New Jersey Institute of Technology
Career Development Services

Cooperative Education Work Experience Course Requirements and Report Format

For Degree Credit Courses

Cooperative Education Definition and Philosophy

Cooperative education is a well-known educational strategy that integrates classroom studies with learning through hands-on work experiences in a field related to the student's academic major and career goals. Cooperative education is an experiential learning process with specific education goals that include critical thinking, knowledge, communication, personal and professional growth, and career preparation. The learning model is embedded within the cooperative education course requirements.

The goal of this process is to ensure that students integrate, not simply participate in, the academic and experiential learning processes. Integration will have varying outcomes based upon the individual student, the work assignment, and the Faculty Co-op Advisor's requirements.

General Requirements for the Co-op Course for Degree Credit

1. Request for approval of degree credit for the work experience from the departmental Faculty Co-op Advisor before work begins. The faculty co-op advisor will evaluate the student's academic record, review the co-op job description, and review any previous co-op job documentation. Students who are pursuing degree credit for the co-op work experience course should include their Advisor in the job selection process, since degree credit work experience requires more advanced job responsibilities.

2. Completion of the Learning Agreement signed by you, your work supervisor and your Co-op Faculty Advisor. When you are pursuing degree credit, you must have your faculty member's signature on the Learning Agreement prior to returning it. It is recommended that you complete this process in person. Keep a photocopy of the document if you are attempting to obtain your Co-op Faculty Advisor's signature by scanning. Your signed copy and your work supervisor's copy will be returned to you after it is signed by your Career Advisor.

3. Attendance at the final co-op seminar as specified by the student's Faculty Co-op Advisor. If you do not receive a notice or phone call from your faculty member, it is your responsibility to call the faculty member to find out the date of the final seminar.

4. A visit to your work site by your Faculty Co-op Advisor, phone discussion or other means by which the Advisor makes contact with you and the supervisor during your work period. It is the student's responsibility to ensure that contact between the supervisor and Faculty Co-op Advisor takes place.

5. Completion of a co-op work experience for the agreed period of field placement.

6. Completion of a co-op work report as specified in the following section.

7. Submission of one copy of the work report to the Faculty Co-op Advisor and one copy to Career Development Services no later than the date of your final seminar.

8. An oral presentation of your co-op work report at your department's final seminar. Failure to attend may affect your grade.

9. Department Co-op Faculty Advisors may add additional requirements.

Requirements for the Degree Credit Co-op Work Report

- One copy of the co-op work report must be submitted to the departmental Faculty Co-op Advisor and one copy must be submitted to Career Development Services to receive full degree credit for a co-op experience. Reports are due no later than the date of the final co-op seminar and may be submitted by email.

- Your professional report should be about 5 pages, excluding appendices, illustrations, charts, or computer printouts. The report is expected to be the student's own work with references to sources used to prepare the report, if appropriate.

1. **TITLE PAGE**

An unnumbered title page in the following format:

Cooperative Education Work and Learning Report

Report Title

Author's Name
E-mail address
Major

Employer
Supervisor's Name
Supervisor's Telephone Number

Career Advisor
Faculty Co-op Advisor
Date Submitted

In partial fulfillment of the requirements for:
Cooperative Education Work Experience
Course Number: _____ - _____

2. **ABSTRACT**

The abstract should provide a concise summary of the main points of the report so that the reader will know what is of major importance. It should contain no more than 250 words, single-spaced. The following information should be included:

A. Heading
- Title of report
- Author's name and major
- Employer's name and location (city and state)

B. Body
- Introductory sentence stating the project's specific objectives
- Brief statement of methods used, if appropriate
- Summary of results
- Dates of co-op education assignment

Sample Abstract

THE EFFECT OF SULFUR DIOXIDE ON PROTEIN CONCENTRATION IN HUMAN EYES. John Jones, ENV ENG; Environmental Protection Agency, Trenton, NJ.

A major portion of the author's cooperative education assignment at EPA was utilized researching the harmful effects of air pollutants on human health, repeatedly seen during air pollution episodes. The physiological effects on the eyes are commonly experienced as excessive tearing, dry eye, and eye irritation.

Because tears are secretory discharge, it is likely that a change in the composition of the tears may be the result of the changes in the condition of eye tissues. Sulfur dioxide, one of the primary pollutants and a constituent 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 microliter capillary pipettes. Tear protein concentration was determined using fluorescence spectrophotometry. We have found that a period of adaptation for the test animals to the environmental chamber is essential. 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) with essentially no change noted at low concentrations (3-6 ppm). Research supported in part by NIH Grant 5-S06-R08101-09.

Dates of Co-op Assignment: January - July 2014

3. **PROJECT OVERVIEW**

a. TASK ANALYSIS

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

Title: Assistant Account Analyst

- Prepared corporate, partnership, and individual income tax returns.
- Conducted individual income tax interviews.
- Prepared payroll tax and sales tax reports.
- Math-checked income tax returns.
- Used the in-house computer for various accounting functions.
- Researched and developed a system for evaluating the needs of a small
  business to determine the feasibility of acquiring an automated
  accounting system.
- Performed month-end and quarter-end write-ups for clients.
- Performed year-end account analyses for financial and tax clients.
- Tested and implemented an accounting software package for a personal
  computer.
- Researched various income tax problems.

b. PROFESSIONAL PROJECT DESCRIPTION AND ANALYSIS

I.   General Guidelines

Provide a detailed description of the projects in which you participated. A wide range of
subject matter is permissible, provided there is a connection with the work
experience. Research and reading are encouraged.

Sample topic concepts are:

- The design, development, manufacture, or testing of equipment or
  products with which the student was associated while on the job.

- A detailed history of the development of a professional process or
  design with which the student was associated.

- The effect on the environment of government policies, logging
  techniques, soil conservation methods, or animal populations.

- An in-depth analysis and evaluation of management strategies, accounting practices, or buying procedures in a firm.

- A comparison/contrast of several writing styles, art styles, drafting techniques, recreational activities, teaching styles and techniques.

II. The project(s) section should include, as applicable:

a.   Introduction

- Purpose of project and the nature of the problem being investigated.
- Scope of the project and limitations.
- Historical background regarding: (a) the investigation, and (b) the subject matter.
- Technical background regarding: (a) theory, and (b) explanation of unusual concepts, apparatus, procedures, etc.
- Acknowledgements of assistance of persons or organizations not cited elsewhere.

b.   Results
c.   Description of Project

Complete description of the project (s). Include an essay section, logically organized:

- Use headings and subheadings, where appropriate.
- Develop ideas logically.
- Use a paragraph for each new idea.
- Use a new section for each new major idea.
- Make clear transitions from one idea to the next.
- Show clear relationships between each section and the overall subject.
- Arrange illustrative data for maximum clarity, when included

d.   Conclusions
e.   Recommendations

4. **WORK EXPERIENCE ANALYSIS**

The purpose of this section is to put the co-op experience into perspective and provide other NJIT students with an in-depth picture of co-op employment opportunities. The items below are general guidelines and may be used as an outline for this section of your report. Not all are necessarily applicable in each case. This section is intended to be open-ended to provide maximum freedom of expression.

a. Provide a brief description of the organization, kind of business or service, products, history, functions and responsibilities of various departments, how the author's department fits into the organization, physical facilities, and facts about the employer (affiliates, locations, number of employees, etc.).

b. Job satisfaction. Was the work satisfying? Did it meet your expectations? How did it change as the work progressed? Explain.

c. Relevance of work experience. Were your work assignments related to your field of study? How? Did the work experience help you find a special area of interest within your academic field? Did it eliminate an area of interest? How did it impact your educational goals?

d. Which concepts and skills learned in the classroom did you find useful in your co-op experience?

e. Responsibility. What kind of responsibility did you have while on your assignment? Did you work as a member of a team? Did you feel part of the total team effort? What was your contribution to solving the problem given to the team? Give examples.

f. Describe any reference material you had to read, learn, or interpret in your work assignment.

g. Briefly describe the use of technology in a project in which you were involved. Did you acquire any new computer tools/software skills during your assignment? If so, what were they?

h. Give an example of an oral or written presentation you made on the job and what communication tools you used.

i. Living arrangements. If you lived away from home, where did you live (apartment, residence hall, etc.)? Was it satisfactory? Did your employer provide help in finding housing and/or defraying expenses?

j. Social and cultural opportunities. How did you spend your free time? What opportunities did you have to meet others in your age group?

k. Co-op contrast/comparison. How was this co-op experience similar to or different from a previous co-op experience? Include similarities/differences in type of employer, kind of work, level of responsibility, employer's expectations, work environment, and any other relevant factors.

REPORT EVALUATION

The following procedures will be followed in evaluating the Cooperative Education Work and Learning Report:

● The report is due on the date of your department's final seminar
● You are required to submit two copies of the report, one to your Faculty Co-op Advisor and one to Career Development Services (Career Advisor)
● Reports will be evaluated on the basis of quality, including format, organization, inclusion of required sections, ability to express facts and opinions, and grammar. If, in the judgment of the Faculty Co-op Advisor, the report should be rewritten, you will be notified.
● The Faculty Co-op Advisor will evaluate the report, assign the appropriate grade

Updated: December 2014