Student Name: Start Date:

**Grade Sheet**

|  |  |  |  |
| --- | --- | --- | --- |
| **Schedule** | **Course Tasks** | **Blackboard****Quiz Scores** | **Skill Assessment** |
| **Week 1-2** | **Welding Definition of Terms** |  |  |
|  | **SMAW Weld Tasks** |  |  |
| **Week 1-3** | **Chapter 1** |  |  |
|  | Weld 1. 6010 Flat Position, Weld Stringer Beads, Build a Pad.¼” Steel |  |  |
|  | Weld 2. 6010 Horizontal Position, Weld Stringer Beads, Builda Pad ¼” Steel |  |  |
|  | Weld 3. 6010 1F position, T-Joint Single-Pass ¼” Steel |  |  |
|  | Weld 4. 6010 1F position, T-Joint Multi-Pass ¼” Steel |  |  |
|  | Weld 5. 6010 2F position T-Joint Single-Pass ¼” Steel |  |  |
|  | Weld 6. 6010 2F position T-Joint, Multi-Pass ¼” Steel |  |  |
|  | Weld 7. 7018 1F Position T-Joint Single-Pass ¼” Steel |  |  |
|  | Weld 8. 7018 1F Position T-Joint Multi-Pass ¼” Steel |  |  |
|  | Weld 9. 7018 1F Position T-Joint Weave Bead ¼”Steel |  |  |
|  | Weld 10. 7018 2F Position T-Joint Single-Pass ¼” Steel |  |  |
|  | Weld 11. 7018 2F Position T-Joint Multi-Pass ¼”” Steel |  |  |
|  **Week 1-5** |  **Chapter 2** |  |  |
|  **Week 1-7** | **Chapter 4** |  |  |
|  | **GMAW Weld Tasks** |  |  |
|  | Weld 12. Flat Position, Weld Stringer Beads, Build a Pad 11 GA |  |  |
|  | Weld 13. Horizontal Position, Weld Stringer Beads, Build a Pad11 GA |  |  |
|  | Weld 14. 1F Position, T-Joint Single Pass 11 GA |  |  |
|  | Weld 15. 1F Position, T-Joint Multi Pass 11 GA |  |  |
|  | Weld 16. 1F Position, T-Joint Weave Bead 11 GA |  |  |
|  **Week 1-9** | **Chapter 11** |  |  |
| **Finals week** | **Final Exam – Available in the toolroom** |  |  |
|  |  |  |  |

NAME COURSE

DATE TERM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DATE | HOURS | INSTRUCTOR | DATE | HOURS | INSTRUCTOR |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**COURSE OVERVIEW- IMPORTANT-**

* **REFERENCE THE HOBART BOOK IN EACH BOOTH IF NEEDED- IT HAS INSTRUCTIONS FOR MACHINE SETUP AND ESSENTIAL VARIABLES**
* **YOU ARE ALLOWED TO ROTATE BETWEEN SMAW AND GMAW LAB PRACTICES.**
* **IF ALL GMAW MACHINES ARE IN USE, YOU MAY CONTINUE WITH THE NEXT SMAW LAB PRACTICE.**
* **IF ALL SMAW MACHINES ARE IN USE, YOU MAY CONTINUE WITH THE NEXT GMAW LAB PRACTICE.**
* **AFTER YOU HAVE COMPLETED A WELD COME CHECK WITH AN INSTRUCTOR OR FACILITATOR FOR ASSESSMENT.**
* **IF YOUR INSTRUCTOR IS NOT AVAILABLE, YOU MAY BE INSTRUCTED TO CONTINUE TO YOUR NEXT ASSIGNMENT, BUT NEVER COMPLETE MORE THAN THREE LAB PRACTICES WITHOUT CHECKING WITH YOUR INSTRUCTOR.**
* **YOU WILL WORK THROUGH ALL THE LAB PRACTICES FOR EACH WELDING PROCESS, ONCE WE FEEL YOUR ARE ABLE TO MOVE ON TO THE NEXT WELD, WE WILL TELL YOU TO MOVE ON. AFTER YOU HAVE COMPLETED ALL THE WELDS FOR THAT WELDING PROCESS, YOU WILL HAVE ONE DAY TO PRACTICE AND THEN YOU WILL COME BACK AND TEST OUT OF ALL THE WELDS AT ONE TIME.**
* **BE SURE TO REVIEW ALL THE TERMS AND DEFINITIONS, WELDING POSITIONS, WELDING NOMENCLATURE, WELD JOINT CLASSIFICATIONS AND ELECTRODE SELECTION AS YOU WILL BE RESPONSIBLE FOR KNOWING THIS INFORMATION ON ALL TESTS FOR THIS COURSE.**
* **THE SKILL ASSESSMENTS FOR EACH WELDING PROCESS ARE DONE AT THE SAME TIME. YOU MAY TEST OUT OF ONE PROCESS BEFORE TESTING OUT OF THE OTHERS.**
* **YOU MAY TAKE YOUR CHAPTER EXAMS AT ANYTIME DURING THE COURSE. ASK YOUR INSTRUCTOR FOR THE PAPER TEST WHEN READY. YOU ARE ALLOWED ONLY ONE ATTEMPT AT EACH TEST. YOU WILL BE**

**ALLOWED TO USE ONLY HAND-WRITTEN NOTES (NO COMPUTER-GENERATED COPIES) DURING THE EXAM.**

* **Chapter 1- History of Welding Lap Objectives**
	1. Explain the history of metalworking and welding.
	2. Explain the development of modern welding.
	3. Give details of the mission of welding in the industrial process. 1-4 Describe the diverse welding process.
	4. List the various welding occupations.
	5. Define welder qualifications and characteristics.
	6. Express the duties and responsibilities of a welder. 1-8 Recognize welder safety and working conditions.

1-9 Identify trade associations and what responsibility they have in the welding industry. 1-10 Establish goals to keep you up to date in the field.

* **Read Chapter 1- History of Welding**
* **Review the Chapter 1 Power Point Presentation**
* **View Chapter 1 Video Lectures**
* **Take Chapter 1 Paper Test**
* **Chapter 2- Industrial Welding Lap Objectives**
	1. Name the two major functions welding has in industry.
	2. Name several industries that have found welding to be an advantage. 2-3 Explain why welding plays an important part in manufacturing.
	3. Discuss how companies save thousands of dollars by using welding for maintenance and repair.
	4. Explain why welding replaced riveting in the fabrication of pressure vessels.
* **Read Chapter 2- Industrial Welding**
* **Review the Chapter 2 Power Point Presentation**
* **View Chapter 2 Video Lectures**
* **Take Chapter 2 Paper Test**
* **Chapter 4- Basic Joints & Welds Lap Objectives**

4-1 Describe the five basic joints and the welds applied to each. 4-2 Measure fillet and groove weld sizes.

4-3 Determine the position of welding for groove and fillet welds on plate and pipe. 4-4 List the factors that will affect the strength of a welded joint.

4-5 Describe the difference between a weld discontinuity and a weld defect. 4-6 Describe visual inspection and its limitations and advantages.

* **Read Chapter 4- Basic Joints & Welds**
* **Review the Chapter 4 Power Point Presentation**
* **View Chapter 4 Video Lectures**
* **Take Chapter 4 Paper Test**
* **Chapter 11- Shielded Metal Arc Welding Principles Lap Objectives**

11-1 List the percentage of usage of Shielded Metal Arc Welding (SMAW) in the industry. 11-2 Name the components that make up the schematic representation of the shielded

metal arc.

11-3 Know the maximum arc temperature of an SMAW electrode. 11-4 List the four constant current welding machines.

11-5 List the common type and uses of constant current welding machines. 11-6 Name the power supply ratings.

11-7 Name the characteristics of the four basic types of welding machines. 11-8 Choose the correct cable size based on the application.

11-9 List the welder’s safety equipment

* **Read Chapter 11- Shielded Metal Arc Welding Principles**
* **Review the Chapter 11 Power Point Presentation**
* **View Chapter 11 Video Lectures**
* **Take Chapter 11 Paper Test**

**After completing chapter exams turn in to an instructor for grading. Make sure they are turned in with your portfolio upon completion of the course.**