Course Proposal Worksheet

STEP 1. Course Title

STEP 2. Duration
This is usually specified in days.

STEP 3. Who Should Attend
Who will benefit from taking this course? Where possible, specific job titles should be provided.

STEP 4. Specify Educational Need
What specific problems or needs in the industry does this course address?

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STEP 5. Develop Learning Objectives
What should the student know or be able to do at the end of a lesson? What are the goals of the course?

Learning Objectives Criteria
- They have two parts: verb and outcome
- They start with a verb to specify an action that the student can perform
- They specific, observable, and measurable

Example:
Upon completion of this course, the student should be able to:
- Identify all parts that make up a cell
- Describe the function of each cell part
- Explain why each function of the cell is important and necessary
Which verb you select depends on the **depth** of learning that you want your students to acquire. *Bloom’s Taxonomy* is a tool you can use to select the verbs you need to write your objectives.

Bloom’s Taxonomy **cites six distinct types of learning behavior reflecting lower to higher thinking skills, increasing in difficulty from left to right:**

- **Remembering:** Recall of data
  - Verbs: Define, list, name, order, recall, state, reproduce
- **Understanding:** Ability to explain concept or idea
  - Verbs: Classify, describe, explain, identify, locate, outline, recognize, report, select
- **Applying:** Using learned information in a new way
  - Verbs: Choose, demonstrate, employ, illustrate, interpret, operate, schedule, solve, use, write
- **Analyzing:** Breaking down systems into components
  - Verbs: Calculate, compare, contrast, differentiate, distinguish, examine, test, investigate
- **Evaluating:** Ability to judge value of material
  - Verbs: Appraise, argue, assess, defend, evaluate, judge, select, support, value
- **Creating:** Ability to build product or plan
  - Verbs: Assemble, construct, create, design, develop, formulate, plan, propose

Please do not use the following verbs, which are not measurable: Understand, Know, Learn, Be Aware of, Appreciate

Learning objectives must be developed to specifically address an educational need. In the box, please rewrite the educational needs that you specified in Step 4 in the left column and write a learning objective (or more) to correlate with each educational need.

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<th>Educational Need</th>
<th>Learning Objective(s)</th>
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<td>• Upon completion of this course, the participant will be able to:</td>
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Please feel free to add more learning objectives if necessary.

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**STEP 6. Determine Learning Assessment**
How will you know whether or not the students learned what you intended? Learning Assessments must be conducted in each course to allow participants to assess achievement of learned content. Effective instructors construct assessments that assess the outcomes specified by the learning objectives.

Assessments for Knowledge Based Courses

- Quizzes and Tests
  - Pre-test/Post-test
  - Multiple Choice and True/False Tests
- Post-testing alone with group discussion and critique of answers
- The Minute Paper
  - After a certain part of a presentation, for 1 – 2 minutes, ask the questions:
    - What was the most important thing you learned during this presentation?
    - What important questions remain unanswered?
    - Participants write on a piece of paper the answers.
    - Responses are collected and used or exchanged between participants for discussion
- The Muddiest Point
  - Participants write the least clear or most confusing part of a particular lesson or topic.
  - Faculty use it as feedback and to guide their talks.
  - This strategy may be done in the beginning, middle or end of a topic.

Assessments for Application Based Courses

- Case Studies followed by discussion
- Problem solving exercises
- Vignettes
- Pro/Con Grid
  - This is an analysis of the pros and cons, costs and benefits, or advantages and disadvantages of a topic.
  - This learning strategy forces participants to search for two sides for the issue in question.
- Problem Recognition Tasks
  - Involves presenting to the participants a few examples of common problems types.
  - The participants are to recognize and identify the particular type of problem each example presents.
- Directed Paraphrasing
  - The participant translates information into terms they will understand.
  - This strategy assesses learners’ ability to summarize important information and concepts in their own words so that they may be able to explain to others.
- Application Cards
  - This technique is used after participants have heard an important principle, theory or procedure.
  - Given index cards, learners write one possible, real-world application for what they just learned.

Please complete the following rubric by rewriting the learning objectives that you specified in Step 5 in the left column and then selecting a learning assessment (or more) that allows you to measure the learning objectives in the right column. How will you test each learning objective?

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<tr>
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<th>Learning Assessment(s)</th>
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Assessment Feedback: Learning assessment feedback must be provided to participants in a timely manner. In addition, feedback should be done in an appropriate and constructive manner.
Active learning is an approach to instruction in which students engage the material they study. Students must do more than just listen; they must be active by engaging in learning such as through discussing or solving problems.

Active learning is critical in adult education. It is reinforced by androgogy, which is the study on how adults learn. Here just several points:

- Adults learn best in a democratic, participatory and collaborative environment.
- Adults need active, not passive, learning experiences.
- Adults are problem-centered, not content-centered. Problem based learning exercises are encouraged.
- Adults want to be able to apply new information and skills immediately.

From the list below, please circle the types of active learning techniques that will be included in your course. Please keep in mind how the strategies will allow the participant to meet the learning objectives that you specified in Step 5.

### Knowledge Based Activities
- Lecture
- Visuals/Illustrations
- Examples
- Analogies
- Review
- Writing
- Presentations
- Matching question/answers
- Discussion
- Report

### Application Based Activities
- Problem Exercises
- Practice Exercises
- Application Exercises
- Role Play
- Simulations
- Demonstrations
- Projects
- Case Studies
- Problems
- Discussion
- Pro/Con Grids
- Develop Plans
- Critiques

Please complete the following rubric by rewriting the learning objectives that you specified in Step 5 in the left column and then selecting an active learning strategy (or more) that allows you to measure the learning objectives in the right column.

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STEP 8. Course Description

Please give a broad overview of the course, which will be posted on PDA’s website and brochures. You may also include the format for the course (lecture, laboratory), the active learning techniques used, and a one sentence statement of the objectives of the course.
STEP 9. Rationale
A statement of why this course is valuable both to the client and to the participants. It should also state what, specifically, the participant will take away from the course and apply back on the job that they did not have before the class.

STEP 10. Prerequisites
Use course completions, certifications, and experience levels where appropriate.

STEP 11. Materials
Please provide a complete list of materials required to teach the course.

This will probably include, but is not limited to:

- Room Visuals (Flip Chart or White Board w/Markers, etc.)
- Overheads and Projector
- Consumable Supplies (markers, envelopes, index cards, lab supplies, etc.)

STEP 12. Instructor
Please provide your name as you’d like it to appear on marketing material, your job title, and company. Please also include a short bio for use on the course web page.

Internal Use Only
Circle or highlight the activity type that most accurately describes this course.

*Knowledge Based Course:* This course is designed primarily for participants to acquire factual knowledge.
Application Based Course: This course is designed primarily for participants to apply the information learned by the conclusion of the course.