This course provides senior undergraduate or graduate students the opportunity to develop further knowledge of remote sensing. Emphasis will be placed on advanced theories and techniques of remote sensing for digital image processing and environmental analysis. Examples of remote sensing applications will be presented along with methods. After completing this course, students will be familiar with advanced digital image processing techniques and be able to conduct research and communicate findings.

Required Textbook:

“Introductory Digital Image Processing”, 3/E, John R Jensen, © 2004 / 0-13-145361-0 / Prentice Hall

Other reference:

R. A. Schowengerdt, *Remote Sensing - Models and Methods for Image Processing*, Academic Press, 1997

Readings:

Additional reading will be assigned on topic issues

Remote Sensing Journals:

Remote Sensing of Environment
Photogrammetric Engineering and Remote Sensing
Canadian Journal of Remote Sensing
International Journal of Remote Sensing

Evaluation and Grading:

<u>Component</u>	<u>Points</u>
Midterm Exam I	20%
Final Exam	25%
Labs and Assignments	25%
Final project:	30%
- Presentation	
- Paper	

Grades of exercises are based on academic merit of the student's answers to the questions. Students are expected to turn in their assignments on time. **No late assignment.**

Class attendance and participation are required, and roll call will be taken. Additionally, students' involvements (question answering, critical thinking, problem discussion and presentation) in the class are encouraged and considered in the final grade.

A fixed grading scale (90%-A; 80%-B; 70%-C; 60%-D) will be used. However, in some cases, for example, the exam average is too high or too low; a flexible scale might be utilized to stretch the distribution of grades.

Course Policies:

Academic misconduct

Students are expected to do their own homework and exams. Students should refer to the Student Handbook for information on definitions of academic misconduct and relevant procedures.

Diversity and collegiality

Every class is influenced by the fact that students come from diverse ethnic and cultural backgrounds and hold different values. Across the course topics, the instructors encourage active and lively discussions.

Students with disability

Students with disability are encouraged to use university disability service for professional help.

Course Calendar: (Tentative)

<i>Week</i>		<i>Topic</i>	<i>Reading</i>
1	8.29/31	Course introduction; Overview of quantitative remote sensing Digital image processing; Image quality assessment and statistical evaluation	Ch. 1 - 4
2	9.5/7	Atmospheric characteristics and correction	Ch.6
3	9.12/14	Geometric correction; BRDF correction	Ch. 7
4	9.19/21	PCA, TCA, VI	Ch. 8
5	9.26/28	Contrast enhancement; spatial convolution	Ch. 8
6	10.3/5	MNGIS/LIS Conference (No class)	
7	10.10/12	Resolution Merge; Fourier transformation	Ch. 8
8	10.17/19	Midterm/Midterm answer	
9	10.24/26	Pattern recognition; Advanced techniques for information extraction	Ch. 9
10	10.31/11 .2	Digital change analysis; accuracy assessment	Ch. 12,13
11	11.7/9	Hyperspectral image analysis	Ch. 11
12	11.14/16	Scientific visualization, virtual GIS and remote sensing	Ch. 5
13	11.21/23	Biophysical quantification (No Thursday class – Thanksgiving)	Paper readings
14	11.28/30	Advanced applications; Remote sensing: frontiers and future	Paper readings
15	12.5/7	Final Review; Project presentation	
December 14, Wednesday, 12: 30 – 2:30 p.m., Final exam (Applies to Oct. 24 to Dec. 7)			

Cronn-Mills, Daniel

From: Schirmer, Ronald C
Sent: Thursday, October 26, 2006 5:02 PM
To: Cronn-Mills, Daniel
Subject: FW: Withdrawal of GEOG Curriculum Proposal

Show to
Kim

Hey Dan,

See below. I formally withdraw the proposal.

Thanks!

Ron.

Ronald C. Schirmer, Ph.D.
Assistant Professor
Department of Anthropology
358 Trafton Science Center, North
Minnesota State University, Mankato
Mankato, MN 56001

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507.389.1919 (Lab)
507.389.6504 (Dept Office)
507.389.6769 (Fax)

"Wovon man nicht sprechen kann, darüber muss man schweigen." Wittgenstein

From: Miller, Cynthia A
Sent: Thu 10/26/2006 11:46 AM
To: Schirmer, Ronald C
Cc: Black-Hughes, Christine
Subject: Withdrawal of GEOG Curriculum Proposal

Hi, Ron: Our department formalized the decision yesterday to withdraw the GEOG 458/558 Change in Course Title curriculum proposal ("~~Advanced Remote Sensing~~" to "~~Remote Sensing of the Environment~~") – it was originally CSBS tracking #456 and now appears as #46 on the UCAP tracking page. We now want to keep its existing title intact.

Please "kill" it when comes up in the UCAP discussion. Let me know if you need anything else from us.

Thanks very much,
Cindy

