|  |  |
| --- | --- |
| **Northern Wyoming Community College District** | |
| Sheridan College  3059 Coffeen Avenue  Sheridan, Wyoming 82801 | Gillette College  300 West Sinclair Street  Gillette, Wyoming 82718 |

**COMMON COURSE SYLLABUS**

WELD 2670 Welding Inspection (3 credits)

Welding Technology

Career and Technical Education Division

*Effective Date*: 4/19/13

|  |  |
| --- | --- |
| *Description* | This course is a survey of welding inspection and quality control standards and practices intended to broaden student’s understanding of welding in general and to specifically provide students with a fundamental understanding of the many aspects of welding inspection and quality control processes, techniques, standards, and applications as well as welding inspector certification requirements. |
|  |  |
| *Prerequisites* | WELD 1715 Thermal Cutting and Oxyfuel Welding **OR** WELD 1755 Shielded Metal Arc Welding **OR** WELD 1772 Flux Cored Arc Welding **OR** WELD 1920 Basic Pipe Welding **OR** WELD 2650 Gas Tungsten Arc Welding **OR** consent of instructor. |
|  |  |
| *Co-requisites* | None |
|  |  |
| *Purpose (including degree requirement fulfilled)* | WELD 2670 Welding Inspection is a program elective for the Welding AAS program. |
|  |  |
| *Course Format* | Lecture and Lab |
|  |  |
| *Grading (Letter or S/U)* | Letter |
|  |  |
| *Program Outcome(s)* | Upon completion of WELD 2670 Welding Inspection, the student will:  1. perform quality welds and cuts to industry standards.  2. apply principles of welding theory to welding practice.  3. demonstrate proper use of welding related terms. |
|  |  |
| *Minimum Student Competencies* | Upon completion of WELD 2670 Welding Inspection , the student will:  1. identify safety issues in welding inspection.  2. identify welding inspector qualification requirements, responsibilities, and limitations.  3. identify applications and limitations of various welding, joining, and cutting processes.  4. identify features and applications of weld joint geometry and use correct terminology.  5. create and interpret weld and welding symbols.  6. identify and distinguish between discontinuities and rejectable defects using acceptance criteria.  7. apply metallurgical concepts to welding and welding inspection.  8. demonstrate ability to use conversion formulae between US Customary units and SI System (metric) units.  9. interpret and apply the provisions of governing documents (i.e. codes, standards, drawings, purchase orders, etc.)  10. apply destructive testing methods.  11. apply non-destructive testing methods including visual inspection tools and techniques.  12. create a qualified welding procedure specification (WPS) and welding procedure qualification record (WPQR) in accordance with the provisions of an applicable welding code or standard.  13. perform documentation process for welder qualification in accordance with the provisions of an applicable welding code or standard. |
|  |  |
| *Texts/Materials* | Texts and/or authority reviewed materials that are selected by individual instructors with Director/Area Coordinator approval. |
|  |  |
| *Minimum Course Requirements* | 1. Written and practical assessments |
|  |  |
| *Academic Honesty Statement* | Students are expected to maintain the highest standards of academic honesty and integrity. Academic honesty means performing all academic work without lying, cheating, deceit, plagiarism, misrepresentation, or unfairly gaining advantage over any other student. Violations of academic honesty are in violation of District standards for student conduct and shall result in disciplinary action. |
|  |  |
| *Disability Statement* | ***Students with disabilities who believe they may need accommodations in this class must contact the disabilities services coordinator on their campus as soon as possible to request such accommodations.*** |