**M E T A L S - I S Y L L U B U S**

**Instructor:** Mr. Casper **Classes that may enroll:** 9-12 **Room**: 125 **Credits:** 1

**Book:** Modern Metalworking **Prerequisites:** None **Course #:** 08540

**Contact Information:**

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**Course Description:**This, very basic, course will provide students with an introduction to stick, wire feed, TIG and oxy-fuel welding principles and processes. Students will also explore metal cutting and bending processes including the plasma arc, oxy-fuel cutting processes. In addition, students can expect a wealth of hands on projects involving sheet metal, aluminum casting, and machining tools equipment and practices. Basic math skills including algebra and geometry will be used daily to complete projects. Upon completion of the class, students will be competent in basic metalworking. Students may earn articulated credits for LTC by completing this course in good standing.

**Grading Scale:**

* 1. = A

89-80 = B

79-70 = C

69-60 = D

0-59 = F

**Gradebook:**

40% Labs

20% Homework

20% Quiz

20% Participation

*Final Exam – 20%*

**Homework:**

* Homework assignments may consist of but are not limited to chapter reviews, worksheets, lab activities, technical manuals, study guides, presentations, posters, demonstrations, etc.
* Students are highly encouraged complete homework and lab assignments to the best of their ability.
* Drop Box: Place all assignments, quizzes, and late work above the folder.
* Cheating/Plagiarism: Cheating or plagiarism will result in a 0% for the assignment/task.

**Missing/Late Work:**

* It is the student’s responsibility to acquire assignments when absent.
* Students are granted 1 day per excused absence. Late work = 10% deduction
* Late work will not be accepted during the last week of each quarter.

**2017-18 METALS I - SCOPE & SEQUENCE**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| **Units of Study** | **Labs /Projects****40%** | **Homework****20%** | **Quiz****20%** | **Extra Credit****“up to 5% each”** |
| HousekeepingMeasurement (rulers, micrometer, calipers, Vernier)Drill PressBench GrinderPortable Disc GrindingBand SawsPlasma CuttingOxy Acetylene CuttingChop SawPortable Disc CuttingReciprocating SawShielded Metal Arc Welding  | SMAW Labs 1-16\_\_\_\_/50SMAW Joints\_\_\_\_/50 | Cutting & Grinding PPT Worksheets\_\_\_\_/50SMAW Packet\_\_\_\_/50 | Safety Tests\_\_\_\_/50SMAW Quiz\_\_\_\_/50 | See Website |
| Hydro-graphics Laser Engraver3D Printing Reaming & ThreadingCounter-bore & Counter-sink Gas Metal Arc Welding Gas Tungsten Arc Welding  | GMAW Labs 1-12\_\_\_\_/40GMAW Joints\_\_\_\_/40GTAW Binder\_\_\_/20 | GMAW Packet\_\_\_\_/50GTAW Packet\_\_\_\_/50 | Tech Center Quiz\_\_\_\_/20GMAW Quiz\_\_\_\_/40GTAW Quiz\_\_\_\_/40 | See Website |
| Casting/FoundryPlug & Slot Welding Aluminum Welding Spool GunMetal LayoutSheet Metal CuttingSheet Metal BendingTube Bending & Notching | Al. Sand Cast\_\_\_\_/50Tool Box\_\_\_\_/50 | Casting Packet\_\_\_\_/50Sheet Metal Packet\_\_\_\_/50 | Casting Quiz\_\_\_\_/50Sheet Metal Quiz\_\_\_\_/50 | See Website |
| Metal FabricationJigs & FixturesMetal IDBill of MaterialsProject PlanningFilesMill & Lathe | Final/Class Project\_\_\_\_/100 | Weld Intro Wkst\_\_\_\_/50Cost Activity\_\_\_\_/25Project Planning\_\_\_\_/25 | Project Planning Quiz\_\_\_\_/100 | See Website |