# Tech 122 - Engineering Graphics - Class Calendar of Upcoming Events. Prof. Lobas, Architect.

Tuesday, October 19th	T- BLOCK: Work in class drafting field measured drawings Autodesk Impression demonstration
Thursday, October 21st	DUE: Beginning of class. Finished 11x17 field measured drawings of T-Block Begin dimensioning with correct tolerances, standardized lettering Begin three-dimensional models of existing spaces
Tuesday, October 26th	T- BLOCK: Discussion of programmatic needs of the rooms Beginning brainstorming session for design. (NOT FINAL). DUE: End of class. Sketch design plans and sketch design interior view(s).
Thursday, October 28th	DUE: End of class. Three-dimensional model of existing space. Continue developing design ideas in teams
Tuesday, November 2nd	PRELIMINARY T-BLOCK DESIGN CRITIQUE - Entire Class Deliverables - Measured drawings, design drawings. Presentation of design using computer
Thursday, November 4th	FIRST FIVE PRESENTATIONS - Manufacturing Processes
Tuesday, November 9th	SECOND FIVE PRESENTATIONS - Manufacturing; Fastners
Thursday, November 11th	FINAL FIVE PRESENTATIONS - Fasteners, Testing
Friday, November 12th	Distribution of Final Grade Sheets to the Schools
Tuesday, November 16th	SELECTION OF FINAL DRAFTING PROBLEM Based on interest sheet from September.
Thursday, November 18th	In-class work
Tuesday, November 23rd	In-class work
Thursday, November 25th	FINAL T-BLOCK DESIGN DUE
FINAL EXAMINATIONS (in o	ur case, FINAL PROJECTS)
Tuesday, November 30th	No class. Instructor available for review of project.
Thursday, December 2nd	No class. Instructor available for review of project.
Tuesday December 7th	FINAL DRAFTING PROBLEM DUE

#### **TECH 122 : ENGINEERING DRAWINGS FUNDAMENTALS**

### **CLASS PRESENTATIONS**

Study the topic listed. Gather at least four sources, preferably recently published books or articles. Write a five page paper (twelve-point type, DOUBLE SPACED. Images may be included but are not part of the five page count). Prepare a twenty minute talk with twenty attractive, informative power point slides.

## I. MANUFACTURING PROCESSES

## A. Describe the process and how it has evolved into its modern use and technology.

B. Describe how the process is depicted in engineering drafting, if applicable.

Anderson, Anthony - STEEL PRODUCTION - OXYGEN FURNACE vs. ELETRIC ARC

Arnold, Terran – MATERIALS CASTING

Bowe, Giavano – POWDER METALLURGY

Collie, Kavon – MACHINE TOOLS

Forbes, Rosscini - WELDING - VARIOUS TYPES

Gaitor, Chad - FORGING

Johnson, Gerrard - MOLDING and FORMING

## II. THREADS, FASTENERS. SOME TESTING.

- A. Describe the purpose of these types of fasteners and their history
- **B.** Describe and SHOW (using CAD drawings of your own creation) how these fasteners are depicted in engineering drafting.

Johnson, Joel – THREAD TYPES AND NOMENCLATURE. THREAD SYMBOLS.

Maycock, Lavardo – THREAD NOTES & SPECIFICATIONS – METRIC & UNIFIED SERIES

McCartney, Byron - ANSI POPE THREADS

Miller, Sheldon – BOLTS, STUDS, SCREWS, NUTS, and WASHERS

Rolle, Alzarrio – KEYS, PINS, and RIVETS

Russell, Alexstan – HELICAL and FLAT SPRINGS – SCHEMATIC RESPRESENTATION

Sherman, Jamaal - METALLURGICAL TESTING - TENSILES and HARDNESS

Turnquestk, Antoine – METALLURGICAL TESTING – CHARPYS and CHEMICAL ANALYSIS

Davis, Roddeno - CONCRETE and MASONRY REINFORCEMENT