**FORM A**

*College of Technology*

**PROPOSAL SUMMARY AND ROUTING FORM**

Proposal Title: *An introductory welding design and fabrication class designed as a bridge class for the ARTS-290 Aesthetic Engineering. This course will introduce students into material selection, material processing, joint designs and welding processes selection. These are competences are that needed to design and produce models and possible full size three dimensional metal sculptures. Students will design 3 D models in ARTS-290 and then select the material, design weld joints, select welding processes, convert art drawing to tool cutting path, cut project and fabricate sculpture.*

Initiating Unit or Individual: **Department of Welding Engineering Technology**
Contact Person's Name: Jeffrey Carney  e-mail: carneyj@ferris.edu  phone: x2952

Date or Term of Proposal Implementation: **Summer 2011**

- [ ] Group I - A – New degree/major or major, redirection of a current offering, or elimination of a degree, major or minor
- [ ] Group I - B – New minors or concentrations
- [ ] Group II - A – Minor curriculum clean-up and course changes
- [x] Group II - B – New Course
- [ ] Group III - Certificates
- [ ] Group IV – Off-Campus Programs

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<tr>
<th>Group/Individual</th>
<th>Signature</th>
<th>Date</th>
<th>Vote/Action *</th>
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<tr>
<td>Program Faculty</td>
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<td>12/1/10</td>
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<td>Department Faculty</td>
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<td>Department Head / Chair</td>
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<td>College Curriculum Committee</td>
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<td>University Curriculum Committee</td>
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<td>Academic Affairs</td>
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* Support with Concerns or Not Support must include a list of specific concerns. Votes must be shown for faculty groups. Administrators check appropriate action taken.
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<th>Academic Affairs</th>
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<td>President (Date Approved)</td>
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1. **Proposal Summary**

(Summary is generally less than one page. Briefly: state what is proposed with a summary of rationale and highlights. Additional rationale may be attached.)

Attached, please find a curriculum proposal from the Welding Program Office to offer an experimental WELD 290 – Introduction to Metal Sculpture Design and Fabrication in the summer 2011 semester. This course is being coordinated with Dr. Robert Barnum and is the second in a series of two courses being offered in the summer 2011 semester. The other course is ART 290.

Students will enroll in the ART 290 course with Dr. Barnum in the morning and take the WELD 290 course with Dave Murray in the afternoon. Courses will be held in the Summer “A” semester starting May 17 and ending June 28.

2. **Summary of All Course Action Required**

   - **a. Newly Created Courses to FSU:**
     
     | Prefix | Number | Title                                      |
     |--------|--------|--------------------------------------------|
     | WELD   | 290    | Introduction to Metal Sculpture Design and Fabrication |

   - **b. Courses to be Deleted From FSU Catalog:**
     
     | Prefix | Number | Title |
     |--------|--------|-------|

   - **c. Existing Course(s) to be Modified:**
     
     | Prefix | Number | Title |
     |--------|--------|-------|

   - **d. Addition of existing FSU courses to program**
     
     | Prefix | Number | Title |
     |--------|--------|-------|

   - **e. Removal of existing FSU courses from program**
     
     | Prefix | Number | Title |
     |--------|--------|-------|

*Contact Senate Secretary or UCC Chair if spaces for additional courses are needed.*
Memo

To: Larry Schult, Interim Associate Dean, College of Engineering Technology
From: Jeffrey Carney, Coordinator – Welding Program Office
Date: November 30, 2010
Re: Summer 2011 Experimental Offering of WELD 290 – Introduction to Metal Sculpture Design and Fabrication

Attached, please find a curriculum proposal from the Welding Program Office to offer an experimental WELD 290 – Introduction to Metal Sculpture Design and Fabrication in the summer 2011 semester. This course is being coordinated with Dr. Robert Barnum and is the second in a series of two courses being offered in the summer 2011 semester. The other course is ARTS 290.

Students will enroll in the ARTS 290 course with Dr. Barnum in the morning and take the WELD 290 course with Dave Murray in the afternoon. Courses will be held in the summer “A” semester starting May 17 and ending June 28.

Additional information enclosed:

• Curriculum Forms A, E, and F

Your support of our curriculum plan is appreciated.

If you have any questions, or if I can provide any further input, please do not hesitate to contact me.
NEW COURSE INFORMATION FORM
See Sample – Limit to Two Pages Please

FORM E

Course Identification:

Prefix: WELD
Number: 290
Title: Introduction to Metal Sculpture Design and Fabrication

Proposal Title: An introductory welding design and fabrication class designed as a bridge class for the ARTS-290 Aesthetic Engineering. This course will introduce students into material selection, material processing, joint designs and welding processes selection. These are competences are that needed to design and produce models and possible full size three dimensional metal sculptures. Students will design 3D models in ARTS-290 and then select the material, design weld joints, select welding processes, convert art drawing to tool cutting path, cut project and fabricate sculpture.

Course Outline including Time Allocation:

CREDIT HOURS: 2 semester hours

CONTACT HOURS:
Lecture - 1 hours/week
Laboratory – 3 hours/week

Co or PREREQUISITES: ARTS-290 Aesthetic Engineering

TEXTBOOKS REQUIRED: None

COURSE OUTCOMES:
1. Students will demonstrate proper safety practices when operation welding and cutting equipment found in a welding shop.

2. Students will identify the basic welding joints and nomenclature used in welding and joining.

3. Students will apply proper welding procedures and techniques to join various ferrous and non-ferrous metals used on their 3D models.

4. Students will produce and critique test samples that meet specified criteria incorporating the use of industrial methods and compare with the welds found on the classes projects.

5. Students will convert art designs produced in Arts 290 to a tool path software and cut out this design using a plasma arc cutting system.
Units of Instructions and Student Learning Goals for Each Unit:

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<thead>
<tr>
<th>Time Weight</th>
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<tbody>
<tr>
<td>Lecture</td>
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I. Introduction and orientation
II. Welding lab safety
III. Joint design and welding nomenclature
IV. Welding process selection
V. Material removal processes
VI. Design conversion and post processing
VII. Design processing and material preparation
VIII. Prototyping design fabrication
IX. Design fabrication
X. Inspection of completed fabrication
CREATE NEW COURSE
Course Data Entry Form

FORM F

Create New Course
Rev. 07/23/07

I. ACTION TO BE TAKEN: CREATE A NEW COURSE
Notes
1. Complete each item in Section I and Section II.
2. If this course is to be used as a prerequisite for other university courses, Form Fs that reflect the prerequisite change must be submitted for those courses as well.

Term Effective (6 digit code only): 201105  Examples: 200801(Spring), 200805(Summer), 200808(Fall)
Note: The first four digits indicate year, the next two digits indicate month in which term begins.

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix
WELD

b. Number
290

C. Enter Contact Hours per week in boxes.
LECture 1  LAB 3  INDependent Study – Check (x) ☐
Practicum: ☐  Seminar: ☐

d. Course Title: WELD290 - Metal Sculpture D&F
(Limit to 30 characters/spaces.)

e. College Code: PE  f. Department Code: WELD
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: ☐ Variable  ☑ Fixed  h. Minimum Credit Hours: 2  i. Maximum Credit Hours: 2

j. May Be Repeated for Added Credit: Check (x) ☐ Yes  ☑ No

k. Levels: Check (x) ☑ Undergraduate  ☐ Graduate  ☐ Professional

l. Grade Method: Check (x) ☑ Normal Grading  ☐ Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) ☑ Yes  ☐ No

n. Equivalent course: Prefix: WELD  Number: 290
See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.
An introductory welding design and fabrication class designed as a bridge class for the ART-290 Aesthetic Engineering. This course will introduce students into material selection, material processing, joint designs and welding processes selection. These are competences that are needed to design and produce models and possible full size three dimensional metal sculptures. Students will design 3 D models in ART-290 and then select the material, design weld joints, select welding processes, convert art drawing to tool cutting path, cut project and fabricate sculpture.

p. Term(s) Offered: [Summer] (See instructions for listing.)

q. Max. Section Enrollment: 15

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces.

UCC Chair Signature/Date:

Academic Affairs Approval Signature/Date:

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code
☐ Basic Skill (BS)  ☐ General Education (GE)  ☐ Occupational Education (OC) ☐ G.E. Codes

Office of the Registrar use ONLY

Date Rec'd:  Date Completed:  Entered: SCACRSE _ SCADTL _ SCARRRES _ SCAPREQ