Request for CHANGING an Existing Course

Department: Geography and Anthropology
College: Humanities and Social Sciences

Course Rubric and #: ANTH 4024

Date: 1/26/2017

Present Course Description

Title: Aerial Photo Interpretation and Image Processing

Semester Hours of Credit: 3

If lecture/lab, # hrs. of credit for lecture: 2 lab: 2

Repeat Credit Max (if repeatable): ______________

Graduate Credit? Yes: x No: __________

Credit will not be given for this course and: __________

Contact Hours Per Week (from ACM): 4

LEC 2 LAB 2 SEM RES/IND CLIN/PRACT

Total Weekly Contact Hours: 4

Grading System: Letter Grade _x_ Pass/Fail

Course Description:

Include course number, title, etc., exactly as it appears in the General Catalog

4020 Aerial Photo Interpretation and Image Processing (3)
See Geog 4020.

Proposed Course Description

Title: Aerial Photo Interpretation and Image Processing

Short Title: A IR P H O T O

Semester Hours of Credit: 3

If lecture/lab, # hrs. of credit for lecture: 3 lab: __________

Repeat Credit Max (if repeatable): __________

Graduate Credit? Yes: x No: __________

Credit will not be given for this course and: __________

Contact Hours Per Week: 3

LEC 3 LAB _ SEM _ RES/IND _ CLIN/PRACT

Total Weekly Contact Hours: 3

Grading System: Letter Grade _x_ Pass/Fail

Course Description:

Include course number, title, etc., exactly as it appears in the General Catalog

4020 Aerial Photo Interpretation and Image Processing (3)
See Geog 4020.

THese QUESTIONS MUST BE ANSWERED COMPLETELY AND ACCURATELY OR PROPOSAL WILL BE RETURNED:

Has this change been discussed with and approved by all departments/colleges affected? Yes (X) No ( ) N/A ( )

Is this course included in any curricula, concentrations, or minors? Yes (X) No ( ) If yes, please list on a separate sheet.

Is this course a prerequisite or corerequisite for other courses? Yes ( ) No (X) If yes, list courses; use separate sheet.

Is this course on the General Education list? Yes ( ) No (X)

JUSTIFICATION/EXPLANATION: Use separate sheet.

Note: IF COURSE IS OR WILL BE CROSS-LISTED, SEPARATE FORMS MUST BE SUBMITTED BY EACH DEPARTMENT.

APPROVALS:

Department Faculty Approval Date: Jan 13, 2017

Department Chair’s Signature: (Date) 6/13/17

College Faculty Approval Date: 2-15-17

College Dean’s Signature: (Date) 6/26/17

Graduate Dean’s Signature: (Date) 9/17/17

Chair, FS C & C Committee (Date) 1/5/18

Academic Affairs Approval (Date)
Justification:

This course is being changed from a format of two laboratory hours and two lecture hours to a format of three lecture hours. This format change is a response to low enrollments that have persisted for several years. The current format only allows the course to be scheduled in late afternoon MW or TTh. The new format will allow the course to be scheduled during prime hours and potentially attract more students. Further, student comments indicate dissatisfaction with a requirement of four contact hours for a course that provides three credit hours. The change will alleviate this situation. Finally, the laboratory period is comprised of in-class assignments that are conducted under the direction of the instructor. Similar activities are conducted in many courses without the laboratory designation.

Curricula, Concentrations, and Minors:

This course is an elective option for the following:

GEOG BS
GEOG BS (Disaster Science and Management concentration)
GEOG BS (Geographic Information Science concentration)
GEOG BA
GEOG BA (Disaster Science and Management concentration)
GEOG BA (Geographic Information Science concentration)
GEOG Geographic Information Systems minor
GEOG Geography minor
# Request for Changing an Existing Course

**Present Course Description**

<table>
<thead>
<tr>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Semester Hours of Credit</td>
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<tr>
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<td>Lecture:</td>
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<td>Repeat Credit Max. (if repeatable):</td>
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<tr>
<td>Graduate Credit?</td>
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Credit will not be given for this course and: ANTH4024

Contact Hours Per Week: (Indicate hours in appropriate course type.)

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<tr>
<th>Lecture</th>
<th>Lab</th>
<th>Seminar</th>
<th>Recitation</th>
<th>Intern</th>
<th>Res/Ind</th>
<th>Clin/Prac</th>
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Total Weekly Contact Hours: 3

Grading System: Letter Grade | Pass/Fail

**Proposed Course Description**

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Total Weekly Contact Hours: 3

Grading System: Letter Grade | Pass/Fail

Course Description:

GEOG 4020 Aerial Photo Interpretation and Image Processing (3)

Prereq.: consent of instructor. Credit will not be given for both this course and ANTH 4024. 2 hrs. lecture; 2 hrs. lab. Analysis and mapping of geological features, hydrological process, land forms, cultural features, natural resource, and environmental phenomena from aerial photographs and satellite images.

These questions must be answered completely and accurately or proposal will be returned.

Has this change been discussed with and approved by all departments/colleges affected? Yes _ No _ N/A _ X _

Is this course included in any curricula, concentrations, or minors? Yes _ No _ If yes, please list on a separate sheet.

Is this course a prerequisite or corequisite for other courses? Yes _ No _ If yes, list courses; use separate sheet.

Is this course on the General Education list? Yes _ No _

Justification/Explanation: Use separate sheet.

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## Approvals

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<tr>
<td>Graduate Dean Signature</td>
<td>3/10/17</td>
</tr>
<tr>
<td>College Dean Signature</td>
<td>3/1/17</td>
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<tr>
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<td>9/7/17</td>
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<tr>
<td>Academic Affairs Approval</td>
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</table>
Course Title: Aerial Photo Interpretation and Image Processing (GEOG 4020/ANTH 4024)
Meeting Time & Location: T&Th 9-10:20 am, 260 HOWE

Instructor Information
Instructor: Dr. Xuelian Meng
Office: E101 Howe-Russell
Office Hour: MW 1-2 pm

Phone: (225) 578-6199
Email: smeng@lsu.edu

Textbook

Additional materials and PowerPoint files

Course Schedule

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<th>Topic</th>
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<td>Chapter 3, 8</td>
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<td>Chapter 15</td>
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<td>Chapter 17</td>
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<tr>
<td>Engineering applications</td>
<td>Chapter 17 and additional material</td>
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<tr>
<td>Environmental monitoring</td>
<td>Chapter 19</td>
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<tr>
<td>Forestry and agriculture</td>
<td>Chapter 21 and additional material</td>
</tr>
<tr>
<td>Additional topics in natural resources management</td>
<td>Chapter 20</td>
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<tr>
<td>Culture and industrial features</td>
<td>Additional material</td>
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<tr>
<td>Thematic information extraction: supervised classification</td>
<td>Additional material</td>
</tr>
<tr>
<td>Image enhancement</td>
<td>Additional material</td>
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Course Description

This course introduces image interpretation and processing skills to analyze and map geological features, hydrological processes, land forms, natural resources, culture features, and environmental phenomena from aerial photographs and satellite images. Students will learn the fundamentals of aerial photograph measurement, image interpretation, and digital image processing skills to extract quantitative and qualitative information for various applications.

The first part of the course covers basic principles of photogrammetry. The second part focuses on interpretation of culture and physical features. The third part introduces image enhancement, pattern recognition and change detection skills to allow advanced image processes to derive thematic information. The practical component involves a series of step-by-step exercises. This will give students extensive hands-on practice in using remote sensing software to process, analyze, and interpret both airborne and satellite images.

Students will carry out course projects that will take them through a condensed, yet complete research experience of identifying a science problem/question, designing a research protocol, carrying out meaningful analysis and effectively addressing the question at hand.

Course Objectives

Upon successful completion of this course, students should be able to:

1. Understand the geometry of a vertical aerial photograph and principle of photogrammetry;
2. Learn image interpretation skills to understand remotely sensed images and their applications in geological features, hydrological process, land forms, nature resources, culture features, and environment change impacts;
3. Study image enhancement, pattern recognition, and change detection methods to obtain thematic information through advanced image processing;
4. Gain hands-on experience and skills in applying remotely sensed data to solve practical problems.

Physical or Learning Disabilities

Any student with a documented disability needing academic adjustments should speak with the Office of Disability Services and me, as early in the semester as possible. All discussions will remain confidential. Please contact the Office of Disability Services, 112 Johnston Hall, 225-578-5919 for additional information. I look forward to talking with you soon to learn how I may be helpful in enhancing your academic success in this course.

Requirements

Exercises

This course has several assignments. The practical exercises provide a way to acquire skills in processing, analyzing and interpreting various digital remote sensing data. ERDAS Imagine will be used as the major software for exercises. All assignments are due usually before the next exercise. A penalty of 10% per day will be deducted for late report. Each assignment normally requires both written responses to questions and creation of images, figures, and maps. Write-ups for assignments must be typed: hand-written work will not be accepted for grading.
Final project

As an important way to evaluate her/his capability in effectively learning and applying remote sensing knowledge and skills, each graduate student is expected to independently conduct a research project that addresses a specific environmental issue. At the end of the course, student will make a research presentation and turn in a final project report.

Evaluation of research projects will be based on (1) the creativity of research topics, (2) the scientific design of research methods and the performance evaluation, 3) the quality of the research presentation, and 4) the quality of final project report.

Other writing assignments

Other than the project reports and presentation, there will be other writing assignments to help students understand the applications in their disciplines and develop ideas for course projects.

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C-I Certification Syllabus Statement

This is a certified Communication-Intensive (C-I) course which meets all of the requirements set forth by LSU’s Communication across the Curriculum program, including:

- instruction and assignments emphasizing informal and formal [mode 1] and [mode 2];
- teaching of discipline-specific communication techniques;
- use of draft-feedback-revision process for learning;
- practice of ethical and professional work standards;
- 40% of the course grade rooted in communication-based work; and
- a student/faculty ratio no greater than 35:1.

Students interested in pursuing the LSU Distinguished Communicators certification may use this C-I course for credit. For more information about this student recognition program, visit www.cxc.lsu.edu.

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Evaluation

Grading scale: A (>=85%), B (75-84%), C (65-74%), D (55-65%), and F (<55%)

Grades will be weighted as follows:

- Assignments: 30%
- Final project: 30%
- Other writing assignments: 31%
- Class participation: 9%
- Total: 100%

Class participation is evaluated through random class attendance check.

Extra credit: The instructor reserves up to 3 extra credit points (in addition to the total credit of 100) to reward students who make special efforts and show creativity.
Due Dates

To be loaded in Moodle.
Course Title: Aerial Photo Interpretation and Image Processing (GEOG 4020/ANTH 4024)

Meeting Time & Location: MW 4-5:30 pm, 260 HOWE

Instructor Information

Instructor: Dr. Xueling Meng
Office: E101 Howe-Russell
Office Hour: W 9-11 am

Email: smeng@lsu.edu
Phone: (225) 578-6199

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<td>Lecture material</td>
<td>Supervised classification</td>
</tr>
<tr>
<td>Unsupervised classification and others</td>
<td>Lecture material</td>
<td>Unsupervised classification</td>
</tr>
<tr>
<td>Culture features</td>
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Course Objectives
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Physical or Learning Disabilities
Any student with a documented disability needing academic adjustments should speak with the Office of Disability Services and me, as early in the semester as possible. All discussions will remain confidential. Please contact the Office of Disability Services, 112 Johnston Hall, 225-578-5919 for additional information. I look forward to talking with you soon to learn how I may be helpful in enhancing your academic success in this course.

Requirements
Quizzes
Quizzes over lecturing and reading assignments will be given in two formats. Half of the quizzes will be given randomly as individual quiz in class after a lecture and each accounts for 2 points. The other half will be delivered together on Moodle website at the end of the semester with quiz review and accounts for 10 points. The total points for quizzes are 20 points and account for 20% of the final.

Exercises
This course has several exercises. The practical exercises provide a way to acquire skills in processing, analyzing and interpreting various digital remote sensing data. ERDAS Imagine will be used as the major software for exercises. All exercises are due usually at the beginning of the next exercise. A penalty of 10% per day will be deducted for late submissions. Each exercise normally requires both written responses to questions and creation of images, figures, and maps. Write-ups for exercises must be typed: hand-written work will not be accepted for grading.

Projects
As an important way to evaluate her/his capability in effectively learning and applying GIS knowledge and skills, each student or a student group is expected to conduct a research project that addresses a specific geographic issue and present the results at the end of the semester. The expectation of a student project requires a student to select a topic related to real-world applications, collect data, conduct image processing, and present the results through a PowerPoint presentation.

Other writing assignments
Other than the project reports and presentation, there will be other writing assignments to help students understand the applications in their disciplines and develop ideas for course projects.

C-I Certification Syllabus Statement
This is a certified Communication-Intensive (C-I) course which meets all of the requirements set forth by LSU’s Communication across the Curriculum program, including

- instruction and assignments emphasizing informal and formal [mode 1] and [mode 2];
- teaching of discipline-specific communication techniques;
- use of draft-feedback-revision process for learning;
- practice of ethical and professional work standards;
- 40% of the course grade rooted in communication-based work; and
- a student/faculty ratio no greater than 35:1.

Students interested in pursuing the LSU Distinguished Communicators certification may use this C-I course for credit. For more information about this student recognition program, visit www.cxc.lsu.edu.

Attendance Policy
Attendance matters! Students cannot expect to do their best in class if they do not attend and participate. Students with valid reasons for absence (see PS-22) are responsible “for providing
reasonable advance notification and appropriate documentation of the reason for the absence” and “for making up examinations, obtaining lecture notes, and otherwise compensating for what may have been missed.”

Valid reasons for absences include:
1. Illness
2. Serious family emergency
3. Special curricular requirements such as judging trips or field trips
4. Court-imposed legal obligations such as subpoenas or jury duty
5. Military obligations
6. Serious weather conditions
7. Religious observances. See the interfaith calendar website (www.interfaithcalendar.org) for an updated calendar of holidays and primary holy days of the various religions.
8. Participation in varsity athletic competitions or university musical events

The student is responsible for providing reasonable advance notification and appropriate documentation of the reason for the absence. The course instructor will determine the validity of a student’s reason(s) for absences and will assist those students who have valid reasons, but some in-class activities are extremely difficult to make up. With an email of advanced notice and prove of evidence, the instructor may consider to accommodate the schedule to avoid taking attendances in those days if there are enough times for taking attendances in the cycle (months or weeks).

The class will take six random attendance checks, each of which weights 1.5 points. The course will give 2 extra credits to those who receive full attendance.

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**Evaluation**

Grading scale:
A+ (97-100 %), A (93-96.99 %), A- (90-92.99 %),
B+ (87-89.99 %) B (83-86.99 %), B- (80-82.99 %),
C+ (77-79.99 %), C (73-76.99 %), C- (70-72.99 %),
D+ (67-69.99 %), D (63-66.99 %) D- (60-62.99 %), and
F (0-59.99 %)

Grades will be weighted as follows:

- Quiz: 20%
- Exercises: 30%
- Projects: 26%
- Writing assignments: 15%
- Class participation: 9%
- Total: 100%
Class participation is evaluated through random class attendance check.

**Extra credit:** The instructor reserves up to 3 extra credit points (in addition to the total credit of 100) to reward students who make special efforts and show creativity.

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**Due Dates**

To be loaded in Moodle.
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<tbody>
<tr>
<td>Course Rubric &amp; Number</td>
<td>GEOG4045</td>
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### Present Course Description

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<td>GEOG 4045 Environmental Remote Sensing (3) May be taken for elective geology credit. 2 hrs. lecture; 2 hrs. lab. Basic energy and matter relationships; principles of primary remote sensors; environment studied via remote sensing techniques.</td>
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<td>Department Chair Signature</td>
<td>1/20/17</td>
<td>College Dean Signature</td>
<td>3/1/17</td>
</tr>
<tr>
<td>Graduate Dean Signature</td>
<td>3/1/17</td>
<td>Chair, FS C&amp;C Committee</td>
<td>9/17/17</td>
</tr>
<tr>
<td>College Contact E-mail</td>
<td>----------</td>
<td>Academic Affairs Approval</td>
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</tr>
</tbody>
</table>

These questions must be answered completely and accurately or proposal will be returned.

Has this change been discussed with and approved by all departments/colleges affected? Yes X No N/A

Is this course included in any curricula, concentrations, or minors? Yes X No If yes, please list on a separate sheet.

Is this course a prerequisite or corequisite for other courses? Yes X No If yes, list courses; use separate sheet.

Is this course on the General Education list? Yes X No

**JUSTIFICATION/EXPLANATION:** Use separate sheet.

Note: IF COURSE IS OR WILL BE CROSS-LISTED, SEPARATE FORMS MUST BE SUBMITTED BY EACH DEPARTMENT.
Justification:

This course is being changed from a format of two laboratory hours and two lecture hours to a format of three lecture hours. This format change is a response to low enrollments that have persisted for several years. The current format only allows the course to be scheduled in late afternoon MW or TTh. The new format will allow the course to be scheduled during prime hours and potentially attract more students. Further, student comments indicate dissatisfaction with a requirement of four contact hours for a course that provides three credit hours. The change will alleviate this situation. Finally, the laboratory period is comprised of in-class assignments that are conducted under the direction of the instructor. Similar activities are conducted in many courses without the laboratory designation.

Curricula, Concentrations, and Minors:

This course is an elective option for the following:

- GEOG BS
- GEOG BS (Disaster Science and Management concentration)
- GEOG BS (Geographic Information Science concentration)
- GEOG BA
- GEOG BA (Disaster Science and Management concentration)
- GEOG BA (Geographic Information Science concentration)
- GEOG Geographic Information Systems minor
- GEOG Geography minor
# SYLLABUS

## Course Title
Environmental Remote Sensing 4045

## Meeting time & location
MW 1:30-3:30, 260 HOWE

## Instructor information

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Dr. Xuelian (Shelley) Meng, Assistant Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Geography &amp; Anthropology</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>E101 Howe-Russell</td>
</tr>
<tr>
<td>Office Hour</td>
<td>W 3:30-5:30pm</td>
</tr>
<tr>
<td>Phone</td>
<td>(225) 578-6199</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:smeng@lsu.edu">smeng@lsu.edu</a></td>
</tr>
</tbody>
</table>

## Textbook

Lecture materials (PowerPoint files, handouts, and reading assignments)

Lecture reference book:

## Course Schedule

<table>
<thead>
<tr>
<th>Topic</th>
<th>Required Reading</th>
<th>Exercise</th>
<th>Exercise Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to remote sensing</td>
<td>Chapter 1</td>
<td>Introduction to ERDAS Imagine</td>
<td>Understanding the nature of digital remote sensing images</td>
</tr>
<tr>
<td>History of aerial photography and aerial platforms</td>
<td>Chapter 3</td>
<td>Atmospheric correction</td>
<td></td>
</tr>
<tr>
<td>Electromagnetic radiation principles</td>
<td>Chapter 2</td>
<td>Aerial photograph interpretation</td>
<td></td>
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<tr>
<td>Aerial Photography –Vantage point, cameras, filters, and film</td>
<td>Chapter 4</td>
<td>Lecture materials</td>
<td>Mosaicing aerial photos</td>
</tr>
<tr>
<td>Aerial photography interpretation</td>
<td>Chapter 5</td>
<td></td>
<td>Working with multispectral data</td>
</tr>
<tr>
<td>Photogrammetry</td>
<td>Chapter 6</td>
<td>Lecture materials</td>
<td>Thermal remote</td>
</tr>
<tr>
<td>Image georeferencing</td>
<td>Lecture materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geometric correction</td>
<td>Lecture materials</td>
<td></td>
<td></td>
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<tr>
<td>Multispectral remote sensing</td>
<td>Chapter 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermal infrared remote sensing</td>
<td>Chapter 8</td>
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</table>
Course Description

This course introduces the principles, techniques and applications of remote sensing to students who are interested in utilizing remote sensing data for environmental information extraction and problem solving. Students will develop a basic understanding and working knowledge of remote sensing physics, methods for obtaining quantitative information from remotely sensed images, qualitative characterization and interpretation of features in remotely sensed images, digital image processing of remote sensing data, and different types of remote sensing systems (including multispectral, thermal infrared, radar and LiDAR remote sensing) and their applications to various environmental issues. The practical component involves a series of step-by-step exercises. This will give students extensive hands-on practice in using remote sensing software to process, analyze, and interpret both airborne and spaceborne remote sensing data. Students will carry out an environmental independent project that will take them through a condensed, yet complete research experience of identifying a science problem/question, designing a research protocol, carrying out meaningful analysis and effectively addressing the question at hand.

Course Objectives

Upon successful completion of this course, the students should be able to:

1. Understand the electromagnetic radiation principles and their physical properties in remotely sensed data;
2. Know the availability and capability of different remote sensing systems for different environmental applications;
3. Learn the skills to extract information from various remotely sensed data including image georeferencing, interpretation, image processing, and geospatial analysis and modeling;
4. Gain hands-on experience and skills in applying remotely sensed data to solve environmental problems.

Physical or Learning Disabilities

Any student with a documented disability needing academic adjustments should speak with the Office of Disability Services and the instructor, as early in the semester as possible. All discussions will remain confidential. This information/material is available in alternative formats upon request. Please contact the Office of Disability Services, 112 Johnston Hall, 225-578-5919. I look forward to talking with you soon to learn how I may be helpful in enhancing your academic success in this course.

Academic Integrity

Scholarly activity is marked by honesty, fairness, and rigor. A scholar does not take credit for the work of others, does not take unfair advantages of others, and does not perform acts that frustrate the scholarly efforts of others. The violation of any of these principles is academic dishonesty. Academic Dishonesty includes the giving, taking, or presenting of information or material by a student with the intent of unethically or fraudulently aiding oneself or another person on any work, which is to be considered in the determination of a grade or the completion of academic requirements. Academic Dishonesty will be handled by the Dean of Students as outlined in the LSU Code of Student Conduct, available online at http://appl003 lsu edu/slas/dos nsf/index.

Course Syllabus Modifications

Modifications to this Course Syllabus will be made as to the selection of reading assignments and due dates in consultation with students. The above schedule and procedures in this course are subject to change in the event of extenuating circumstances.

Requirements

Exams

There will be two exams for this course. An absence from an exam without prior notice with strongly justified reasons will result in a zero point for that exam.

Exercises

This course has step-by-step exercises. The practical exercises provide a way to acquire skills in processing, analyzing and interpreting various digital remote sensing data. ERDAS IMAGINE will be used as the major software for exercises. All exercises are due
in a week, which is usually at the beginning of the next exercise. A penalty of 10% per day will be deducted for late exercises. Each exercise normally requires both written responses to questions and creation of images, figures, and maps. Write-ups for exercises must be typed: hand-written work will not be accepted for grading.

Attendance Policy

Attendance matters! Students cannot expect to do their best in class if they do not attend and participate. Students with valid reasons for absence (see PS-22) are responsible “for providing reasonable advance notification and appropriate documentation of the reason for the absence” and “for making up examinations, obtaining lecture notes, and otherwise compensating for what may have been missed.”

Valid reasons for absences include:
1. Illness
2. Serious family emergency
3. Special curricular requirements such as judging trips or field trips
4. Court-imposed legal obligations such as subpoenas or jury duty
5. Military obligations
6. Serious weather conditions
7. Religious observances. See the interfaith calendar website (www.interfaithcalendar.org) for an updated calendar of holidays and primary holy days of the various religions.
8. Participation in varsity athletic competitions or university musical events

The student is responsible for providing reasonable **advance notification** and appropriate documentation of the reason for the absence. The course instructor will determine the validity of a student’s reason(s) for absences and will assist those students who have valid reasons, but some in-class activities are extremely difficult to make up. However, with an email of advanced notice and prove of evidence, the instructor may consider to accommodate the schedule to avoid taking attendances in those days if there are enough times for taking attendances in the cycle (months or weeks).

The class will take six **random attendance checks**, each of which weights 1.5 points. The course will give **2 extra credits** to those who receive full attendance.

**Evaluation**

Grading scale:
A+ (97-100 %), A (93-96.99 %), A- (90-92.99 %),
B+ (87-89.99 %) B (83-86.99 %), B- (80-82.99 %),
C+ (77-79.99 %), C (73-76.99 %), C- (70-72.99 %),
D+ (67-69.99 %), D (63-66.99 %) D- (60-62.99 %), and
F (0-59.99 %)

Grades will be weighted as follows:
Exams: 50% (midterm and final)
Exercises: 41%
Class attendance: 9%

Extra credit: The instructor reserves up to 3 extra credit points to reward students based on their attendance, participation and activity in the class.

Due Dates

See Moodle.