



Outline & Schedule for Switcher Course

RED – Optional Holidays

Week 1 - Day 1 - ALL – Monday April 15, 2019

Intro to Denali Gold

- Engineering
 - Router
 - Patch Panels
- Record/PB Area
 - EVS Recorders
 - GV Server
 - BMD SSD Recorders

Week 1 - Day 2 - ALL – Tuesday April 16, 2019

Intro to Denali Gold

- Camera Control
- Expression
- DEKO CG
- Adobe Premiere Pro Editor

Week 1 - Day 3 - ALL – Wednesday April 17, 2019

Intro to Denali Gold

- Virtual Camera Control
- Audio Mixer
- Tri-pods / Heads / Audio-Video External Connections

Week 1 - Day 4 – ALL - Thurs April 18, 2019

Written test Week 1 - Days 1-3

Week 2 - Day 1 - Monday April 22, 2019

• What Is a Switcher?

- A creative tool that allows real-time editing of Video Sources
- A device that allows the addition of real-time Video Effects and Transitions
- A device that routes and layers Video Sources to one or more discreet outputs
 - Program Out
 - Preview Out
 - M/E Outputs
 - M/E PGM
 - M/E PVW
 - AUX Outputs

Week 2 - Day 2 - Tuesday April 23, 2019

- **What are the Functions of a Switcher?**
 - All Switchers perform 3 basic functions
 - Cuts
 - Dissolves
 - Keys
 - What is a KEY?

Week 2 - Day 3 - Wednesday April 24, 2019

- Built-In Still Stores
- Built-In DVE's
- Color Correction

Week 2 - Day 4 - Thursday April 25, 2019 – Nat'l Sons & Daughters to work Day

Written test Week 2 - Days 1-3

Week 3 - Day 1 - Monday April 29, 2019

- External Device Control
 - Editor Control
 - VDRCS / VDCP / AMP / BVW-75 / Ethernet / RS-422 / PBus
- GPI
 - GPI In
 - GPI Out

Week 3 - Day 2 - Tuesday April 30, 2019

- **Switcher Components**
 - Main Frame
 - Inputs
 - Outputs
 - Ethernet / RS-422 Ports
 - Format
 - NTSC / PAL
 - SD / HD

Week 3 - Day 3 - Wednesday May 1, 2019

- 720p
- 1080i
- 1080p
- 4K
- 8K
- Working with multiple formats in the same switcher
 - Format Converters

Week 3 - Day 4 - Thursday May 2, 2019

Written test Week 3 - Days 1-3

Week 4 - Day 1 - Monday May 6, 2019 – Ramadan

- Panel
 - M/E Stripes
 - Crosspoint Buttons
 - Backgrounds
 - Keys
 - Utility Buses

Week 4 - Day 2 - Tuesday May 7, 2019

- Transition Control
- Keyer Control
- M/E Data & Information Displays
- AUX Panel
 - Aux Bus Selection
 - Source Selection

Week 4 - Day 3 - Wednesday May 8, 2019

- Keyer Control
- Matte Control
- DVE Control
- Machine Control
- Still Store Control

Week 4 - Day 4 - Thursday May 9, 2019

Written test Week 4 - Days 1-3

Week 5 - Day 1 - Monday May 13, 2019

- E-MEM / Timeline / Editing Control
- Macro Record / Editing / Playback
- Internet Streaming
- Embedded Audio

Week 5 - Day 2 - Tuesday May 14, 2019

- Menu
 - Menu Layout & Hierarchy
 - Engineering Menus
 - User Menus
- DCU (Some Models)

Week 5 - Day 3 - Wednesday May 15, 2019

- **Switcher Inputs**
 - Connectors on Main Frame
 - Types of Inputs
 - Video
 - Key
 - Mapping Source Inputs to Buttons
 - Source Patching

- Built-In Sources

Week 5 - Day 4 - Thursday May 16, 2019

Written test Week 5 - Days 1-3

Week 6 - Day 1 - Monday May 20, 2019

- **Switcher Outputs**
 - Connectors on Main Frame
 - What is a PGM Output?
 - What is a PVW Output?
 - What is an M/E Output?
 - Each M/E has 6 Outputs
 - What is an AUX Output?

Week 6 - Day 2 - Tuesday May 21, 2019

- **Controlling and Manipulating Sources**
 - Doing CUTS between Sources
 - Doing a DISSOLVE Between Sources
 - Doing a WIPE Between Sources
 - Selecting a Pattern
 - NORM / REVERSE / N/R Directions
 - Modifying the Wipe Pattern
 - Pattern Multipliers
 - Aspect Control
 - Positioning Control
 - Adding Softness to a wipe edge

Week 6 - Day 3 - Wednesday May 22, 2019

- Adding a Matte color(s) to a wipe edge
- Adding Video to a wipe edge
- Pattern Limiting
- Doing a USER TRANSITION Between Sources
- Doing a PRESET BLACK TRANSITION Between Sources
- Doing a TRANSITION PREVIEW

Week 6 - Day 4 - Thursday May 23, 2019

Written test Week 6 - Days 1-3

Week 7 - Day 1 - Monday May 27, 2019 – Memorial Day Fundraiser

- **Building Effects**
 - Adding KEYS
 - Self Key vs. Auto Select Key
 - Luminance Key vs. Linear Key
 - Key Transparency
 - Bringing Keys On & Off
 - Matte-Filling Keys
 - Adding Borderlines, Edges & Shadows

Week 7 - Day 2 - Tuesday May 28, 2019

- Masking Keys
- Creating a Preset Pattern Key
- Routing a Keyer through a DVE / Resizer
- Chroma Keys
- Introduction to E-MEMs
- Introduction to Timelines

Week 7 - Day 3 - Wednesday May 29, 2019

- **Re-Entry and Layering**
 - Using another M/E as a background source
 - Using another M/E as a key source
 - LAYERED MODE

Week 7 - Day 4 - Thursday May 30, 2019

Written test Week 7 - Days 1-3

Week 8 - Day 1 - Monday June 3, 2019

- **Controlling Stills and Animations**
 - Mapping Still Store Outputs
 - Setting up Still Store Inputs
 - Recording a Still
 - Recalling a Still
 - Manipulating a Still

Week 8 - Day 2 - Tuesday June 4, 2019

- Recording an Animation
- Replaying an Animation
- Controlling the Still Store with E-MEMs / Timelines

Week 8 - Day 3 - Wednesday June 5, 2019

- **Color Correction**
 - RGB vs. YUV Modes
 - Where to find Color Correction Handles
 - Controlling Color Correction using E-MEMs / Timelines

Week 8 - Day 4 - Thursday June 6, 2019

Written test Week 8 - Days 1-3

Week 9 - Day 1 - Monday June 10, 2019

- **Manipulating Video using Digital Video Effects Devices**
 - Effects Send Theory - Number of Available Channels
 - Using a DVE Upstream vs. Downstream of a Source
 - 2D vs. 3D
 - DVE Terminology & Functionality
 - Sizing
 - Positioning

- Aspect Control
- Using 2D Space

Week 9 - Day 2 - Tuesday June 11, 2019

- Using 3D Space
 - X, Y & Z
- Using TARGET Space
- Using SOURCE Space
- Using Rotations & Spins
- Non-Linear Effects, Warps, Mattes, Shadows, Lighting
- Using Multiple Channels
- GLOBAL Control

Week 9 - Day 3 - Wednesday June 12, 2019

- **Controlling External Devices**
 - VTRs / Servers
 - Cameras
 - Plus Devices
 - GPI Control

Week 9 - Day 4 - Thursday June 13, 2019

Written test Week 9 - Days 1-3

Week 10 - Day 1 - Monday June 17, 2019

- **Advanced Timeline Features**
 - Accessing E-Mem Registers (Banks / Levels)
 - All-Inclusive Timelines on an M/E
 - Partial Timelines on an M/E
 - Editing Timelines
 - Local E-Mem / Timelines vs. Master E-Mem / Timelines

Week 10 - Day 2 - Tuesday June 18, 2019

- **Macros**
 - What IS a Macro?
 - What gets recorded into a Macro
 - Macro Registers (Banks)
 - Recording a Macro
 - Adding Pauses
 - Editing a Macro
 - Replaying a Macro

Week 10 - Day 3 - Wednesday June 19, 2019

- Chaining Macros
- Playing a Macro from the Timeline
- Attaching a Macro to a Panel Button
 - Pre-Attach
 - Post-Attach
 - Replace-Attach

- Using the Menu to View Attachments
- Removing an Attachment

Week 10 - Day 4 - Thursday June 20, 2019

Written test Week 10 - Days 1-3

Week 11 - Day 1 - Monday June 24, 2019

- **M/E Modes**
 - Partitioning the Switcher between multiple users
 - Sharing the Switcher between multiple panels
 - Sharing Switcher Resources between multiple users
 - The 6 Outputs of each M/E

Week 11 - Day 2 - Tuesday June 25, 2019

- NORMAL MODE
- PROGRAMMABLE KEYSER MODE
- LAYERED MODE
- SPLIT MODE

Week 11 - Day 3 - Wednesday June 26, 2019

Week 11 - Day 4 - Thursday June 27, 2019

Week 12 - Day 1 - Monday July 1, 2019

Week 12 - Day 2 - Tuesday July 2, 2019

Week 12 - Day 3 - Wednesday July 3, 2019

- Final Exams

Week 12 - Day 4 - Thursday July 4, 2019 – 4th of July

Week 12 - Day 5 - Friday July 5, 2019

- **GRADUATION!!!**