Basic Course Information

Semester	**Spring 2016**	Instructor Name	**Victor M. Figueroa**
Course Title & #	**Generation Mechanic VI**	Email	**vmfigueroa@iid.com**
CRN #	**20987**	Webpage (optional)	
Room	**ECGS Engineering Trailer**	Office	**Part-Timers: Room 809**
Class Dates	**2/16/2016 – 5/31/2016**	Office Hours	**n/a for part-time faculty**
Class Days	**Wednesday**	Office Phone #	**Part-time faculty may use dept. secretary phone number.**
Class Times Units	**4:00pm – 8:30pm** **4**	Office contact if student will be out or emergency	**Department Secretary is an option**

Course Description

An introduction to Generation Mechanic technology. Development of skills in drawings, sketching, measurements and shaft repair. And introduction to the principles of mechanical power transmission.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge and/or attitudes as demonstrated by being able to:

1. Read blue print drawings
2. Take measurements
3. Describe shaft purposes and minor shaft repair
4. Understand principles of mechanical power transmission

Course Objectives

Give students a better understanding of blue print drawings by learning how to read them and how to use various measuring instruments.

Textbooks & Other Resources or Links

Millwrights and Mechanics Guide (5^{th} Edition)
Thomas Bieber and Carl A. Nelson (Audel Books 2004)
ISBN: 978-0-7645-4171-1

Course Requirements and Instructional Methods

Assignments are designed to elicit your demonstration of critical thinking, understanding and application of the course concepts, and your proficiency in the subject matter.

Required Activities or Assignments

1. Homework (5)
2. Presentations (4)
3. Exams (2)

Teaching Methods: During this class you will have the opportunity to participate in a variety of presentations and teaching methods. Lectures, including material not covered in your readings, class and group discussions requiring your active participation, student oral presentations, field trips will supplement your required readings.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

Grading Criteria: Letter Grade only
Grading Policy: The students grade will depend on the following areas:

Attendance	31% = 80 Points	(5 points per class session)
Homework	20% = 50 Points	(10 points per homework assignment)
Class Presentations	15% = 40 Points	(10 points per presentation)
Mid-Term Exam	14% = 35 Points	(1 point per question)
Final Exam	20% = 50 Points	(1 point per question)

The course grade is based on total points accumulated during the semester. There is a maximum of 255 points. Final Grades are calculated as follows:

Percentage	Grade
90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
Below 60%	F

Points	Grade
230 – 255	A
204 – 229	B
178 – 203	C
152 – 177	D
0 – 151	F

Attendance is mandatory for the duration of every class session. If for some reason you miss a class due to illness, shift work, or unforeseen reasons, you need to call me and let me know ahead of time so I can set up a make-up class and give you the homework assignment. Anyone cutting out of class early or failing to call and absence will not be credited for that class session.

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor.

- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

- Plagiarism is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.

  Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment ;(c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service

Additional Help – Discretionary Section and Language

- You are allowed to ask any Journeyman Mechanic questions pertaining to your homework, drawings or procedures which may be discussed in class.
- Library Services: All technical manuals pertaining to the equipment covered in class can be found in the Maintenance Building.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313 if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Refer to IID Policy and Procedure

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process.

Anticipated Class Schedule / Calendar

Below is a list of weekly activities and assignments that will assist you in meeting the course objectives and the Student Learning Outcomes. Please review carefully and often as the list may include reading assignments, exams, field trips, projects, presentations, etc.

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1 February 17	Class Introduction Safety and OSHA	Pages 1
Week 2 February 24	Lines Projection Arrangement of Views	Pages 7 to 12
Week 3 March 2	Two-view drawings One-view drawings Hidden lines	Pages 13 to 14
Week 4 March 9	Auxiliary views Full – section views Full – section cutting plane Half – section views	Pages 15 to 17
Week 5 March 16	Section lines Machine drawing Perspective Oblique	Pages 18 to 34
Week 6 March 23	Isometric Isometric pipe sketching Sketching an object freehand Sketching and object using simple instruments	Pages 34 to 47
Week 7 April 6	Class review prior to Mid-Term exam	
Week 8 April 13	Mid-Term Exam	
Week 9 April 20	Steel rule Vernier caliper	Pages 101 to 105
Week 10 April 27	Micrometer Dial indicator	Pages 106 to 107
Week 11 May 4	Screw pitch gauge Taper gauge	Page 108
Week 12 May 11	Pitch Pitch diameter Pitch circle	Pages 245 to 252
Week 13 May 18	Shafting specifications General shaft diameters	Page 253
Week 14 May 25	Emergency shaft repair Use of a shaft sleeve Use of a stub shaft	Pages 254 to 261
Week 15 June 1	Class review for Final Exam	
Week 16 June 8	Final Exam	