

LSC # 99
Action Approved
3-19-92

COVER SHEET: Request for Approval to Use W-Designation

TYPE I. PROFESSOR COMMITMENT

- (X) Professor Richard L. Christensen Phone 3017
(X) Writing Workshop? (If not at IUP, where? when? January 9-11, 1990)
(X) Proposal for one W-course (see instructions below)
(X) Agree to forward syllabi for subsequently offered W-courses?

TYPE II. DEPARTMENT COURSE

- () Department Contact Person _____ Phone _____
() Course Number/Title _____
() Statement concerning departmental responsibility
() Proposal for this W-course (see instructions below)

TYPE III. SPECIFIC COURSE AND SPECIFIC PROFESSOR(S)

- () Professor(s) _____ Phone _____
() Course Number/Title _____
() Proposal for this W-course (see instructions below)

SIGNATURES:

Professor(s) Richard L. Christensen
Department Chairperson Robert B. Boush
College Dean Harold E. Wingard
Director of Liberal Studies CD Hill

COMPONENTS OF A PROPOSAL FOR A WRITING-INTENSIVE COURSE:

I. "Writing Summary"--one or two pages explaining how writing is used in the course. First, explain any distinctive characteristics of the content or students which would help the Liberal Studies Committee understand your summary. Second, list and explain the types of writing activities; be especially careful to explain (1) what each writing activity is intended to accomplish as well as the (2) amount of writing, (3) frequency and number of assignments, and (4) whether there are opportunities for revision. If the activity is to be graded, indicate (5) evaluation standards and (6) percentage contribution to the student's final grade.

II. Copy of the course syllabus.

III. Two or three samples of assignment sheets, instructions, or criteria concerning writing that are given to students. Limit: 4 pages. (Single copies of longer items, if essential to the proposal, may be submitted to be passed among LSC members and returned to you.)

Please number all pages. Provide one copy to Liberal Studies Committee.

REQUEST FOR APPROVAL TO USE W-DESIGNATION
VIA PROFESSOR COMMITMENT BY RICHARD L. CHRISTENSEN
FOR SA412: EVALUATION OF SAFETY PROGRAM EFFECTIVENESS

I. WRITING SUMMARY

Characteristics of the Course and Students

SA412, Evaluation of Safety Program Effectiveness, is being proposed hereby as a writing-intensive course based upon the commitment of the faculty member, Richard L. Christensen, currently assigned to teach the course during the Fall Semester, 1992. This course is one of the courses required of each student majoring in safety sciences. This course is offered every semester, although not always by this faculty member.

Students take this course as upperclassmen, i.e., juniors or seniors with the majority of their other coursework in the major completed. The students enrolling in this course have progressed far enough to begin applying some of their previous coursework in the management of the safety and health function.

Types of Writing Activities Proposed

A minimum of seven different types of writing activities have been incorporated into this proposal. They have been formulated as a meaningful sequence of activities whereby the writing exercises will facilitate the learning process for the students in the course. The description of this sequence, as it is proposed for presentation to the students, is provided in Section III as a sample of the assignments, instruction, and criteria given to students. The various writing activities are discussed in the following sections.

Free-Writing Exercises. At various times during the course, students will be asked to "take a few minutes" to express in writing the significance of a particular topic of current discussion. Some of this activity will be in-class and some will be out-of-class. An example of this type of activity is described in Section III materials (Step 1, Step 5, and step 6 of the instructions for the Semester Project).

Maintenance of a Journal. Students will be required to maintain a journal of their activities and experiences during completion of the Semester Project. This is being done, in part, in an attempt to have the students analyze and express (in writing) their reactions to what is experienced in the classroom, at the library, in discussions with fellow students, and other situations where such experiences contribute to the completion of the overall Semester Project. There will be no formal approach made to the mechanics of the journal keeping; for example, legible handwriting will be acceptable. This will be stressed to the students so that

there will not be an incentive to "copy over" or otherwise edit the journal entries.

Library Exercises. Several minor exercises will require the students to become familiar with and use library resources. They will be required to locate a relevant articles or materials in the literature, correctly cite the reference using an appropriate style (see next section), and quote correctly and precisely from it. Peer evaluation will be used to a limited extent here, in that the reference will be exchanged among students and verification of each student's work will be provided by another.

Familiarization With Style Manuals. Students will be asked to select a particular style manual commonly found on the campus such as Campbell, et al, the APA, or the MLA. They will be expected to adhere to the selected manual for all citations, references, and format of a formal paper prepared as a Semester Project.

Homework. A number of homework problems will be assigned throughout the semester which require significant computational work. This work must be done in an orderly, organized manner which can be followed easily. Also, short essay responses will be required within this homework to explain or justify the results. In some cases technical graphs or charts will be required.

Formal Semester Project. The culmination of the Semester Project will be a formal paper, based on the sequence of writing activities above. Preliminary steps will include research into the subject provided, collection and development of the data, preparation of the results of the analysis, submittal of a draft, and the final paper. Students will be asked to provide an analysis of their draft through the use of a commercial grammar checker software package. They will be expected to re-write the draft for their final paper based upon that analysis and comments supplied by the instructor.

Of the various writing activities described above, only the final, formal paper/analysis will be used as an item of evaluation for purposes of determining a grade for the course. A table summarizing the type, objective, amount of writing, number and frequency of assignments, revision opportunities, whether the activity is to be graded, and percent contribution of graded activities is presented below.

TYPE	OBJECT	AMOUNT	NO/FREQ	REVISION	GRADED	PERCENT
Free	See Disc	1 page	3/senester	no	no	NA
Journal	See Disc	10-15pp.	continuous	no	no	NA
Library	See Disc	2 pp.	3/senester	no	no	NA
Style	See Disc	1 pp.	1/senester	no	no	NA
Quizzes	Essay	1 page	3/senester	no	no	20%
Paper	See Disc	15 pp.	1/senester	yes	yes	25%
Homework	See Disc	1 pp.	6/senester	no	no	15%

II. COURSE SYLLABUS

Evaluation of Safety Program Effectiveness
(Richard L. Christensen)

Objective- The objective of this course is to have the student be able to describe the fundamentals of the total loss control concept and explain the differences between the traditional approach to safety and health and that which emphasizes the operational error concept. The student shall be able to develop effective policies and procedures which will guide the organization in accomplishing defined safety and health goals for total loss control. The student will then be able to develop a number of different statistically accurate means, utilizing various criteria, for measuring the effectiveness of those policies and procedures used to direct the performance of the different levels of management.

Grade- The final grade will be weighted as indicated below:

Quizzes	=20%
Homework	=15%
Project	=25%
Major Exams (2)	=40%

Your grade, at any time, may be determined by weighting the scores received on those items above and comparing the results with 90% and above an A, 80-89% a B, 70-79% a C, 60-69% a D, and below 60% an F.

Exams- All quizzes will be announced and closed book. Exams may be partially closed book and partially open book and will be comprehensive. Quizzes generally comprehend fill-in-the-blank type of objective questions and problems. Exams are generally multiple choice, true-false, and matching objective questions which will be computer graded; the balance of the questions will be essay or problem solving in nature.

Make up quizzes will be limited to a maximum of 80%. The low quiz grade will be dropped only if the

student has not missed any regularly scheduled quizzes; otherwise the first quiz missed will count as the "dropped low quiz". If more than one quiz is missed, it is the responsibility of the student to contact the instructor to arrange for a make-up quiz. There will be no make-up quizzes the last week of class.

Homework- Late homework will receive a penalty of 10% per day late including weekends.

Text- Required for this course:

Petersen, Dan. Techniques of Safety Management , Aloray Inc., Goshen, NY, Third Edition, 1989.

Readings- The following three standards are on reserve in Stapleton Library in sufficient quantity for efficient use:

1. ANSI Z16.1 Method of Recording and Measuring Work Injury Experience.

2. ANSI Z16.2 Method of Recording Basic Facts Relating to the Nature and Occurrence of Work Injuries.

3. ANSI Z16.4 ANS For Uniform Recordkeeping For Occupational Injuries and Illnesses.

Other readings may be assigned from materials on reserve in the library.

Project- A semester project will consist of a sequence of related tasks, culminating in preparation of a formal analysis of a series of accident reports.

Details of the project are being distributed in a separate handout. A late project will receive a penalty of 2% per day (including weekends).

CLASS SCHEDULE & ASSIGNMENTS

Based upon one 3-hour class per week; 14 weeks per semester.

<u>Meeting</u>	<u>Subject</u>	<u>Assignments</u>
1	Introduction; Objectives, Policy and Measurement	Ch. 1-4 Append B
2	Recording Work Injury Experience	ANSI Z16.1 ANSI Z16.4 Ch.6 pp.130-131 & Ch. 13
3	Collecting & Recording Accident Data	ANSI Z16.2 Ch. 11
4	Worker's Compensation Insurance	Ch.6 pp.134-136
5	Worker's Compensation Administration	-----
6	Accident Costs	Ch.6 pp.132-134
7&8	Statistical Methods Review	Ch. 12
9	SAFE-T-SCORE Cumulative Control Charts	Ch.6 pp.136-137
10	Safety Sampling	-----
11	Plant Inspection Methods "Near Miss" Systems Critical Incident Technique	Ch. 8
12	APEX and other techniques	Ch. 5,7 & 14
13	Audits; Characteristics of good Measurement Techniques	Append. A Ch.6 pp.115-130 & Ch. 10
14	Accident Data Handling Computer applications	Lecture

III. SAMPLES OF ASSIGNMENTS/INSTRUCTIONS

Each student in SA412 is expected to complete all of the assignments comprising the semester activities described below. If any of the assignments identified are not completed, the student will receive a grade of "I" (incomplete) for the course. Although all of the items discussed below are to be submitted to the instructor, only the final, formal analysis will be graded. All other assignments will be reviewed by the instructor primarily for purposes of assuring the student that satisfactory progress is being made in the course.

TOPIC FOR PROJECT

1. Each student must maintain a journal, in diary format and narrative style, of all activity pertaining to completion of the formal analysis and report. Journal entries should be written as if spoken, or otherwise related, to a fellow professional (or professional-in-training) presumed to have knowledge of the subject matter equivalent to that of the writer. Concepts, considerations, accomplishments, frustrations, and all other feelings associated with work on the project should be entered into the journal. Include in your journal for each new topic discussed in class the development of one (1) question (and answer) which could be used on a quiz or test. Journals will be collected at least twice during the semester for review and comment by the instructor.
2. Prior to the third meeting of this class (9-17-92) all students will identify a minimum of three (3) articles or chapters in books (exclusive of the current textbook) which discuss Pareto Analysis and/or accident analysis (not to be confused with accident investigation). The student must submit the following to the instructor by the third meeting:
 - a. specification of a style manual which the student has selected to define format, citation methods, referencing style, and other criteria for presentation of the formal analysis and report (at least six different style manuals are in common use at IUP),
 - b. a copy of one of the articles found,

- c. a 5" x 8" card on which the student has correctly and completely cited each of the three sources found (3 cards),
 - d. on the 5" x 8" cards mentioned above, an exact quotation from each of the references, one which the student considers to be significant, and
 - e. a list of five (5) questions which are raised by the article. These may be questions concerning the methods of analysis, issues pertaining to any results found, suggestions for additional work, or any other relevant questions.
3. During the fourth class meeting (9-24-92) the 5" x 8" cards will be distributed among students in the class (no student will have his/her own cards). Each student must verify the correctness of the citation on the card and, as evidence of having located the correct article, quote exactly the sentence in the article immediately following the one provided. These cards are to be returned to the instructor prior to the seventh class meeting (10-15-92) along with the page indicating the sentences required.

OBTAINING MATERIAL FOR AN ACCIDENT ANALYSIS/REPORT

4. Each student will be given a package of ten (10) "supervisor's accident report summaries" and sufficient "coding forms" for recording data. The "coding form" must be completely filled in with the Employee Data. This may require access to an old calendar and estimation of worker's sex by the worker's name. Also, Accident Data for each accident report must include the number codes for each of the eight (8) "key facts" listed (see ANSI Z16.2). Finally, include the File No. on each record in the upper right-hand corner of the "coding form".

5. Prior to the eighth class meeting (10-22-92), each student is to provide the instructor with a tabular summary of the ten (10) "coding forms" completed in 4. above. This summary shall be in matrix form showing the characteristics as follows:

Accident Occurrence

Characteristic 1 2 3 4 5 6 7 8 9 10

Employee:

File No.
 Cost Center
 Shift No.
 Supervisor Name
 Day of Week Injured
 Sex (M or F)

Key Facts:

Nature of Injury
 Part of Body
 Source of Injury
 Accident Type
 Hazardous Condition
 Agency of Accident
 Agency of Acc. Part
 Unsafe Act

Include with this summary a brief description of the problems encountered with the analysis of the accidents thus far (no more than one page).

6. By the ninth class meeting (10-29-92), each student shall receive copies of each other student's tabular summary and will begin preparing a grand total matrix of all accidents. This tabular summary shall be used in the development of the final analysis and report. The total matrix will be included in the appendix of the final analysis/report.

PREPARATION/REVISION OF ACCIDENT ANALYSIS/REPORT

7. Prior to the twelfth class meeting (11-19-92), the student must submit a rough draft of the analysis/report which has been prepared on a MS-DOS word processor and which has been run through the "grammar checker" software called "Right Writer". The draft shall include the comments provided by the "Right Writer" software. The student must have access to the software individually or must reserve time on the student computer in the Safety Sciences Department (Room 12 JOH) to be able to use the department's copy.

It is recommended that the word processor called "WordPerfect" be used on this report as the program is available for student use on the university computers.

8. The instructor will review the rough draft and make whatever critical comments are appropriate. The draft will be returned to the student for revision as necessary.
9. The final analysis/report must be submitted no later than the fourteenth (last) class meeting (12-10-92). The overall length of the paper is anticipated to be 8 to 10 pages exclusive of any tables, figures, graphs, and references.

The analysis/report shall include a tabular summary of the most frequently occurring items for each of the five (5) Employee Characteristics and for each of the eight (8) "key facts". Prepare professional figures or graphs of your choice of three (3) Employee Characteristics and five (5) "key facts". Justify your selections.

The body of the analysis/report will discuss the findings, will predict the underlying causes of the accidents, and will develop specific recommendations for broad control of those causes.