LSC # 156

# REQUEST FOR APPROVAL TO USE W-DESIGNATION

Action approv COVER SHEET: Request for Approval to Use W-Designation TYPE I. PROFESSOR COMMITMENT Phone 357-3017 (x) Professor <u>Jack C. Reed</u> (x) Writing Workshop? (If not at IUP, where? when? IUP (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) \_ ( ) Course Number/Title ( ) Proposal for this W-course (see instructions below) SIGNATURES: Professor(s) Department Chairperson College Dean Director of Liberal Studies

### COMPONENTS OF A PROPOSAL FOR A WRITING-INTENSIVE COURSE:

- I. "Writing Summary"--one or two pages explaining how writing is used in the course. <u>First</u>, explain any distinctive characteristics of the content or students which would help the Liberal Studies Committee understand your summary. <u>Second</u>, 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.)

# REQUEST FOR APPROVAL TO USE W-DESIGNATION VIA PROFESSOR COMMITMENT BY JACK C. REED FOR SA 311: INDUSTRIAL FIRE PROTECTION

#### I.WRITING SUMMARY

# Characteristics of the Course and Students

SA 311: Industrial Fire Protection, is being proposed as a writing-intensive course based on the commitment of the faculty member, Jack C. Reed, currently assigned to teach the course during Fall Semester, 1994. Since this course is a required course, it is offered each semester. Therefore, the students will have more opportunities to take a writing-intensive course within the department.

The students that will be taking this course are upperclassmen, i.e., juniors or seniors. At this level the student is well prepared in the safety field and has the necessary background course work to handle the technical aspects of fire protection.

Since this a required course and many jobs use the knowledge gained in this course, they are able to relate this to on-the-job situations.

# Types of Writing Activities Proposed

A minimum of five (5) different types of writing activities have been identified in this proposal. They have been developed to reinforce the learning experience that is given in the classroom lectures. The description of some the activities can be found in Section III (page 6) as a sample of the assignments, instructions, and criteria given to the students. The various writing activities are discussed in the following sections.

<u>Informal Writing Exercise</u>. At various times during the semester the student will be asked to evaluate the subject matter of a specific topic covered or in the reading assignments. An example of this activity will be found in Section III materials found on page 6.

<u>Use of Style Manuals.</u> The students will be expected to use the style manual: "Form and Style" by Campbell. This will be in reserve at the Main Library. They will use this as a base for all writing, citations, references and format for the formal paper that they will have to prepare as a semester project. An informal evaluation will be conducted by the student at the end of the semester on this manual.

<u>Interview and Record Search</u>. Students will be required to interview a fire protection professional in their home town. This exercise will consist of prepared questions that will be evaluated by the student's peers prior to the actual interview. At the same time they will conduct a search of the fire protection records to determine the causes of any reported fires. A summary of the interview and record search will be submitted.

<u>Literature Search</u>. The student will conduct a literature search of a topic related to fire protection. It will consist of at least three annotated

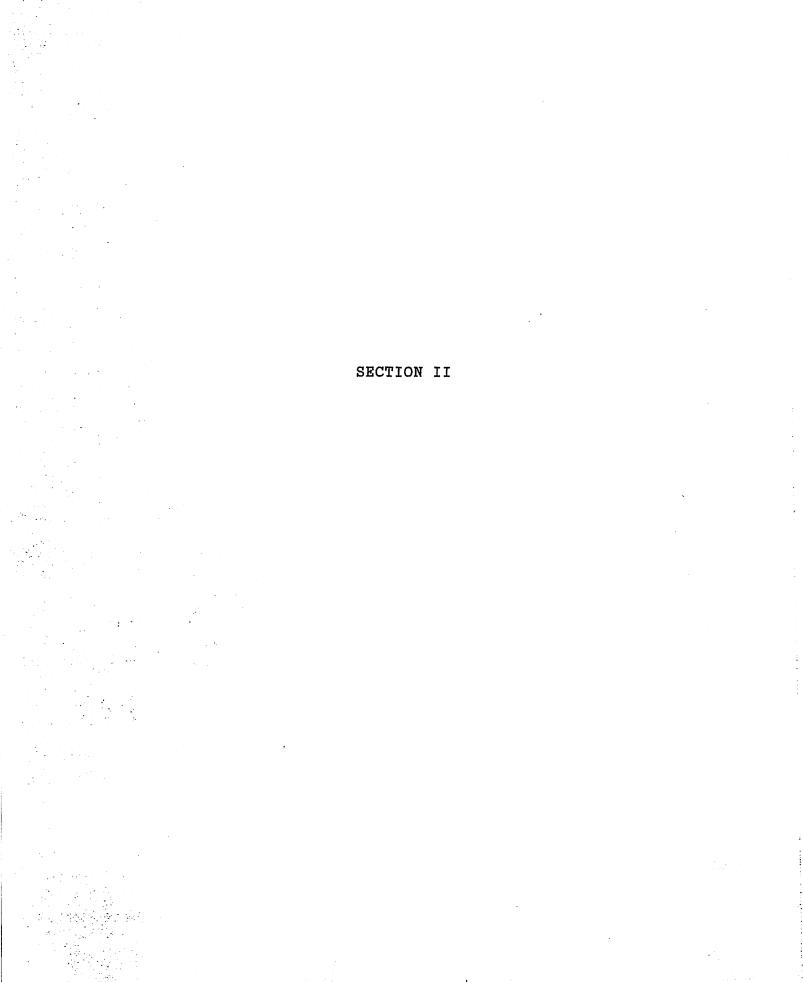
bibliographies. Appropriate style from the Use of Style Manuals section will be followed. A list of various topics that are acceptable will be given for this selection. A brief justification of why this particular subject was chosen will be turned in on date assigned.

<u>Semester Report</u>. This report will be based on a building for which the students will conduct a life safety study. This a group project and will consists of not more than four students per group. Random drawing will be the method of group establishment. Each group member will be evaluated by their peers for part of the grading process. This evaluation will be 10% of the report grade. Details of the requirements will be given on the assignment sheet. The students will be required to submit a draft of their paper within the first six weeks of the semester. Students will be encouraged to submit a second draft during the next three weeks. All group meetings will have minutes taken on progress and participation by group members and will be turned in during the draft period and final reports.

Only those activities shown as graded in table below will be used as part of the student's evaluation for semester grade.

SUMMARY OF COURSE ACTIVITIES

TYPE	OBJECT	AMOUNT	NO/FREQ	REVISION	GRADED	% of FINAL
Informal Writing	see above	1 page	10/sems	no	no	NA
Style Manual	see above	1 page	1/sems	no	no	NA
Interview & Record	see above	4 pages	1/sems	no	yes	5%
Literature Search	see above	2 pages	3/sems	no	yes	5%
Semester Report	see above	5 pages	1/sems	yes	yes	20%
Quizzes	essay	1 page	5/sems	no	yes	15%
Homework	NA	NA	6/sems	no	yes	10%
Exams	NA	NA	3/sems	no	yes	45%



SA 311 INDUSTRIAL FIRE PROTECTION SECT. 001

MONDAY, WEDNESDAY & FRIDAY 9:15 AM TO 10:15 AM

<u>OBJECTIVE</u>: TO GAIN AN UNDERSTANDING OF THE PRINCIPLES OF FIRE PREVENTION AND SUPPRESSION.

TEXT: FIRE PROTECTION HANDBOOK, 17TH EDITION, ARTHUR E. COTE, EDITOR, NATIONAL FIRE PROTECTION ASSOCIATION, QUINCY, MA ( 1991).

PREREQUISITES: SA 211, CH 102, PY 112 AND JUNIOR STANDING IN SAFETY.

#### REFERENCE BOOKS:

- 1. PRINCIPLES OF FIRE PROTECTION CHEMISTRY, RICHARD L. TUVE; NATIONAL FIRE PROTECTION ASSOCIATION, QUINCY, MA (1988).
- 2. <u>BUILDING CONSTRUCTION FOR THE FIRE SERVICE</u>, 2nd ED., FRANCIS L. BRANNIGAN; NATIONAL FIRE PROTECTION ASSOCIATION, QUINCY, MA (1989).
- 3. <u>FIRE ALARM SIGNALING SYSTEMS HANDBOOK</u>, 2nd ED., CHARLES E. ZIMMERMAN; NATIONAL FIRE PROTECTION ENGINEERS, BOSTON, MA (1988).
- 4. AN INTRODUCTION TO FIRE DYNAMICS, DOUGAL DRYSDALE; JOHN WILEY AND SONS, NEW YORK, NY (1986).

GRADING: THE FINAL GRADE WILL BE BASED ON THE HIGHEST CLASS AVERAGE. THE WRIGHTED AVERAGE OF EACH OF THE FOLLOWING WILL BE USED TO DETERMINE THIS AVERAGE. (THE GRADES WILL BE CURVED)

SCHEDULED EXAMS=45%
QUIZZES=15%
HOMEWORK=10%
SEMESTER REPORTS=20%
LITERATURE SEARCHES=5%
INTERVIEW & RECORD SEARCH=5%

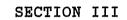
- 1. ANY OUT OF CLASSROOM WORK WILL BE GIVEN A "O" FOR BEING LATE. THE PENALTY WILL START THE END OF THE CLASS PERIOD AS THE 1ST DAY.
- 2. ALL OUT OF CLASSROOM WORK, SUCH AS HOMEWORK, REPORTS, ETC., WILL BE ASSIGNED DUE DATES AS REQUIRED. INSTRUCTIONS AND FORMAT FOR EACH WILL BE HANDED OUT AS SOON AS POSSIBLE FOR THE STUDENT TO HAVE SUFFICIENT TIME TO COMPLETE THE WORK. ALL WORK OUTSIDE OF THE CLASSROOM WILL BE TYPED OR COMPUTER PRINTOUT EXCEPT PROBLEMS CAN BE HANDWRITTEN.
- 3. THERE WILL BE NO MAKEUPS FOR THE SCHEDULED EXAMS UNLESS PRIOR ARRANGEMENTS ARE MADE. ALL EXAMS ARE OF EQUAL VALUE REGARDLESS OF LENGTH.
- 4. QUIZZES WILL BE WEEKLY AND QUESTIONS WILL BE ON THE PREVIOUS WEEK'S READING ASSIGNMENTS. NO MAKEUP OF QUIZZES FOR ANY REASONS.
- 5. ALL QUIZZES AND EXAMS WILL BE CLOSED BOOK.
- 6. MAJOR REPORTS WILL BE DONE BY GROUPS. THE GRADE WILL BE CALCULATED 90% OF MY GRADE AND 10% BY YOUR PEERS. YOU MUST DO YOUR FAIR SHARE.

THERE WILL BE ONE MAIN FIELD TRIP. FOR THOSE WHO CAN NOT GO ON THIS TRIP, THERE WILL BE A FIVE(5) PAGE RESEARCH PAPER REQUIRED ON A SUBJECT THAT WILL BE ASSIGNED BY ME. THIS FIELD TRIP AND REPORT WILL COUNT AS ONE QUIZ.

CONSULTATION: MY OFFICE IS IN ROOM 135 OF JOHNSON HALL. MY OFFICE HOURS ARE POSTED ON THE DOOR BUT IF YOU SEE THE DOOR OPEN FEEL FREE TO COME IN AND SEE ME AT ANY TIME. IF YOU DESIRE AN APPOINTMENT CALL 357-3017.

READING AND EXAM SCHEDULE: BASED ON 1.0 HOUR PER CLASS.

<u>DATE</u>	CLASS	SUBJECT	<u>ASSIGNMENT</u>			
	1	Introduction	Lecture Notes			
	2	Introduction	1-1			
	3		9-1, 9-2,9-3 & 9-8			
	4	Program Mgmt. Bldg. Const.	1-2,1-3,6-1			
	5	Bldg. Const.	6-2,6-3,6-4			
	6	Bldg. Const.	6-5,6-6,6-7			
	7	Life Safety	7–1			
	8	Life Safety	7–2			
	9	Life Safety	7-3, 7-4			
	10	Life Safety	Lecture Notes			
			*ALL MATERIAL FROM CLASS 1-10			
	12	Ignition & Combustion				
	13	Ignition & Combustion				
	14	Ignition & Combustion	1-5			
	15	Heat Transfer	Lecture Notes			
	16	Heat Transfer	Lecture Notes			
	17	Heat Transfer L	ecture Notes			
	18	Extinguishment	1–6			
FIRST DRA	FT OF S	SEMESTER REPORT DUE AT E	ND OF CLASS 18			
	19	Extinguishment	1–6			
20****EXAM*#2*********ALL MATERIAL FROM CLASS 12-19						
	21					
	22	Fire Hazards-Materials				
	23	Fire Hazards—Materials				
	24	Fire Hazards—Materials				
	25	Storage Hazards	8-5, 8-6,8-7, 2-27			
	26	Storage Hazards	2-24,2-25,2-26,2-29			
	27	Process Hazards	8-2.8-3.2-11.2-12			
	28	Process Hazards				
29****EXAM*#3***********************************						
	30	Ignition Control	2-31,2-32			
	31	Extinguishment Agents	5-1,5-2,5-3			
	32	Extinguishment Agents	5-17,5-18,5-19			
	33	Extinguishment Agents				
	34	Alarm & Detection				
	35 36		4-5,4-6,4-7			
	36 27	Extinguishment Systems				
	37	Extinguishment Systems				
TITALE CONC.	38	Extinguishment Systems	3-TT,3-TZ			
LINAL KRLOK	T DOR Y	AT END OF CLASS 38				



#### SA 311

#### INDUSTRIAL FIRE PROTECTION

Each student in the course will be expected to complete all of the assignments. If any of the assignments are not finished, the student will receive a "0" for that activity. All of the out of class assignments that are in the form of reports will be graded. The draft copies will be graded but this is to indicate what will be the grade if not revised. This draft is for the student' benefit so that he/she can schedule their time. The short reports will be review by the instructor primarily for purposes of determining that the student is progressing satisfactorily.

SA 311 INDUSTRIAL FIRE PROTECTION INFORMAL EXERCISE EXAMPLE

# ASSIGNMENT:

<u>Objective:</u> To acquaint you with the requirements of fire safety and all the safety requirements associated with an egress plan.

The Bateman Corporation manufactures metal parts for machinery and road-building equipment assembled and merchandised by other concerns. It does a good deal of cutting, pressing, and welding of both steel and magnesium. Occupying a two-story brick building containing 230,000 square feet of floor space on each floor, it employs, on the average 950 men and 100 women.

#### REQUIRED:

For fire prevention, describe the following:

Safety features that it would be desirable to have in the design and construction of the building.

An organization and training program you would recommend.

Portable fire-extinguishing equipment you would recommend.

\*\*\*\*(For Liberal Studies Committee—Each of the questions above will be a separate assignment. In other words the student will receive only one of the requirements at a time. The student then will work with a group which will pick the best answer. Lastly, the groups will present to the whole class for discussion.)\*\*\*\*

#### Report: Industrial Fire Brigade

<u>Objective:</u> To learn the problems in establishing a program for training, development, and scheduling of a fire brigade.

<u>Problem</u>: You have been assigned the job to develop a fire brigade for your company. The company is a Petro-Chemical Producer with 1,500 employees that work over a 3 shift day for 352 days a year.

Using the OSHA standards as your base reference for the study, develop the requirements that your company will have to do and/or needs for the fire brigade.

This will consist of a formal report to your superior with justifications for your recommendations.

Be sure to indicate in your report any and all assumptions that you make. The report will contain the following and in that order:

Introduction Conclusions Recommendations Body of text

Use headings and subheadings in the text part of the report.

The report will be no greater than 5 pages and not less than 3 pages in length. This is text only. Use tables and diagrams to help the reader understand what you are doing.

The report will be typed or computer printout. Double spacing is required. One inch margins (left and right) will be used.

Assignment: Interview & Record

Objective: To teach you the research procedures of statistical analysis and how to interview.

<u>Problem</u>: During a visit to your hometown, assess the causes of fires for your area. Use data from the local fire department. The records should go back for at least 3 years to give you a good data base to do a statistical analysis. Use tables and graphs to report your results. An executive summary is expected to accompany your findings. Try to keep to 2 pages of text plus as many pages of tables and graphs that you think necessary. All shall be typed for ease of reading and review.

An additional requirement will be that of interviewing your local fire chief. You will have to develop 10 questions to ask in this interview. Additional information will be discussed in class.

SA 311 Industrial Fire Protection SEMESTER REPORT

This is your major report for the semester. Please refer to schedule of class as to due dates for the draft and final copies.

This report will be on computer disk for the draft copy. The computer must be MS-DOS compatible and Wordperfect is the preferred wordprocessor to be use. Check with instructor if your computer is different.

Semester Project Report: Means of Egress Study

Reference: NFPA 101 and 29 CFR 1910

<u>Objective:</u> To acquaint you with the procedures of evaluation of a building for its means of egress and associated problems.

<u>Problem</u>: Using the assigned building, conduct a means of egress study. The text will be a minimum of 5 pages and not more than 10 pages in length.

The paper will contain a map showing the means of egress. This will be on 8 1/2"x11" paper and drawn to scale. The paths will be marked in red.

The paper will contain the following items as text material:

- 1. Explanation of fundamental requirements as they apply to your building.
- 2. How the building is classified?
- 3. Matrix of the content hazards.
- 4. Necessary fire protection features.

The following format will be followed:

- 1.Introduction
- 2.Conclusions
- 3.Body of text

Use headings and subheadings in this report.

This is a group report, therefore all students will receive two grades:

90% my evaluation

10% peer evaluation

The peer evaluation will consist of participation in group meetings, contribution in group writing and proofreading and actual field work that will be required. Minutes of each meeting will be kept as to progress of report and who is doing what and why. These minutes will be turned in with the draft and the final reports.