# Glendale Community College Instructional Division Program Learning Outcomes Assessment Timeline

# Please complete a separate timeline form for each program within your division

#### Division name:

Technology and Aviation

Program name (degree, certificate, sequence of courses or series of learning activities leading to intellectual mastery):

WELDING, OCCUPATIONAL COMBINATION WELDER

# Program Relationship to Glendale Community College's Core Competencies/Institutional Student Learning Outcomes (ISLOs)

#### How does this program relate to GCC's College's Core Competencies/Institutional Student Learning Outcomes (ISLOs)?:

Core Competencies/ISLOs are commonly defined as the knowledge, skills, abilities, and attitudes that students are expected to develop as a result of their overall experiences with any aspect of the college, including courses, programs, and student services. Each program offered at GCC should link to at least some of these Core Competencies/ISLOs. A list of the Core Competencies/ISLOs can be found here:

http://www.glendale.edu/Modules/ShowDocument.aspx?documentid=4362 Include a brief statement outlining how this program aligns with GCC's Core Competencies/ISLOs

# An ideal relationship:

- Is clear and brief
- Is connected to GCC's Core Competencies/ISLOs
- If applicable, aligns with professional organization(s) learning outcomes

This program aligns itself with a number of core competencies. The Welding Certificate enhances the students' abilities in Communication (1a,1b,1c, 1e) through reading and writing descriptions of welding theory and practice. Mathematical Competencies (2a, 2b) through the measuring of stock used to create welding projects. Students are also required to calculate the material needed for a specific project Information Competencies (3b) through location of information to perform the fabrication of the project and also for code requirements. Critical Thinking (4d) through the problem solving of the procedures specification. Global Awareness and Appreciation (5e) Students are required to be aware of the environmental effects and safety issues as they pertain to welding processes. Personal Management (6a, 6b) students must be aware of the results that could occur due to a faulty weld. They are also

aware of the health and life safety issues that they are responsible for. Application of Knowledge (7a, 7b, 7c, 7d) by learning the various computer software and the workplace skills required to complete a project.

# **Program Level Outcomes (PLOs) Assessment Timeline**

#### What are the Program Learning Outcomes of this program?:

Program Learning Outcomes (PLOs) are commonly defined as the knowledge, skills, and abilities that students have attained as a result of their involvement in a particular set of educational experiences such as within a specific program, degree, certificate or series of learning activities leading to intellectual mastery

List your PLOs below and explain the timeline by which the PLOs will be assessed

# What is the PLO Assessment Planning Timeline for this Program?:

To develop an ongoing and systematic planning timeline, it is recommended that you assess PLOs within a 3 year cycle (e.g. assess 1/3 of PLOs in year 1, 1/3 in year 2, and 1/3 in year 3)

#### **Ideal examples of Program Learning Outcomes:**

- Are observable and measurable
- Are program specific
- Connect to GCC's Core Competencies/ISLOs
- Use action verbs
- Generally a program will have between three and six PLOs
- If applicable, aligns with professional organization(s) learning outcomes

### **Ideal examples of Program Assessment Timelines:**

- Are practical, sustainable, and geared to Core Competencies/ISLOs, and college mission
- Ensure that each PLO is assessed regularly within a 3 vear cycle
- Include teams for assessment data collection and analysis and assessment report writing that include faculty members who are instructors of the courses/programs assessed

List PLOs below. Generally, a program will have between three and six PLOs. Continue to add PLOs until you have developed an assessment timeline for each	In what semester and year will you assess this PLO? What data will you use to assess it (i.e. SLO data from courses within the	Who will collect and analyze the PLO assessment data and write a report of the findings? (Include report writer's name and, if possible, other participants)
PLO associated with this program.	program, exam or essay data, portfolios of student work, licensing/exit exams, etc)?	
PLO 1 Students will demonstrate the skills necessary to read engineering drawings, solve technical mathematics problems as they relate to	This PLO will be assessed beginning the Spring 2012 Semester. SLO data from within each course will be used for the assessment.	John Kray

welding tasks.		
PLO 2 Students will complete introductory and advanced level welding projects using various techniques and procedures.	This PLO will be assessed beginning the Spring 2012 Semester. SLO data from within each course will be used for the assessment.	John Kray
PLO 3 Students will discuss metallurgical concepts, heat treating procedures, and machine tool technology concepts.	This PLO will be assessed beginning the Spring 2012 Semester. SLO data from within each course will be used for the assessment.	John Kray

# **Course/Program Alignment Matrix**

# How are courses in the program aligned with the program's learning outcomes?:

This section should include a matrix of the PLOs for your program and a list of each course which is a part of the program

- For each course indicate if PLO is addressed within it the level at which it is addressed by either leaving it blank (if not addressed in program) or noting I, D, or M
- Introduce = I PLO is introduced at a basic level
- **D = Develop** Students are given opportunities to practice, learn more about, and receive feedback to develop more sophistication
- **M = Mastery** Students demonstrate mastery at a level appropriate for graduation

# Ideal alignment:

- Course/Program matrix indicates that PLOs are embedded in program's coursework
- PLOs are introduced, developed, and mastered within the range of courses
- Each course addresses one or more of the PLOs; however, rarely does a course address all PLOs

	PLO 1 Students will demonstrate the skills necessary to read engineering drawings, solve technical mathematics problems as they relate to welding tasks.	PLO 2 Students will complete introductory and advanced level welding projects using various techniques and procedures.	PLO 3 Students will discuss metallurgical concepts, heat treating procedures, and machine tool technology concepts.
WELD 121 Occupational Welding	I	I	,
WELD 122 Occupational Welding	D	D	
WELD 123 Occupational Welding	D	D	I
WELD 124 Occupational Welding	D	D	D

WELD 125 Advanced Welding Procedures	M	M	D
WELD 126 Occupational Welding Certification Workshop	M	M	D
MTLGY 150 Principles of Metallurgy and Heat Treating	D		M

As you fill out this alignment matrix, gaps may occur or become visible. Use the gaps to help your determine which course or program SLOs may need to be revised so that all courses and programs are aligned. Question 2.2 in your program's Program Review report provides a means to explain if you noted any gaps in alignment and, if yes, how your division might revise course or program SLOs to ensure that all course and program learning outcomes are aligned.