

**SYLLABUS - WELD 150 - WELDING INSPECTION
ONLINE - FALL - 2010**

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| Instructor: | Jay Miller |
| Contact: | jmiller@palomar.edu |
| Section: | 73643 |
| Course Objectives: | <p>Weld 150, Welding Inspection, is designed to provide students with basic knowledge, skills, and attitudes of welding inspection. It also provides a valid capstone for the welding certificates offered at Palomar College. Welding inspectors should be familiar with all the fundamentals of welding, understand how to read and interpret prints, codes, specifications and standards; and be able to use the tools of the trade to measure and evaluate welds and weldments.</p> <p>The technology, knowledge and skills in the welding field are vast and improving and changing everyday. You may be tested or asked questions on material that is not presented in the text, but may be found online or in another source. You should be able to access information other than what is provided in the text.</p> <p>This class may also be beneficial to those taking the AWS CWI exam, and will emulate the American Welding Society - CWI testing format. The class will be divided into three parts, i.e.; Part A. Fundamentals, Part B. Code interpretation, and Part C. Practical methods for evaluating welds and writing welding procedures. When offered online, Weld 150, students are expected to have access to the internet without compromise. If you are able to see and speak to me on campus I will gladly help you with a problem, however, you will receive an answer to a question very quickly via email. I do not recommend leaving messages on the phone. After all, this is an internet class.</p> |
| Books: | <p>Required Text:</p> <p>All the texts are available at Hobart School of Welding Technology - Bookstore.</p> <p>Hobart Institute of Welding Technology 400 Trade Square E Troy OH 45373</p> <p>Toll Free: 1-800-332-9448 Fax: 937-332-5200 Bookstore Fax: 937-332-5220</p> <p>Certification Manual For Welding Inspectors</p> |

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| | <p>Recommended Reading:</p> <ol style="list-style-type: none"> 1. Standard Welding Terms and Definitions, AWS A3.0 2. Standard Symbols for Welding, Brazing, and Nondestructive Examination, AWS 2.4. 3. Safety in Welding, Cutting and Allied Processes. ANSI/ASC Z49.1. <p>The books for recommended reading are available from the American Welding Society. These books are very expensive and are recommended for those planning to take the CWI exam.</p> | | | | | | | | | | | | | | | | | | | | |
| Grade Scale: | <table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">90</td> <td style="width: 20%;">100</td> <td style="width: 10%;">=</td> <td style="width: 10%;">A</td> </tr> <tr> <td>80</td> <td>89</td> <td>=</td> <td>B</td> </tr> <tr> <td>70</td> <td>79</td> <td>=</td> <td>C</td> </tr> <tr> <td>60</td> <td>69</td> <td>=</td> <td>D</td> </tr> <tr> <td>Below</td> <td>60</td> <td>=</td> <td>F</td> </tr> </table> | 90 | 100 | = | A | 80 | 89 | = | B | 70 | 79 | = | C | 60 | 69 | = | D | Below | 60 | = | F |
| 90 | 100 | = | A | | | | | | | | | | | | | | | | | | |
| 80 | 89 | = | B | | | | | | | | | | | | | | | | | | |
| 70 | 79 | = | C | | | | | | | | | | | | | | | | | | |
| 60 | 69 | = | D | | | | | | | | | | | | | | | | | | |
| Below | 60 | = | F | | | | | | | | | | | | | | | | | | |
| Testing | In order to stay current with the American Welding Society's format for testing, the tests in this class will be multiple choices. | | | | | | | | | | | | | | | | | | | | |

WELD 150 - Welding Inspection is the first online class offered by the Welding Department at Palomar College in the history of the college. We will all learn about welding inspection and the technology making it possible to present this class online. I hope this class will be a positive learning experience for all of us and that attain the knowledge you are seeking, and that you meet your goals and interests. If things are not going as you had expected, please do not wait until the end of the semester to voice your dissatisfaction or make suggestions how to improve the class. If you need help or are confused about Blackboard or the content, please ask.

| Week | Topics |
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| | Orientation |
| 1 | Getting acquainted to Blackboard Quiz - Getting acquainted to Blackboard |
| 1 | CWI Package |

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| | <p>QC1: 2007, Standard for AWS Certification of Welding Inspectors</p> <ul style="list-style-type: none"> a. Knowledge b. Experience c. Testing d. Education <p>B5.1 Specification for the Qualification of Welding Inspectors</p> <p>Application for CWI</p> <ul style="list-style-type: none"> a. Forms b. Eye test c. Fees <p>Quiz - QC1 and B5.1</p> |
| Part A - Fundamentals | |
| 2 | <p>Module 1 - The Welding Inspector</p> <p>Module 1 - Quiz</p> |
| | <p>Module 2 - Welding Inspector Responsibilities</p> <p>Module 2 - Quiz</p> |
| 3 | <p>Module 3 - Safety</p> <p>Module 3 - Quiz</p> |
| 3 | <p>Module 4 - Standards, Including Codes and Specifications</p> <p>Module 4 - Quiz</p> |
| 4 | <p>Module 5 - Weld Geometry and Welding Terminology</p> <p>Module 5 - Quiz</p> |
| 5 | <p>Module 6 - Welding Symbols</p> <p>Module 6 - Quiz</p> |
| 6 | <p>Module 7 - Weldability, Welding Metallurgy, and Welding Chemistry</p> <p>Module 7 - Quiz</p> |
| 6 | <p>Module 8 - Destructive Testing</p> <p>Module 8 - Quiz</p> |
| 7 | <p>Module 9 - Welding Procedure and Welder Qualification</p> <p>Module 9 - Quiz</p> |
| 8 | <p>Module 10 - Welding, Brazing, and Cutting Processes</p> <p>Module 10 - Quiz</p> |
| 9 | <p>Module 11 - Weld and Base Metal Discontinuities</p> <p>Module 11 - Quiz</p> |
| 10 | <p>Module 12 - Nondestructive (NDE) Examination Processes</p> <p>Module 12 - Quiz</p> |
| 11 | <p>Module 13 - Inspection Reports</p> <p>Module 13 - Quiz</p> |
| 11 | <p>Review and Comprehensive Test on Fundamentals Part 1</p> |

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| Part 2 Open Book Code | |
|------------------------------|--|
| 12 - 13 | MIL-STD-2219 MIL-STD-1595 Open Book Test |
| Part 3 Practical | |
| 13 -16 | How to read the rule How to read the caliper How to read the micrometer How to read the fillet gauge Welding Procedures Specifications Procedure Qualification Test Record Welder Certifications |
| Final | Comprehensive Test on all three parts |