**Xpression Training Outline**

**Learning Resources:**

Ross University: <https://www.rossvideo.com/knowledge-center/ross-university/>

Xpression U: <https://www.rossvideo.com/products-services/acquisition-production/cg-graphics-systems/xpression/xpression-u/>

Ross Video Community: <https://discussions.rossvideo.com/>

Freelancer Training: <https://www.rossvideo.com/products-services/acquisition-production/cg-graphics-systems/xpression/freelancer-training/>

Ross Video Facebook Page: <https://www.facebook.com/rossvideo>

Xpression Function/Workflow Overviews:

* Ross XPression Real-Time Motion Graphics Overview <https://www.youtube.com/watch?v=55r1OJ9Ujqw&t=4s>  ***(8:06)***
* XPression Graphics News Workflows: <https://www.youtube.com/watch?v=EINmqGZ2Sak&t=4s> ***(14:41)***
* XPression Graphics Sports Workflows: <https://www.youtube.com/watch?v=vMga3OQWRRc&t=2s> ***(19:06)***

**USER INTERFACE OVERVIEW:**

**Layout:**

* Navigating the software
* Menu Bars
* Viewports
  + Zoom
  + Adding Viewports
* Scene Manager
* Object Inspector
* Object Manager
* Project Manager
* Object Library
* Output Monitors
* **Customizing the Docking Layout:** XPression U: Creating Docking Layouts in XPression (Quick Tips 106) <https://www.youtube.com/watch?v=YfvLLE3iweM> ***(1:10)***

**Scenes:**

* Create New Scenes
* Duplicate Scenes
* Rename Scenes
* Organizing Scenes
* Groups (For Creating Credit Rolls)
* **Importing Scenes from other projects:** XPression U: Importing XPression Scenes from One Project to Another Project (Basics 128) <https://www.youtube.com/watch?v=oBl3HuqTobM> ***(2:13)***

**OBJECTS OVERVIEW:**

* **Objects Intro:** XPression U: Object 3D Manipulation (Basics 102) <https://www.youtube.com/watch?v=Rct-ltP-3b8&t=134s> ***(21:59)***
  + Slabs: XPression U: Slab – The Newest Geometric Primitive Object (Basics 112) <https://www.youtube.com/watch?v=KPuesjtfeOc&t=4s> ***(3:53)***
  + Cylinder “tricks”
  + Lines – “how to”
* **Text & Fonts:** XPression U: Change Fonts and Text Objects (Basics 103) <https://www.youtube.com/watch?v=LsyIbTf4xAw&t=800s> ***(26:01)***
* ***Tip:*** Text Kerning: “Ctrl” + ”-“ or “Ctrl” + “+” (will probably only work for static text, not dynamically linked text)
* Backgrounds
* Lights & Types: \*\*
  + Directional
  + Spot
  + Point
  + Bound Lights
* Cameras
* **Group Objects:**
* Can act like a null object
* Keyframeable and animatable
* Useful for organizing objects
* **Layer Objects:**
* Layer Order influences object visibility and interference issues
* Hides Objects uniformly
* No Animation Controls (Won’t affect keyframing)

**Materials & Texture Settings:** XPression U: How to add 3D Materials, Videos and Images (Basics 104) <https://www.youtube.com/watch?v=rriGKDzrV38&t=2s> ***(28:09)***

* Dynamic (Datalinqed) materials: \*\*
* Manipulating material coordinates, scale, position: \*\*

**Making templates and publishing attributes:** XPression U: Template Linking (Basics 105) <https://www.youtube.com/watch?v=WpYmodgiyBY>  ***(15:13)***

**User Controls Text Fill Field Lists:** XPression U: User Input Controls Basics (Basics 114) <https://www.youtube.com/watch?v=jEiUJ2cAZfs> ***(5:42)***

**ANIMATION:**

**Animation & Keyframing**: XPression U: Creating keyframed animations in XPression (Basics 108) <https://www.youtube.com/watch?v=rdyonQlATCI&t=21s> ***(15:32)***

**Animating Object Properties**: XPression U: Keyframing Published Properties of Objects (Basics 140) <https://www.youtube.com/watch?v=z588pQTVJdM&t=17s> ***(2:52)***

**Scene Directors:**

* Accessing & Adjusting Keyframes (F3):
* Duplicating and reassigning keys to similar objects
* Reversing Keyframes
* **Applying Audio**: XPression U: Using Audio Files on XPression (Quick Tips 131) <https://www.youtube.com/watch?v=-mIh7Zmv6d4&t=2s> ***(3:00)***
* Placing Events: Pause, Offline

**Creating, applying and animating masks**: XPression U: Creating Masks and Animating Them in XPression (Basics 136) <https://www.youtube.com/watch?v=DVzg2freZzk&t=2s> ***(11:28)***

**Stagger Animations**: XPression U: Stagger Animations in XPression (Basics 134) <https://www.youtube.com/watch?v=jLkbrFyn0Ps&t=37s> ***(5:30)***

**Animating Lights & Cameras:**

* Keyframing Cameras, Scene Director
* Activating Camera (Flags)

**Centering Pivot Points:** XPression U: Adjusting the Pivot Point of an XPression Object (Quick Tips 122) <https://www.youtube.com/watch?v=7-ZPCgPBaSk&t=1s> ***(1:13)***

**Stagger Animations:** XPression U: Stagger Animations in XPression (Basics 134)  [https://www.youtube.com/watch?v=jLkbrFyn0Ps&t=1s](%20https://www.youtube.com/watch?v=jLkbrFyn0Ps&t=1s)  ***(5:30)***

**Continuous motion:**  XPression U: Continuous animation basics (Basics 106) <https://www.youtube.com/watch?v=D4VXH6igf5A&t=15s>  ***(23:30)***

**Effects – applying and animating:** XPression U: Keyframing Effects in XPression (Basics 132) <https://www.youtube.com/watch?v=xDLWADJQxP4> ***(1:36)***

**Setting up new projects**: XPression U: Set up a new Graphics Project (Basics 101) <https://www.youtube.com/watch?v=oq_HSaylbVA&t=11s> ***(6:41)***

**DATALINQ:**

**Microsoft Excel Basics & Datalinq - PART 1:** XPression U: Setting up Microsoft Excel® to Work With XPression Datalinq™ (Datalinq™ 101) <https://www.youtube.com/watch?v=jFkx67taFmg> ***(1:49)***

**Microsoft Excel Basics & Datalinq - PART 2:** XPression U: Setting Up XPression Datalinq™ (Datalinq™ 102) <https://www.youtube.com/watch?v=8Jr1lbTR6kk&t=7s> ***(8:32)***

**Working with Excel Files Remotely:** Using Excel to Change Video Files in XPression Scenes Remotely: <https://www.youtube.com/watch?v=QfY9fkuIKsY> ***(8:47)***

**Auto Update Data w/SQL Datalinq & Copying Datalinq Settings:** XPression U: Using SQL Queries to Automatically Order External Data Dynamically (Datalinq 104) <https://www.youtube.com/watch?v=R-yj6e9eW4w> ***(5:05)***

**Set Up Rel ID:** XPression U: Setting Up Datalinq™ Keys and %Relid% (Datalinq™ 103) <https://www.youtube.com/watch?v=qr-p6xv7EuM&t=7s> ***(6:04)***

**Datalinq Video Materials:** Using Excel to Change Video Files in XPression Scenes Remotely <https://www.youtube.com/watch?v=QfY9fkuIKsY> ***(8:47)***  *(\*\*shows how to set up datalinq server)*

**SEQUENCER OVERVIEW:**

* Sequencer Operations: XPression U: Controlling Channels and Layers (Basics 107) <https://www.youtube.com/watch?v=7GpEvqN5dyE&t=1269s> ***(30:40)***
  + Layers vs Framebuffers:
* Column Customization: XPression U: Thumbnails in XPression Sequencer (Basics 152) <https://www.youtube.com/watch?v=LRGa8tbcj7U> ***(0:48)***
* Cue, Take, Take Offline
  + Fast Recall
* Take Inspector
  + Take Item
  + Transition
  + Template Data
  + Scene Control
    - Scene Control (Duration): XPression U: Changing the duration of Scenes Playing on XPression (Quick Tips 113) <https://www.youtube.com/watch?v=op8YoZobVVU> ***(2:17)***
* Sequencer Groups
  + Types:
    - Manual
    - Data Pages (Row Pops): <https://www.youtube.com/watch?v=SfQiDRkxjCA> ***(3:49)***
    - Screen Crawls (Sequencer)
    - Timed (Scenes must be on Same Layer & Buffer)
    - Take All (Scenes on Different Layers or Buffers)
* Importing Scenes to the Sequencer
* Go Back to Edit Scene in Layout
* **Updating Scenes Already inSequencer:** XPression U: Update Take Item Data After Changes in an XPression Scene (Basics 142) <https://www.youtube.com/watch?v=PSSgSQEl6KQ> ***(4:16)***
* **Exporting Graphics to Video:** XPression U: Exporting XPression Scenes as Videos (Quick Tips 111) <https://www.youtube.com/watch?v=PEyz4EMMlXk> ***(2:39)***
* **Changing Data & Formatting in the Sequencer:** If it is dynamically linked, you won’t be able to make changes because the table data will keep auto-filling fields, but you can (maybe) break the link in the sequencer

**Keyboard GPI Mapping:** XPression U: How you can change or create keyboard shortcuts (Intermediate 201) <https://www.youtube.com/watch?v=WzlNHBvIZhM> ***(14:21)***

* Creating Take Item Shortcuts
* User Keys

**TRANSITION LOGIC BASICS:**  XPression U: XPression Transition Logic (Basics 109) <https://www.youtube.com/watch?v=O8xzn8yGioY&t=24s> ***(30:40)***

**IMPORTING 3D OBJECTS FROM OTHER PROGRAMS:**

* **Importing 3D OBJ files objects/sequences & texturing:** XPression U: Importing OBJ Sequences into XPression <https://www.youtube.com/watch?v=3cTkj1N-ZZA> ***(4:51)***
* **Exporting OBJ Sequences from Maya (Exporting Scripts):**
* <https://www.highend3d.com/maya/script/obj-i-o-obj-sequences-import-export-for-maya>
* <https://docs.google.com/file/d/0B-KaHqvvtRW4T0JJU2F2ZXc5WWc/edit>

**EXAMPLES - HOW TO CREATE:**

* **A Basic Lower Third:** Wireframe Group Tutorial:Lowerthird in XPression <https://www.youtube.com/watch?v=wlIB9mqGvAM> ***(13:46)***
* **Creating Credit Rolls:** XPression U: Creating a Simple Credit Roll on XPression (Quick Tips 132) <https://www.youtube.com/watch?v=M1F64X23PHE&t=2s> ***(7:59)***

Visual Logic:

* **Pie Chart:** XPression U: Creating a Pie Chart in XPression Using Visual Logic (Quick Tips 123) <https://www.youtube.com/watch?v=H5yFmk3Oy0U&t=37s> ***(16:35)***
* **Expanding list:** Ross Xpression U - How to do Logic without Scripting (Intermediate 202) <https://www.youtube.com/watch?v=FgBzTSpg3A8&t=16s> ***(18:22)***
* **Bar graph:** XPression U: Creating a Bar Graph in XPression Using Visual Logic (Quick Tips 121) <https://www.youtube.com/watch?v=NW4YOM1QvZA> ***(9:22)***
* **Visual Logic - Sort Selector:** XPression U: Visual Logic Sort Selector Function Block <https://www.youtube.com/watch?v=RamDBQHU3tU> ***(8:06)***
* **Clock Widget:** XPression U: Using the XPression Clock and Timers Widget (Quick Tips 129) <https://www.youtube.com/watch?v=oZ3sf2-G-lg> ***(5:38)***

**STRATEGIES FOR OPTIMIZING GRAPHICS AND VIDEO AND TABLES/DATALINQ**

* Video Encoder: XPression U: Introduction to XPression Video Coder (Basics 122) <https://www.youtube.com/watch?v=dBoTugSLLB4&t=24s> ***(5:15)***
* Datalinq Tables – Fixed Table datalinq
* Optimize Materials, Bump Maps
* Export large elements to video, bring back into project as a new layer
* Don’t link to an outside table or data source unless you really need to.