LSC Use Only

Check all appropriate lines and complete all information. Use a separate cover sheet for each course.

1. Course Proposals (check all that apply)

____ New Course ____ Course Prefix Change ____ Course Deletion

X Course Revision Course Number and/or Short

ive (include new cover sheet)

Studies Elective (please mark the design that applies – must meet at least

or program name, if changing)

Department Curriculum Committee Chair(s), Dr. Jan K. Wachter 9-13-2011

Department Chairperson(s), Dr. Lon Ferguson 9-15-2011

College Curriculum Committee Chair

LSWCC Co-Chairs

Received

OCT 24 2011

Liberal Studies

Part II Description of the Curriculum Change

1. Syllabus of Record.

   The new syllabus of record for this revised course is attached in Appendix A.

2. A summary of the proposed revisions:

   a. The course has been reduced from a 4 credit course to a 3 credit course. This

Old Course Description

SAFE 211 Principles of Safety II – Construction Industry (3c-31-4cr)

Prerequisites: SAFE 101

[redacted]

Appendix A: New Syllabus of Record

Course Title: SAEF 211 Principles of Safety II – Construction Safety 2 class hours

3 lab hours

Prerequisite: SAEF 101 3 credit hours

Develops an understanding of hazard recognition, evaluation, prioritization and control of critical workplace hazards associated with construction. Students are exposed to the complexity of three dimensional work which exists in the fast paced construction industry by thoroughly examining elements of safety and health enumerated in the Occupational Safety and Health Administration standards and in various consensus standards. Emphasis is placed on personal protective equipment, electrical safety, scaffolds, fall protection, trenches and confined space entry

B. Personal Protective Equipment (2 hours)

1. Identifying Needs and Limitations
2. Maintenance and Inspection Programs
3. Selection and Training Programs
4. 29 CFR 1926.95-.107,1910 Subpart I

C. Electrical Safety (4 hours)

1. Principles of Electricity
2. Elements of Electrical Equipment
3. Choosing Electrical Equipment for Hazardous Locations
4. Lockout / Tagout Procedures
5. Electrical Power Transmission
6. Wiring and its Associated Hazards
7. Switches/Ground Fault Circuit Interrupters
8. Electrical Grounding as a Safeguard
9. Electrical Test Equipment

E. Permit Required Confined Spaces (PRCS) (3 hours)

1. Regulations Governing Spaces

3. Permitting
4. PRCS Program Elements

Midterm (1 hour)

F. Cranes and Rigging (1 hour)

1. Hazards with Hoists, Cranes, Derricks

4. Regulations Governing Operations and Hazard Control

I. Fall Protection and Prevention (4 hours)

1. Significance of Exposure
2. Physics of Falls-The Human Experience
3. Options for Protection
4. Regulations Governing Fall Protection

Final culminating activity (during final exams week) 2 hours

Laboratory Exercises (42 hours, each at 3 hours)

The following laboratory exercises are an integral part of the course, giving the students [redacted]

Classroom Evaluation

Weighting:

Final	10 %
Quizzes	10 %
Homework	20 %
Participation*	10 %

Laboratory Evaluation

Weighting:

Laboratory Reports / Portfolio	60 %
Laboratory Memos	15 %
Culminating Activity	5 %
Quizzes	10 %
Participation*	10 %

professional appearance, organization, timeliness, evidence of the above three items, evidence of improved work, and a reflective statement.

[redacted]

D=60-69%
F= <60%

At the discretion of the instructor, a grading curve that results in an appropriate distribution of grades may be used in place of the scale described above.

VI. Attendance Policy

The undergraduate course attendance policy will be consistent with the university undergraduate attendance policy included in the Undergraduate Catalog.

[redacted]

Hill, D.C. (2004). *Construction Safety Management and Engineering*. Des Plaines, Illinois:

Manuel, F, (2008). *Advanced Safety Management; Focusing on Z10 and Serious Injury Prevention*. Hoboken, New Jersey: John Wiley & Sons.

McReynolds, R. (2000). *Step By Step Guide Book On Home Wiring*. Salt Lake City, Utah: Step-By-Step Guide Book Co.

NFPA (2009). *NFPA 70E: Standard for Electrical Safety in the Workplace, 2009 Edition.* Quincy, Massachusetts: Courier/Westford.

OSHA (2002). *Scaffold Use in the Construction Industry: OSHA 3150. Small Business Safety*

[redacted]

Historical Bibliography

Alerich, W. & Keljik, J. (1996). *Electricity: AC/DC Motors, Controls and Maintenance, Sixth Edition*. Albany, NY: Delmar Publishers.

Alerich, W. & Keljik, J. (1996). *Electricity: Power Generation and Delivery, Sixth Edition.* Albany, NY: Delmar Publishers.

Balchin, N. & Castner, H. (1993). *Health and Safety in Welding and Allied Processes, Fourth Edition.* New York, NY: McGraw-Hill.

Grimaldi, J. & Simmons, R. (1989). *Safety Management.* Boston, MA: Irwin.

Hammer, W. (1989). *Occupational Safety Management & Engineering.* Englewood Cliffs, CA: Prentice-Hall.

Herman S. (1999). *Delmar's Standard Textbook of Electricity, Second Edition.* Albany, NY:

Appendix B: Old Syllabus of Record

I. Catalog Description

Course Title: SAFE 211 Principles of Industrial Safety II

Prerequisites: SAFE 101

3 class hours
3 lab hours
4 semester hours

(3c-31-4sh)

Stresses an understanding of the complexity of industrial hazard control by thoroughly examining elements of safety and health enumerated in the Occupational Safety and Health Administration promulgated standards and in various consensus standards. Emphasis is placed

III. Course Outline

A. Occupational Safety and Health Standards (3 hours)

1. [redacted]

2. Enforcement Methods
3. Computer Search Methods
4. Interpretation of Standards

B. Personal Protective Equipment (3 hours)

1. Identifying Needs
2. Maintenance and Inspection Programs
3. Training Programs
4. 1926.95-.107,1910 Subpart I

C. Electrical Safety (6 hours)

1. Principles of Electricity
2. Elements of Electrical Equipment

4. Lockout/tagout Procedures
5. Electrical Power Transmission
6. Wiring and its Associated Hazards

Midterm Examination (1 hour)

K. Trenching (4 hours)

1. Significance of Exposure
2. Mechanics of Collapse
3. Soil Classifications
4. Safeguarding-Sloping, Shoring, Shielding
5. Regulations Governing Operations

L. Scaffolds and Ladders (4 hours)

1. Types of and Use of Scaffolds
2. Identifying Typical Hazard Exposures
3. Regulations Governing Operations and Hazard Control

M. Fall Protection (4 hours)

1. Significance of Exposure
2. Physics of Falls-The Human Experience
3. Options for Protection
4. Regulations Governing Fall Protection

J. Walking and Working Surfaces (2 hours)

1. Significance of Exposure to Employees and Public
2. Coefficient of Friction
3. Choosing Floor Materials
4. Stairways, Ramps, Catwalks

K. Special Industry Machinery and Processes (3 hours)

1. Introduction to Robotic Safety
2. Saw Mills and Logging
3. Meat Cutting
4. [redacted]

L. Culminating Activity (2 hours)

data and results. Agreement on what constitutes a "hazard". Review of quantitative

IV. Evaluation Methods

The faculty person assigned to teach this course could be one of several faculty within the Safety Sciences Department. What follows is an example of the evaluation methods and weightings used by one of those faculty:

Classroom Evaluation

Weighting:

Midterm exam	20%
Final	20%
Group Project	20%
Quizzes/Tests	25%
Assignments	10%
Participation*	5%

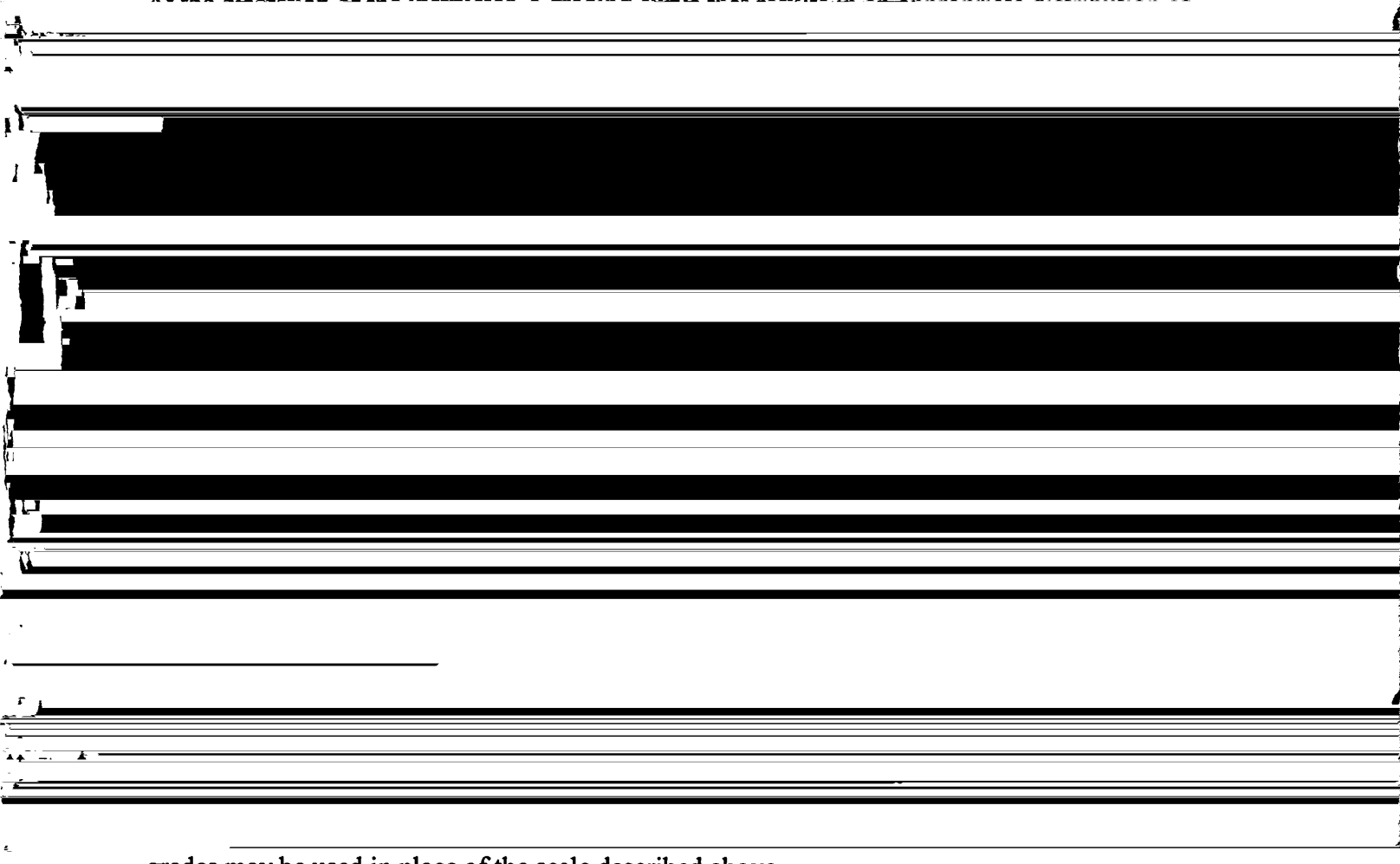
*This includes but is not limited to: individual participation in whole class and small group discussions and other brief class presentations

No make-up examinations will be given except in the case of illness (confirmed in writing by the infirmary or MD) or a documented (in writing) family emergency. Regardless of reason, absolutely no make-up exams will be given unless the instructor is contacted prior to the

Grading Scale:

A=90-100%
B=80-89%
C=70-79%
D=60-69%
F= <60%

Grading will be based on the portfolio's professional appearance, organization, timeliness, evidence of the above three items, evidence of improved work, and a reflective statement. At the discretion of the instructor, a grading curve that results in appropriate distribution of



grades may be used in place of the scale described above.

V. Attendance Policy

Although there is no formal attendance policy for this class, student learning is enhanced by regular attendance and participation in class discussions and the university expects all students to attend class.

VI. Required Text

Laing, Patricia M., Editor. (2001). Accident Prevention Manual for Business and Industry – Engineering & Technology, 12th Edition. Chicago, IL: National Safety Council.

Herman S. (1999). *Delmar's Standard Textbook of Electricity, Second Edition*. Albany, NY: Delmar Publishers.

Kubala, T. (1996). *Electricity: Devices, Circuits and Materials, Volumes 1 & 2, Sixth*

SAFE 211 Principles of Safety II – Construction Industry **2c-31-3cr**
Prerequisite: SAFE 101

workplace hazards associated with construction. Students are exposed to the complexity of three dimensional work which exists in the fast paced construction industry by thoroughly examining elements of safety and health enumerated in the Occupational Safety and Health Administration standards and in various consensus standards. Emphasis is placed on personal protective equipment, electrical safety, scaffolds, fall protection, trenches and confined space entry including rescue. Practical application of associated hazards and their control strategies is accomplished in laboratory sessions.