CO-OP REPORT GUIDELINES

GENERAL REQUIRMENTS:

Submit in a black jacket with clear vinyl front cover with either a **sliding lock (preferred)** or a three-hole fastener.

1. REPORT EVALUATION FORM*
2. BODY OF REPORT*
3. **Copy of** PERFORMANCE APPRAISAL

Note: **Performance Appraisal* –** (original and signed) – must be left loose inside cover of report – this goes in your academic file

***(Download the report template and performance appraisal from our web site.**
http:/.louisville.edu/speed . (Click on Forms)

BODY OF REPORT CONTENT

I) EMPLOYER DESCRIPTION* (1 page): QUANTIFY :

How big is the company (sales, employees)?
Is it publicly traded?
Where are its locations?
What are the principal products and services?
What department did you work in? How big is it?
Who are the major customers? **See writing sample. (3rd person)**

II) MAJOR RESPONSIBILITIES AND DUTIES: (2-3 pages). Describe in detail your major projects (one or two projects max).

What were the project's objectives?
What were your specific duties and responsibilities? Analyze how they fit with the project objectives
What were your accomplishments? Analyze how they impacted the project outcome.
Use 3rd person.

In this section, you will be assessed on your ability to use your Critical Thinking Skills:

You already use these skills, but probably have not labeled them as such. Critical thinking is **using logic based on facts and objective evidence when determining the answer to problems**. It is the ability to think **clearly and rationally**.

As you worked on and solved **any type of problem** on your co-op, evaluate your thinking using these **elements of CRTICAL THINKING (reasoning)**:
Purpose - what was the fundamental purpose and goal of the project or problem? You are seeking *Clarity, Significance* and *Accuracy.*

Questions and Assumptions – what were the fundamental questions associated with the problem? Are they *Clearly* and *Precisely* stated? Are they *Relevant* and *Complete*? How did your *Assumptions* affect your problem solution?
Points of View, Knowledge and Concepts – you should identify different *points of view* and be *objective* in the assessment of these viewpoints. You should have enough information to assess the key concepts for *Clarity* and consider all possibilities (*Depth* and *Breadth*).
I**nferences and Implications** – The solution selected should be a *logical conclusion – consistent and relevant.*

You will be evaluated on **CLARITY** (is information clear), **ACCURACY** (is the data accurate and precise?), **INFORMATION** (is it relevant and complete), and **CONCISENESS** (information reported in appropriate depth.)

III. EMPLOYER BENEFITS (1 page): In this section you should **QUANTIFY** the benefits your project had for your employer.

- How much did sales increase?
- How much did profit increase?
- Did quality improve – how much?
- Did direct costs (material, labor) go down – how much?
- Were there other benefits that REDUCED indirect costs: inventory, cycle time, scrap, repair work?

Use 3rd person (See writing sample).

IV. STUDENT BENEFITS (1 page): In this section you should answer the CENTRAL QUESTION: **what did you learn on this co-op work period**. **This section is to be done in "Question & Answer" format and expressed in terms of the "learning outcomes or goals" established by ABET, Inc.**

(ABET, Inc is the recognized accreditor for college and university programs in applied science, computing, engineering, and technology. ABET, Inc. has accredited UofL Speed School of Engineering degree programs.)

The checklist of the learning outcomes "QUESTIONS" is shown below. You may not have experienced all of "a-k" learning outcomes. If not, answer "Not applicable." However for the ones which apply, you should describe what you learned in those terms.

(This should be easy if you kept a diary.)

Use 1st person!

ABET Learning Outcomes "QUESTIONS":

a) Discuss how you applied math/science/engineering knowledge.
b) Discuss experiments you conducted and how the data was analyzed.
c) Discuss your participation in designing a system, component, or process to meet desired needs within constraints.
d) Discuss examples of working on TEAMS.
e) Discuss your experience solving engineering problems.
f) Discuss how you increased your understanding of professional and ethical responsibility as an engineer.
g) Give examples where you had to effectively COMMUNICATE!.

h) Discuss how your co-op experience increased your understanding of the impact of engineering solutions on society.
(E.G. RECOGNIZE THE HARMFUL CONSEQUENCES OF ENGINEERING ERRORS, AND BENEFITS OF RAPID ECONOMICAL SOLUTION TO PROBLEMS, IN THE BUSINESS, THE COMMUNITY AND THE ENVIRONMENT.)
i) Discuss how you became aware of the need for lifelong learning in your field.
j) Give examples of encountering contemporary issues in your field.
k) Discuss your experience in using techniques, skills, and modern engineering tools commonly used in engineering practice.

***A SAMPLE CO-OP REPORT (WRITING SAMPLE) IS AVAILABLE ON THE WEBSITE: http://louiville.edu/speed.**

FORMAT:

1. Laser printed on white paper, Times Roman 12, double-spaced with a 1.5-inch left margin and one-inch top, bottom and right margins
2. **Print single sided**.
3. Headings: CENTERED, **BOLD,** and ALL CAPS.
4. Reports should be SPELL-CHECKED and PROOF READ.

STYLE and WRITING TIPS:

1. Pay special attention to subject/verb agreement and verb tense, the two most common sentence-level problems in technical writing.

2. Favor short paragraphs over long ones in order to stay focused.

3. Build paragraphs around a central idea expressed in the topic sentence. The topic sentence may be as simple as “Daily activities fell into three categories.” Then all of the sentences in the paragraph should contribute to the development of the main idea.

4. Use transition words (therefore, for example, similarly, but, however, nevertheless, furthermore, now, meanwhile, after that, then, next, finally) at the beginning of pivotal sentences and paragraphs, remembering that transition words are simple ways to guide the reader’s thinking.

5. Rely on the active voice more than the passive. Write “The Flight Standards Office employs three co-op students” rather than “Three co-op students are employed by the Flight Standards Office.”

6. Use active verbs, thinking in terms of things you demonstrated, performed, defined, improved, mapped, programmed, organized, etc.

7. Avoid clichés, slang, and colloquial language (used in conversations).

8. Use punctuation marks such as the comma, semicolon, colon and dash correctly.

HAVING TROUBLE? VISIT THE WRITING CENTER IN EKSTROM LIBRARY, OR SEE YOUR CO-OP ADVISOR.