Instructor Notes for L00

Personal Software Process for Engineers

# Recommended Order of Presentation

1. Course Overview (PowerPoint)
2. Introduction (PowerPoint)
3. Factorial (PowerPoint and/or Word)
4. Reflection (PowerPoint)

## Course Overview

When deciding how to deliver this course, the instructor may choose to reorder the delivery of Blocks 2 (estimating), 3 (reviews), and 4 (design representation). That choice should be reflected on Slide 7, cleverly titled “Course Overview.”

The instructor is advised to change this slide to reflect the current reality. Block 1 covers the “Introduction” and “Process and Measurement” materials. Block 2 covers “Planning and Estimating” materials. Block 3 covers “Defect Management” in the form of the personal review materials. The “Design Process” is Block 4. “Design Verification” materials from traditional PSP training have not, as of this writing, made the transition to the current format. If these materials ever do make the transition, they will probably be either Block 4A or simply included into Block 4. “Scaling Up the Process” (Block 5) contains just a single module on the topic at this time. “PSP in Practice” is intended as a placeholder for whatever the instructor feels appropriate in the environment in which this class is being delivered.

## Introduction

This is the beginning of PSP: why and how to track time and defects at the personal level. Note that no attempt is made to link to the actual mechanics of how this is done. The details will vary depending on what tool is being used and how it has been implemented. The presumption is that the instructor provides this link, possibly with additional materials or a hands-on demonstration.

There is no process script or process level yet. This one is just for practice.

## Factorial

If learning PSP is not to be entirely on the job, this is the first minimal programming assignment. By design, the data gathered with this assignment won’t be used going forward, so we start the count at ‘0.’ Either or both of the PowerPoint and Word documents can be used, with both being recommended.

The factorial program was sometimes known as “Program 0.” The idea is that the act of recording time and defects for the first time is both difficult and extremely error prone, and presumably a “gimme” program would provide a little practice and thereby encourage people to stick around. The actual data gathered would likely not be of practical use anyway.

The other idea behind Program 0 is that it is the first real-time event with which to use a PSP or TSP tool. If these materials are presented in a classroom environment, there is a good chance that the particular environment being used is novel to the student. This program is a trial run for all of that; treat it as such.

## Reflection

This lecture will be of critical importance going forward. Every program written from now on should include some form of reflection, with each block and each lecture potentially adding some considerations for what learners should reflect on. Slides 3−6 are the minimal reflection demanded after Program 0. After thinking about and checking the capture of “task” time, defects, and any special problems, the module assumes a traditional path through the PSP (size, estimation, reviews, and design). Each program, depending on where it is given as an assignment, should end with a reflection module that represents the formal steps in whatever process was followed.

Ending each module with the kitty who thinks he is a tiger should encourage the students to capture data to “see the world as it is, not as you imagine.”

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