

#### INTERNSHIP PROGRAM

# PROFESSIONAL REPORT GUIDELINES

The Internship Professional Report must be submitted to the department office to receive full academic credit for the internship experience. If the student works two successive academic sessions for the same employer (i.e., Summer/Fall), only one report is required for the combined work period. The Professional Report is due, along with the Student Evaluation, Supervisor Evaluation, and Monthly Progress Reports, by the end of the first week of the academic session following the work term. Two sets (one original and one copy) are required, one for the Internship Faculty Advisor and one for the department's Internship Library.

The Internship Professional Report contains two parts. Section I involves a narrative or research directly related to some aspect of the student's professional or technical work on the job. Section II involves a job description/task analysis and evaluation of the internship assignment including current company information, literature and/or annual report. The Internship Professional Report is designed to give the student experience in writing both professional and general reports, to encourage the student to reflect on his or her experience, and to gain additional educational benefits. The report will be evaluated on organization, content, and communication skills (including grammar). These skills contribute significantly to a student's progress at the University and to an employee's progress in any organization. NOTE: If your company reports follow the normal technical report format and review procedure for internship, your Internship Faculty Advisor may waive the standard Professional Report format described here.

### **General Guidelines**

A. Double spaced typing (11-point) on only one side of 8 1/2" X 11" bond. Pages should be numbered consecutively, and each section should have a title (further instructions below). All figures and tables should be referred to in the text and should be numbered consecutively and captioned. The report should be spiral bound.

B. An unnumbered title page including the following information in the order listed:

Report Title
INTERNSHIP PROFESSIONAL REPORT

Student's Name Student's ID

Employer Supervisor's Name Supervisor's Telephone Number

Work Assignment Academic Terms
Date Submitted

In partial fulfillment of requirements for: CE 293/393/493 Internship Assignment

Local Address Local Telephone

- C. The next page(s) is the Table of Contents and, like the Title Page, is not numbered.
- D. The body of the report should be in two sections (with pages numbered consecutively through both sections) and titled as follows:

### **SECTION I**

This section should be a minimum of 10 pages of text, doubled spaced, and may contain illustrations. The report is expected to be the student's own work with references to sources used to prepare the report.

A wide range of subject matter is permissible, provided there is a connection with the work experience. Research and reading are required.

### Sample topic concepts are:

- ✓ The analysis and design of a project component with which the student was associated while on the job.
- ✓ The history and development of an engineering process and practice with which the student was associated while on the job.
- ✓ An in-depth analysis and evaluation of management strategies, accounting practices, or buying procedures in a firm.

This section should follow the format outlined below. However, it is recognized that for some types of internship, this format might not be appropriate or workable. In such cases, the student should develop his or her own organization in consultation with the Internship Faculty Advisor.

# **Typical Format**

# A. Abstract

The abstract should provide a concise summary of the main points of Section I so that the reader will know what is of major importance.

<u>Single-space this section</u>. The abstract should be 250 words or less. Information to be included: (1) TITLE OF PAPER; (2) author's name; (3) employer name and location; (4) abstract, including (a) a sentence statement of the task's specific objectives, unless given in the title, (b) brief statement of methods, if pertinent, (c) summary of results obtained, (d) a statement of the conclusions, (e) acknowledgement of any financial support, and (f) dates of Internship assignment.

#### SAMPLE ABSTRACT:

THE EFFECT OF SULFUR DIOXIDE ON PROTEIN CONCENTRATION IN HUMAN EYES. John Jones; U.S. Environmental Protection Agency, San Francisco, CA.

A major portion of the author's Cooperative Education assignment at EPA utilized researching the harmful effects of air pollutants on human health -- repeatedly seen during air pollution episodes. The physiological effects upon the eyes are commonly experienced as excessive tearing, dry eye, and eye irritation. Sulfur dioxide, one of the primary pollutants and a contingent of smog, has been chosen for this study. Tear samples from female New Zealand white rabbits were collected from the inner medial puncta of the eye with the use of ten micro liter capillary pipettes. Tear protein concentration was determined using fluorescence spectrophotometer. Certain environmental factors allow a steady range of protein concentration to be established so that any significant deviations can be observed from the exposure to sulfur dioxide. The rabbits were exposed to high levels of sulfur dioxide (18-24 PPM) with essentially no change noted at low concentrations (3-6 PPM). Research supported in part by NIH Grant 5-S06-RR08101-09.

Date of Internship Assignment: March-September 2001

#### B. Introduction

The introduction should supply the background information necessary to understand the discussion. The introduction should contain the following information at a minimum:

- 1. Purpose of the research and nature of the problem being investigated.
  - 2. Scope of the research and limitations.
  - 3. Historical background: (a) the research, and (b) the subject matter.
  - 4. Technical background: (a) theory, and (b) explanation of unusual concepts, apparatus, procedures, etc.
  - 5. References to published material that has been extensively referenced in the discussion that is not cited elsewhere.
  - 6. Acknowledgement of assistance of persons or organizations not cited elsewhere.

#### C. Discussion

The main rule regarding the discussion section is that it be logically organized:

- 1. Use headings and subheadings.
- 2. Develop ideas logically.
- 3. Use a paragraph and subheading appropriately to convey ideas.
- 4. Make a clear transition from one idea to the next.
- 5. Show a clear relationship between a section and the overall subject.
- 6. Arrange illustrative data for maximum clarity.

# D. Conclusion(s)

- 1. State the result(s)/outcome(s) of the discussion.
- 2. Give a personal judgment/opinion of the conclusion.

#### E. Appendices

The appendices should contain all material that is helpful but not essential for an understanding of Section I. An appendix also can contain material, which, for various reasons, cannot be incorporated conveniently into the discussion. As a rule of thumb, however, the reader should be able to understand the main body of the report without the material contained in the appendices. Wherever possible, put graphics and other illustrative material in this part of the report. Be certain that:

- 1. Each separate item or exhibit has a clear and accurate identifying title.
- 2. Each item has an identifying letter or number that is listed either under "Appendix" or in the Table of Contents.
- 3. Order the items in the Appendix in the order they are referred to in the text.

### F. <u>List of References</u>

This section contains all materials that were cited in the report.

# **SECTION II**

The purpose of this section is to put the internship experience into perspective and provide other students with an in-depth picture of internship employment opportunities. A copy of Section II may then be placed in the Department's Internship Library to provide job information for other students. The student's name and ID number will be deleted from the Internship Library copy. The topics below are general guidelines and may be used as an outline for Section II of this report. This part of the report is intentionally set up to be "open-minded" to provide maximum freedom of expression.

## A. Work Description

- 1. Organization Description: Kind of business or service, products, history, functions and responsibilities of various departments; physical facilities; facts about the employer (affiliates, locations, number of employees, etc.); and how the intern's department fit into the overall organization. An organization chart would be helpful here.
- 2. Job Satisfaction: Was the work satisfying? Did it meet your expectations? Explain.

- 3. Relevance: Was your work assignment related to your field of study? How? Did the work experience help you find a special area of interest within your academic field?
- 4. Responsibilities: What type of responsibility did you have while on your assignment? Did you feel part of the total "team effort?" Give examples.
- 5. Living Arrangements: If you lived away from home, where did you live (apartment, boarding house, etc.)? Was it satisfactory? Approximate total of monthly living expenses? Did your employer provide help in finding housing?
- 6. Social/Cultural Opportunities: If your internship took you away from your normal living environment, how did you spend your free time? Were there opportunities to meet others in your age group? Were there opportunities to attend sports events, plays, concerts, etc.?

#### B. Task Analysis

Give your job title and outline the tasks in which you were involved for the internship work period. The following is a sample listing of tasks:

Title: Facility Engineer

- 1. Prepare plant, office and production equipment layouts for economy of operation and to maximize utilization of facilities and equipment.
- 2. Select, order and maintain inventory control for furniture.
- 3. Handle all signage. Write specifications and cross-bid projects.
- 4. Oversee faculty-related activities and interface with regulatory agencies.
- 5. Review and estimate design costs, including equipment, labor, material and preparation
- 6. Develop performance specifications for facilities and equipment required to meet unique operating requirements and building and safety codes.

# **C.** Course Relevancy

Please answer the following questions. Be as specific as possible.

- 1. What courses did you take at school that applied to your work assignment?
- 2. In what specific ways were these courses beneficial in preparing you for your internship experience? In what ways could they have better prepared you?
- 3. What technical skills did you gain as a result of your work assignment?
- 4. What equipment, tools, or software applications did you use while on work assignment?
- 5. What theoretical concepts or conceptual knowledge did you apply during your work assignment?
- 6. What have you learned through your internship experience that is not traditionally learned in the classroom?
- 7. What do you consider to be the best aspects of your Internship experience? What concerns would you express to future students about going on Internship?
- 8. How could the Department of Civil Engineering and Engineering Mechanics have helped to make the experience better?

#### REPORT EVALUATION

The following procedures will be used to evaluate the internship report:

- A. The Internship Professional Report (original and one copy) is due in the department office by the end of the first week of the academic session following the work term. <u>Late submission will affect</u> your grade.
- B. The Internship Faculty Advisor will evaluate the report for format, organization, the ability to express facts and concepts, and communication skills (including grammar, spelling, etc.). The Internship Faculty Advisor may make written suggestions for improvement on the original report.
- C. If, in the judgment of the Internship Faculty Advisor, the report should be rewritten, you will have two weeks to incorporate the suggested changes and submit the revised report.