**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”** |
| Housekeeping  Measurement (rulers, micrometer, calipers, Vernier)  Drill Press  Bench Grinder  Portable Disc Grinding  Band Saws  Plasma Cutting  Oxy Acetylene Cutting  Chop Saw  Portable Disc Cutting  Reciprocating Saw  Shielded Metal Arc Welding | SMAW Labs 1-16  \_\_\_\_/50  SMAW Joints  \_\_\_\_/50 | Cutting & Grinding PPT Worksheets  \_\_\_\_/50  SMAW Packet  \_\_\_\_/50 | Safety Tests  \_\_\_\_/50  SMAW Quiz  \_\_\_\_/50 | See Website |
| Hydro-graphics  Laser Engraver  3D Printing  Reaming & Threading  Counter-bore & Counter-sink Gas Metal Arc Welding  Gas Tungsten Arc Welding | GMAW Labs 1-12  \_\_\_\_/40  GMAW Joints  \_\_\_\_/40  GTAW Binder  \_\_\_/20 | GMAW Packet  \_\_\_\_/50  GTAW Packet  \_\_\_\_/50 | Tech Center Quiz  \_\_\_\_/20  GMAW Quiz  \_\_\_\_/40  GTAW Quiz  \_\_\_\_/40 | See Website |
| Casting/Foundry  Plug & Slot Welding  Aluminum Welding Spool Gun  Metal Layout  Sheet Metal Cutting  Sheet Metal Bending  Tube Bending & Notching | Al. Sand Cast  \_\_\_\_/50  Tool Box  \_\_\_\_/50 | Casting Packet  \_\_\_\_/50  Sheet Metal Packet  \_\_\_\_/50 | Casting Quiz  \_\_\_\_/50  Sheet Metal Quiz  \_\_\_\_/50 | See Website |
| Metal Fabrication  Jigs & Fixtures  Metal ID  Bill of Materials  Project Planning  Files  Mill & Lathe | Final/Class Project  \_\_\_\_/100 | Weld Intro Wkst  \_\_\_\_/50  Cost Activity  \_\_\_\_/25  Project Planning  \_\_\_\_/25 | Project Planning Quiz  \_\_\_\_/100 | See Website |