Semester/Year: Spring 2016

Lecture Hours: 2  Lab Hours: 2  Credit Hours: 3

Class Time: 9:30-11:20 am  Days: TTH  Room: GW212

Instructor’s Name: Jason Eggemeyer

Instructor's Contact  Office Phone: 268-2409  Email: jeggemeyer@caspercollege.edu
                      Information:  Cell Phone: 258-3216

Office Hours: MW 8:30AM-9:00AM, 11:50AM-12:30PM, 3:15PM-3:55PM
                         TTH 11:50AM-12:30PM

Course Description: Emphasis is on the graphic solutions to engineering and design problems. Topics will include: visibility, notation, auxiliary views, true lengths and angles, bearing, grade, intersecting lines, lines on planes, point views, normal views, piercing points, intersection of planes, revolution of lines, vectors, and perspective.

Statement of Prerequisites: ENTK 1510 or permission of the instructor.

Goal: To ready those who are preparing for a career in industry to solve engineering and design problems by graphic methods.

Outcomes:
1. Solve problems using critical thinking and creativity.
2. Construct: Orthographic, axonometric projections using manual methods and AutoCAD.
3. Describe and construct multiview perspectives.
4. Define the key term in each chapter.
5. Describe the differences between bearing and an azimuth.
6. Demonstrate the conversion of bearings to azimuths and azimuths to bearings.
7. Demonstrate the plotting of bearings or azimuths from a written table of data.
8. Construct primary, secondary and successive auxiliary views using the fold line method.
9. Locate the piercing point of a line and a plane using the auxiliary view and cutting plane methods.
10. Locate the intersections of two planes and determine the angle between them.
11. Demonstrate the true length of a line using manual drafting and CAD methods of revolutions.
12. Demonstrate the ability to use the parallel-line technique and radial-line techniques to solve common development situations used in fabrication industries.
13. Find the resultant of a concurrent coplanar vector system using the parallelogram method and the polygon method.
14. Use Pythagorean’s theorem to find the magnitude of a vector.
15. Define and apply basic math functions within a spreadsheet.
Methodology: Students will be given daily lectures, demonstrations, videos, and PowerPoint presentations focusing on the topic at hand, to be followed by an appropriate lab assignment on the computer. Most assignments will require time outside of class to complete. To facilitate working outside of regular class hours, students will be given a form to gain access to the lab during “after hours.”

Evaluation Criteria:

50% Tests  
50% Daily Work and Quizzes (announced and unannounced)

- 90 – 100 pts = A, 80 – 89 pts = B, 70 – 79 pts = C, 60 – 69 pts = D  
0 – 60 pts = F

Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

Required Text, Readings, and Materials:

Title: Descriptive Geometry  
Author: E.G. Pare, R.O. Loving, I.L. Hill, and R.C. Pare  
ISBN: 002391341

Equipment and Supplies Needed Per Student: 45 degree and 30/60 degree triangles, metric, architect’s and civil engineer’s scales, compass, 0.5mm mechanical pencils, drafting tape, circle template, USB Flash Drive

Class Policies:

1. Students missing more than 5 classes will be given the choice of taking an “F” for the class, withdrawing from class or changing to an audit and continue to participate,  
2. There will be no makeup quizzes or tests given.  
3. Home work is due at the beginning of the next class.  
4. Late assignments will not receive full credit! 10% will be deducted for every day the assignment is late.  
5. Casper College demands intellectual honesty. Proven cheating, plagiarism, or any form of dishonesty can result in the offender failing the course or being expelled from school.  
6. Cell phones are considered a disruption of class. Please turn them off or set on vibrate. If you must use them do it outside the classroom.

Last date to change to Audit Status or to Withdaws with a W Grade:  
Please refer to the current Casper College Academic Calendar.

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Chain of Command: If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.
Academic Dishonesty: (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

Official Means of Communication: Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

ADA Accommodations Policy: If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college’s Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu. The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

Schedule:

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IN ADDITION TO THE CHAPTERS OF THE TEXT, STUDENTS ARE RESPONSIBLE FOR ALL SUPPLEMENTAL HANDOUTS AND LECTURES

TAKE NOTES

SCHEDULE SUBJECT TO CHANGE