KISHWAUKEE COLLEGE SYLLABUS

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| Spring 2014 |
| Shielded Metal Arc Welding I 2 Credit HoursWT122 -5AO1Tuesday, Thursday 3:30-6:15pm RM A1430 &A1431 |
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| 01/14/2014-03/07/2014  |
| Bernard Hackler  |
| Room A1429 |
| Office hours :M 8:30-10am, T 2-3:30pm,W8:30-10am, Th 2-3:30pm  |
| Office phone: 815-825-2086 x 6151  |
| Office hour by appointment |
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| Instructor Kishwaukee College email Bernard.Hackler@kishwaukeecollege.edu |

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| COURSE DESCRIPTION (as stated in current catalog)  This course will emphasize the theory and practice of Shielded Metal Arc Welding (SMAW). Safe handling and correct set up of equipment will be covered. Process techniques using various types of mild steel electrodes in four weld positions will be practiced. The five basic joints will be employed. One hour lecture/discussion and two hours lab a week. |
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| Prerequisite : None |
| STUDENT LEARNING OUTCOMES (SLO)The students will be able to:1. Identify safe welding practices and procedures conforming to American Welding Society (AWS) Z 49 standards
2. Identify the different power sources used in SMAW.
3. Safely and correctly set up SMAW equipment to include the identification and correct adjustment of amperage for various sizes and types of electrodes per thickness of material.
4. Describe the application of different types of electrodes and their classifications by means of the American Welding Society (AWS) categorization system.
5. Identify basic weld joints and their applicable welds
6. Demonstrate a basic knowledge of welding theory.
7. Establish good work habits by arriving for class on time and participating in class activities with other students.
8. Exhibit a basic understanding of metallurgy required of a competent welder.
9. Summarize different welding codes, standards, procedures, and qualifications related to the production of fillet welds.
10. Identify common production metals such as steels and alloys by classification designations.
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| TEXT(S) Welding Principles and Applications by Larry Jeffus Seventh Edition |
| REQUIRED STUDENT MATERIALS A. Text: Welding Principles and Applications by Larry Jeffus Seventh EditionB. Note-taking materialsC. Work clothing 1. Long pants 2. Long sleeve shirt or welding coat 3. Leather shoes 4. Safety Glasses 5. Welding hood with a #10 lens for SMAW 6. Welding goggles or shield with a #3 lens for gas welding 7. Welding gloves 8. 8 inch adjustable pliers (channel-locks) 9. Wire brush 10. Welder’s chipping hammer |
| ADDITIONAL STUDENT REFERENCES AND THEIR LOCATION (if applicable) |

BREAKDOWN OF COURSE REQUIREMENTS

Exams ………………...20%

Participation..................10%

Homework……………10%

Weld Coupons………..60%

FINAL GRADE DETERMINATION

 Example #l (percent system)

 90 - l00 = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

59 - below = F

Grade reports will not be mailed out. Please check KishSOS, My Student Info, under Academic

Profile, Grades, for grade reports.

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| COURSE EXIT REQUIREMENTS (if applicable)Click here to enter text TENTATIVE COURSE OUTLINE |
| Week #1 - Syllabus & Course Info, Introduction to Welding, Safety in Welding – Safety TestWeek #1 – SMAW Equipment Setup and Operation Part I - Weld # 1 Flat bead on plate- E7018.Week #2 – SMAW Equipment Setup and Operation Part II- Weld # 2 1F- E7018. 2F – E7018 Week #2 – SMAW on Plate Part I – Weld # 3 - 3F (string) -E7018.Week #3 –Weld # 4 - 3F (weave) - E7018.Week #3 – SMAW on Plate Part II – Weld # 5 - 4F – E7018.Week #4– Introduction to Joint Designs – Weld # 6 1F – E6013 open corner –fillet.Week #4 – SMAW Related Metallurgy Weld # 7 - 2F – E6013 open corner –fillet.Week #5 –MID TERM- WrittenWeek #5 – Weldability of Metals & SMAW Processes - Weld # 8 - 1F (weave) E7024Week #6 – Weld # 9 - 1F (string) – E7024. Week #6 - SMAW Filler Metal Selection – Weld # 10 - 2F (string) E7024Week #7 – Introduction to Welding Codes & Standards - Weld # 11 - 2F –E6012.Week #7 -Weld # 12 - 1F –E6010, Weld # 13 - 2F—E6010Week #8- Weld # 14 - 3F—E6010, Weld # 15 - 4F—6010Week #8 -Weld # 16 - 2F—E7018 –5/32**Week** #8 -**Final-written**Weld Assignment Key: Positions & Weld Type: 1F-Flat Fillet, 2F-Horizontal Fillet, 3F-Vertical Fillet, 4F-Overhead FilletFiller Rod Assigned: E6010, E6012, E6013, E7018, E7024, E6012  |
| MAKE-UP POLICY (for tests and other course requirements)Make-up tests and other course requirements must be prearranged with instructor. |

ATTENDANCE POLICY

If you miss 3 days or more and do not make them up, there will be a 35% reduction in your grade

CLASS WITHDRAWAL

A “W” cannot be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Any student that does not officially withdraw from the class will receive a letter grade. The last date for withdrawal for this course can be found at “My Class Schedule” on KishSOS. Kishwaukee College reserves the right to administratively withdraw at midterm those students who are not actively pursuing course objectives or who are in violation of standards of behavior as outlined in the Student Code of Conduct and Discipline. For a copy of the student conduct policy, contact the Vice President of Student Services Office or refer to the Kishwaukee College catalog.

INCOMPLETE GRADE

All course requirements must be completed by the end date for the course. In the event that extremely difficult circumstances merit granting a student more time to finish course requirements, an “Incomplete” (I) grade may be given.  Taking an Incomplete is possible only at the instructor's discretion.  To receive an Incomplete, a contract between the student and the instructor must be completed and approved regarding the completion of all remaining work within a strictly defined period of time.  If the conditions of the contract are not met, an “I” grade may revert to an “F”.

CLASS CANCELLATIONS

Class cancellations due to inclement weather will be posted on the College Website: www.kishwaukeecollege.edu. or announced by the local radio stations. Students may also call the College at (815) 825-2086. Class cancellations due to instructor absence will be posted on the classroom door and posted at [www.kishwaukeecollege.edu/class\_cancellations](http://www.kishwaukeecollege.edu/class_cancellations). Room changes will be announced in advance whenever possible and posted on the classroom door.

ACADEMIC DISHONESTY

In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Cheating, falsifying information, forgery, plagiarism, and other dishonest actions will not be tolerated. Sanctions for academic dishonesty are at the discretion of the instructor and subject to appeal as provided in Student Code of Conduct and Discipline. A complete explanation of the policy and procedures surrounding academic dishonesty are outlined in the Kishwaukee College Catalog.

COPYRIGHT

As a Kishwaukee College Student, you may have copyrighted materials or software made available to you by the college for course use. Please understand that copyright law may prohibit copying these materials. Violation of copyright laws can lead to prosecution for a criminal offense. You are required to abide by the specific copyright and licensing agreements that apply to each particular piece of software.

GRADUATION REQUIREMENTS FOR TRANSFER DEGREE STUDENTS

All students intending to graduate with an A.A., A.S., A.E.S., or A.F.A. are required to submit a complete Degree Portfolio. The Degree Portfolio is a means for the institution to measure its effectiveness in preparing students for successful completion of a degree at a transferring institution. Save your college-level work throughout your academic career in order to facilitate the portfolio compilation. Also, submit a completed application for graduation from the college the semester that you plan on graduating prior to submitting the complete Degree Portfolio. Guidelines and the specific requirements (along with the rubrics used for assessment) for the Degree Portfolio can be found at [www.kishwaukeecollege.edu/portfolio](http://www.kishwaukeecollege.edu/portfolio).

ASSISTIVE RESOURCES CENTER/DISABILITY SERVICES

Any student with a documented disability or special learning need and wanting to request accommodations, should contact the Coordinator in A1317 or at (815) 825-2086 ext 3960, (815) 825-9106 (TTY), or send an email to awilson@kishwaukeecollege.edu. The student’s disability must impact their ability to participate in the educational environment and be documented by an appropriate professional prior to accommodations being approved.

LEARNING SKILLS CENTER (A1300)

Students must present their Kishwaukee College student ID when using any Learning Skills Center services. For more information on the Learning Skills Center go to <http://www.kishwaukeecollege.edu/go/lsc>. Tutoring is available to all Kishwaukee students free of charge. The Writing Center (Learning Skills Center, A1306) answers your writing-related questions regardless of the class or assignment. Students are expected to bring all material related to the assignment, including textbooks, paper prompts, etc.

Make-up tests, online tests, and placement tests are available through Testing Services, also located in the Learning Skills Center

EMERGENCY PROCEDURES/SAFETY

Yellow and red Emergency Information flipcharts are located in each classroom. These are quick reference sheets with telephone numbers to reach emergency assistance and a brief description of the correct actions to take in the event of a tornado, fire or other emergency on campus.

RELIGIOUS OBSERVANCES

Students faced with schedule conflicts related to a religious observance should make prior arrangements with the instructor a minimum of seven (7) school days in advance of the examination or other activity involved.

STUDENT E-MAIL

Your Kishwaukee College e-mail account will be the only way to receive official notices from the College. If you choose to forward your e-mail to another account, please be advised that all communication from and within the college will use your Kishwaukee student e-mail. When communicating with instructors or employees of the college, you are required to use your Kishwaukee e-mail address.

COMMUNITY RESOURCES

There are numerous community resources that are available to assist students in addressing a variety of personal needs. A listing and description of community resources can be found at <http://www.kishwaukeecollege.edu/go/communityresources>

Language on the syllabi course materials developed by INAM funds:

From the grant agreement’s Part IV  Special Conditions, Item 15, Intellectual Property Rights, the following needs to be on all products developed in whole or in part with grant funds:

“This workforce solution was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timelines, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for  non-commercial purposes, is permissible. All other uses require the prior authorization of the copyright holder.”