

Remote Sensing and Photo Interpretation
GIS4035
[Print Option](#)

Pre-requisite:

Cartographic Skills with Lab GIS3015

Course Format:

Elearning

Course Credits:

4 credits (3 lecture + 1 lab)

Course Content

This course will examine current research topics and techniques in remote sensing of the environment. Students will read text book and online materials. Students will review remote sensing journal articles and write a literature review paper in the areas of their interest.

Themes include:

- Concepts of remote sensing
- Basics of image processing and analysis
- Applications in geology
- Vegetation applications
- Urban and land use applications
- Remote sensing of water

Goal

To learn the state-of-the-art approaches to deriving environmental variables from remotely sensed data. By the end of this course, students should be familiar with several important topics in environmental studies and quite capable of applying remote sensing technology to your areas of interests.

Text book

Campbell, J. B., 2007, Introduction to Remote Sensing, 4th ed. The Guilford Press, New York, London

Online Reading

NASA: [NASA Remote Sensing Tutorial](#)

Journal References

UWF library has the following online journals on remote sensing to which you can have access if you have an UWF Argus account (your UWF email ID and password). The web links for the journals may not work if you do not use an UWF account. UWF library website is: <http://library.uwf.edu/> .

[GIScience & remote sensing](#)

[IEEE geoscience and remote sensing letters](#)

[IEEE transactions on geoscience and remote sensing](#)

[ISPRS journal of photogrammetry and remote sensing](#)

Other Online Resources

Tutorials

- [CCRS Remote Sensing Tutorials](#)

Web links

Associations and Societies

- [American Society for Photogrammetry and Remote Sensing \(ASPRS\)](#)
- [Canadian Remote Sensing Society \(CRSS\)](#)
- [European Association of Remote Sensing Laboratories \(EARSel\)](#)
- [IEEE Geoscience and Remote Sensing Society](#)
- [International Society for Photogrammetry and Remote Sensing \(ISPRS\)](#)
- [Remote Sensing and Photogrammetry Society \(RSPSoc\)](#)

Spatial Agencies

- [Agenzia Spaziale Italiana](#)
- [British National Space Centre \(BNSC\)](#)
- [Canadian Space Agency](#)
- [Centre National d'Etudes Spatiales](#)
- [European Space Agency](#)
- [German Aerospace Center](#)
- [Japan Aerospace Exploration Agency](#)
- [National Aeronautics and Space Administration \(NASA\)](#)
- [Swedish Space Corporation \(SSC\)](#)

Remote Sensing Centers

- [Australian Centre for Remote Sensing \(ACRES\)](#)
- [Canada Centre for Remote Sensing](#)
- [Indian Institute of Remote Sensing](#)
- [Remote Sensing Unit \(Portugal\)](#)
- [National Remote Sensing Agency Hyderabad, INDIA](#)

Satellites (missions, platforms and sensors)

- [AVHRR](#)
- [OrbView](#)
- [EO-1](#)
- [ASTER](#)

- [ENVISAT-1](#)
- [ERS](#)
- [GOES](#)
- [IKONOS](#)
- [IRS](#)
- [Landsat](#)
- [MODIS](#)
- [Quickbird](#)
- [RADARSAT](#)
- [SeaWifs](#)
- [SPOT Image](#)

Evaluation

Evaluation will be based on participation of online discussion (10%), quizzes (60%), AND labs (30%). Most questions for quizzes are from online reading material, textbook, and MS Power Point lectures. Other comprehensive questions are designed to cover the whole remote sensing discipline and examine students' learning outcomes achieved after completing the introductory remote sensing course (GIS4131/L) and this application course.

All assignments and activities must be completed and submitted by the due date. Late submission will be rejected by the system.

Grading Scale		
Letter Grade	UWF Scale Quality Points	Grade
A	4	93% +
A-	3.7	90 < 93%
B+	3.3	87 < 90%
B	3	83 < 87%
B-	2.7	80 < 83%
C+	2.3	77 < 80%
C	2	73 < 77%

C-	1.7	70 < 73%
D+	1.3	67 < 70%
D	1	60 < 67%
F	0	< 60%

Special Technology Utilized by Students: This course is totally online. All instructional content and interaction takes place over the WWW. In addition to baseline word processing skills and sending/receiving email with attachments, students will be expected to search the internet and upload / download files. In addition, students **may** need one or more of the following plug-ins:

- Adobe Acrobat Reader:
<http://www.adobe.com/products/acrobat/readstep2.html>
- PowerPoint Viewer:
<http://microsoft.com/downloads/details.aspx?FamilyId=D1649C22-B51F-4910-93FC-4CF2832D3342&displaylang=en>
- Windows Media Player:
<http://www.microsoft.com/windows/windowsmedia/download/>
- QuickTime Player: <http://www.apple.com/quicktime/download/>
- Real Player:
<http://forms.real.com/netzip/getrde601.html?h=207.188.7.150&f=windows/RealOnePlayerV2GOLD.exe&p=RealOne+Player&oem=dl&tagtype=ie&type=dl>
- Macromedia Flash Player:
http://macromedia.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash

Expectations for Academic Conduct/Plagiarism Policy:

Academic Conduct Policy: ([Web Format](#)) | ([PDF Format](#)) | ([RTF Format](#))

Plagiarism Policy: ([Word Format](#)) | ([PDF Format](#)) | ([RTF Format](#))

Student Handbook: ([PDF Format](#))

ASSISTANCE:

Students with special needs who require specific examination-related or other course-related accommodations should contact Barbara Fitzpatrick, Director of Disabled Student Services (DSS), dss@uwf.edu, (850) 474-2387. DSS will provide the student with a letter for the instructor that will specify any recommended accommodations.