COURSE NUMBER	**SET 303**
COURSE NAME	Photogrammetry and Aerial Photo Interpretation
COURSE STRUCTURE	(3-3-4) (lecture hr/wk - lab hr/wk – course credits)
COURSE DESCRIPTION	This course reviews the principles of photogrammetry and remote sensing as they relate to engineering, land surveying and geographic information systems. This includes developing an understanding of the necessary optics, mathematics, image processing and computer science fundamentals. Photographic and Digital Photogrammerty will be covered with an emphasis placed on the process of designing and establishing the required data for the acquisition of photogrammetric information according to standards and procedures.
PREREQUISITE(S)	CE 200 or equivalent
CO REQUISITE(S)	None
REQUIRED MATERIALS	A. Elements of Photogrammetry with Applications in GIS, Wolf, Paul R. & Dewitt, Bon A., 3rd Edition, McGraw Hill, latest edition B. Technical Journal Articles C. Federal, State and Professional Standards/Procedures
COMPUTER USAGE	Word, Excel
CLASS TOPICS	Photogrammetric principles and optics, mathematics of Photogrammetry and photographic systems. Geometry and properties of vertical and tilted photographs, photographic measurements, refinements and parallax. Fundamentals of analytical photogrammetry and aerotriangulation. Project Planning and Standards. Digital Photogrammetry and Digital Image Processing. Sensing Systems. Orthophotography and Topographic Mapping.
COURSE LEARNING OUTCOMES (CLO)	By the end of the course students should be able to: 1. apply the principles of photogrammetry and remote sensing as they relate to engineering, land surveying and geographic information systems. 2. Students will review technical journal articles and standards/procedures manuals and participate in group discussions. 3. Students will perform weekly homework assignments solving quantitative and qualitative problems relating to the classroom lectures and discussion. 4. Students will participate in laboratory projects, discussions and attend related field trips.
MODIFICATION TO COURSE	The Course Outline may be modified at the discretion of the instructor or in the event of extenuating circumstances. Students will be notified in class of any changes to the Course Outline.
COURSE COORDINATED BY	Dr. L. Potts