Autodesk Maya Python API 2 Day Training Agenda
Instructor: Kristine Middlemiss, ADN, Autodesk
(Kristine.middlemiss@autodesk.com)

Training Description
Maya has been used by the world's best animation studios and companies ever since it came into existence ten years ago. As one of the most powerful 3d animation applications, it provides quite flexible architecture so that users are free to mold and change Maya to fit their particular production environment and workflow, through Maya's Application Programming Interface (API). Maya API increase Maya's power, customizing and extending Maya in many ways that you never thought possible. This 2 day training will be an intensive journey to explore Maya API through a top-down approach. We will first look at Maya's fundamental concepts and internal design architecture then goes step-by-step into details on Maya API key components individually. There will also be hands-on labs for people to play around with sample plug-ins and get their feet wet in Maya plug-in development field.

Level of expectation
This course is a step-by-step training transitioning from novice level to intermediate level. The target audience preferably would be people who know programming in Python, but are new to Maya plug-in development. People with basic knowledge of programming language such as Python and want to develop Python Maya plug-ins can also benefit from this API training.

Agenda
Day 1: We will be focusing on the Maya's own particular design philosophy to give audiences a better understanding of what's going on under the hood.

We will cover basics of getting you started to build a plug-in from scratch, and then we will dwell into Maya's most fundamental concepts, Dependency Graph Nodes and Commands. We will also introduce Maya Dependency Graph's push-pull mechanism.

Day 2: Will be a reinforcement and extension of what we have learned in Day one. We will be covering some of the caveats and gotcha for dependency graph programming in Maya and a closer look at Multi attribute. We will also be looking at more advanced topics such as Maya callback systems, and miscellaneous tools to help improving your workflow.

Time Specific Agenda*

Day 1:
10:00 to 10:15 – Instructor & Class Introduction
10:15 to 11:15 – Maya API Overview and Introduction

11:15 to 11:30 – Break
11:30 to 12:00 – Lab Introduction and Maya API Overview Work Period
12:00 to 12:30 – Maya Nodes Part 1
12:30 to 1:30 – Lunch
1:30 to 2:00 – Maya Nodes Part 1 (Continued)
2:00 to 2:45 – Maya Nodes Part 1 Work Period
2:450 to 3:45 – Maya Nodes Part 2
3:45 to 4:00 – Break
4:00 to 4:45 – Maya Nodes Part 2 Work Period
4:45 to 5:30 – Commands
5:30 to 6:00 – Commands Work Period

Day 2:
10:00 to 11:00 – A Closer Look at Dependency Graph
11:00 to 11:15 – Break
11:15 to 12:00 – A Closer Look at Dependency Graph Work Period
12:00 to 12:30 – Miscellaneous Tools
12:30 to 1:30 – Lunch
1:30 to 2:00 – Miscellaneous Tools Continued
2:00 to 2:45 – Miscellaneous Work Period
2:30 to 3:30 – Maya Tools Manipulators
3:30 to 3:45 – Break
3:45 to 4:30 – Maya Tools Manipulators Work Period
4:30 to 5:15 – Advanced Python Topics
5:15 to 5:45 – Maya 2011 – What's New in the API
5:45 to 6:00 – Wrap-up and Feedback Survey Completion

Times may change depending on class pace