CET 52 Course Outline as of Fall 1981

CATALOG INFORMATION

Dept and Nbr: CET 52 Title: PHOTOGRAMMETRY
Full Title: Photogrammetry
Last Reviewed: 2/9/2004

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	17.5	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 157.50

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	

Catalog Description:
Beginning principles and techniques with applications in surveying and engineering

Prerequisites/Corequisites:
Civil and Surveying Technology 50B or equivalent with grade of "C" or better.

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Preq: CET 50B or equiv with "C" or better. Basic principles & techniques with application in surveying & engineering. (Grade only) COURSE RENUMBERED TO CEST 52 - 94/95. (Grade Only)
Prerequisites/Corequisites: Civil and Surveying Technology 50B or equivalent with grade of "C" or better.
Recommended:
Limits on Enrollment:
Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**			Effective:	Inactive:
CSU GE:	**Transfer Area**			Effective:	Inactive:
IGETC:	**Transfer Area**			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Fall 1981	Inactive:	Summer 2008
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Not Certificate/Major Applicable

COURSE CONTENT

Outcomes and Objectives:
The students will:
1. Define and illustrate the general applications of photogrammetry.
2. List and demonstrate the photographic process as it applies to aerial mapping.
3. Identify and demonstrate the types of optics used in aerial cameras.
4. Determine and calculate the appropriate geometry for various lens sittings and elevations of the aerial camera for a given situation.
5. Define and illustrate stereoscopy and its application to aerial mapping.
6. Demonstrate their skill in photo interpretation as applied to surveying and engineering works.
7. Demonstrate radial line mapping and its application.
8. Identify and illustrate the use of stereo plotting instruments.
9. Describe the use of ground control and flight planning.

Topics and Scope:

1. History and general application of photogrammetry.
2. Photographic process optics and aerial cameras.
3. Photographic geometry and its application.
4. Practical application of stereoscopy.
5. Photo interpretation and its application to surveying and engineering.
6. Radial line mapping.
7. Stereometer type plotters.
8. General procedures and use of stereo plotting instruments.
9. Ground control and flight planning.
10. Analytical photogrammetry and special applications.

Assignment:

1. Photogrammetry applications, topographic and planimetric maps.
2. Camera systems, single large and small scale formats.
3. Photographic scales, analysis of vertical aerial photos.
4. Flying heights and altitudes.
5. Relief (radial) displacement - mapping techniques.
6. Stereoscopic parallax and stereoviewing.
7. Flight lines and photographic overlap.
8. Flight planning.
9. Ground control for mapping.
10. Applications of airphoto interpretations for the surveyor and engineer.
11. Remote seusine applications and techniques.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Exams	Problem solving 30 - 40%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams	Skill Demonstrations 10 - 20%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, Matching items, Completion	Exams 20 - 40%

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%

Representative Textbooks and Materials:
ELEMENTS OF PHOTOGRAMMETRY, 2nd ed. by Wolf; McGraw Hill.