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Computer Graphics and Animations

ADOBE PHOTOSHOP 7

Advanced Image Blending Options & Layer Tricks

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Layer Tricks – Isolating & Managing Layers

- Opening an existing project for demonstration
- Isolating layers by right-clicking and selecting **Show/Hide All Other Layers**
- Holding **Alt (Windows)** or **Option (Mac)** and clicking the eye icon to isolate one layer
- Layers can be color-coded for better organization using the layer options
- Right-clicking on a layer thumbnail allows color changes and other management tools
- Thumbnail views can be customized: document bounds, layer bounds, or various sizes
- Layer panel - additional options: blending settings, pixel selection, and styles
- Double-clicking the layer opens the Layer Style panel for advanced editing

Filtering Layers to Enhance Workflow

- Photoshop provides filter tools to isolate layers based on **Kind, Name, Effect**, etc.
- Using the **Kind** filter to isolate layers by type: pixel, text, shape, smart object
- Filtering by **Name** to search specific layers in complex compositions
- Using **Effect** filter to isolate layers with specific styles (Drop Shadow, Bevel & Emboss)
- Using **Blending Mode** filter to highlight layers with a particular blending behavior
- Using **Attributes** filter to isolate based on visibility, lock status, masks, etc.
- Filtering by **Color** to view layers assigned specific organizational colors
- Multiple filters can be combined to target precise sets of layers for editing

Advanced Blending Options - Knockouts

- **Knockouts** function similarly to layer masks but offer additional features
- Using knockouts to puncture holes through layers down to the background layer
- Can be applied using blending options and fill opacity adjustments
- Two types: **Shallow** (within groups) and **Deep** (across all layers)
- New A4 document; demonstration using text and shape layers
- Comparison between knockouts and layer masks using brush tool
- Revealing transparency by hiding background or using knockout technique
- Font recommendation: Clash Display Bold (free for non-commercial use)



Applying Knockouts Practically

- Accessing knockout effect via *Layer > Blending Options > Knockout*
- Setting fill opacity to zero activates the knockout transparency
- **Shallow knockout** affects only layers inside the same group
- **Deep knockout** punches through all layers down to the background
- Inserting text “DESIGN” with vertical orientation
- Positioning shapes (rectangles) beneath text to reveal knockout
- Knockout visibility depends on correct grouping and stacking
- Using PNG textures like halftone patterns to explore depth and structure
- Enhance depth using duplicated halftone layer with **Deep Knockout** and drop shadow



Creative Uses & Enhancements

- Using layer mask and brush tools to create vignette effects on background
- Adjusting hardness and brush size controls the transparency transition
- Applying additional knockouts to duplicate textures for layered results
- Setting fill opacity to zero to maintain knockout transparency
- Adding drop shadow to the group for enhanced depth and separation
- Cropping and cleaning composition for final design output
- Using multiple knockouts to create complex visual compositions
- Saving and exporting final design for future use



Advanced Blending Options – Color Channels

- **Color channels** represent the separate Red, Green, and Blue components of an image
- Photoshop primarily uses the **RGB color model** for image composition
- Each image layer can be split by channel using Blending Options
- Starting by opening an image and unlocking the background layer (duplicating it as backup)
- Accessing Blending Options by double-clicking the layer
- Unchecking two of the three RGB channels to isolate one color per duplicated layer
- Result: three layers representing Red, Green, and Blue channel data independently
- Toggling layers on/off to show how combinations recreate the full image



Creating Glitch Effect with Channel Manipulation

- **Offsetting** individual color channel layers to create a visual glitch effect
- Using arrow keys for precise horizontal or vertical shifts
- Duplicating and scaling layers to enhance the visual intensity
- Applying blending modes like **Lighten** and adjusting opacity for subtler effects
- Using the *Rectangular Marquee Tool* to select image sections for targeted shifts
- Moving selections within individual channels to intensify glitch complexity
- Combining with texture layers and masks for added artistic depth
- Final results demonstrate how designers craft complex visuals using basic channel offsets



Introduction to Blend If in Photoshop

- **Blend If:** a blending tool found in the **Layer Style dialog** under Blending Options
- Enables blending based on color or light intensity
- Applying to both the current layer and the underlying layer
- Adjusting using sliders for darks and lights
- Precise blending creates hard transitions
- Holding **Alt** (**Option** on Mac) splits sliders for soft transitions
- Effective for non-destructive and flexible layer interaction
- Works with gray or specific color channels (Red, Green, Blue)



Exercise 1

- Using Blend If for Sky Replacement
- Import a High-contrast image for sky removal demonstration
- Unlock the image layer and access Blending Options
- Under **Blend If**, switch to the **Blue** channel for color-based blending
- Drag the light slider to erase bright (sky) parts
- Hold **Alt** to split the slider and create a soft transition
- Minimized manual selection effort around complex details like branches
- Achieved realistic sky removal in seconds
- New sky image can be placed underneath for seamless replacement



Exercise 2

- Using Blend If for blending a logo on a wall
- Import a wall texture and a transparent logo
- Convert logo to Smart Object and duplicate into three versions
- Set blending mode: one layer to **Multiply** (dark) and one to **Screen** (bright)
- Use **Blend If** to separately blend bright and dark layers into the texture
- Adjust sliders with **Alt/Option** for smoother transitions
- Reorder layers to enhance realistic texture absorption
- Group layers for organized editing
- Blend If created natural-looking logo integration on the wall



Exercise 2

- Import grunge texture to create a custom layer mask
- Apply texture directly into the group's mask via **Alt/Option + Click and Paste**
- Invert mask using **Ctrl/Cmd + I** for correct blending behavior
- Unlink mask from the group to allow independent movement
- Adjust mask position and scale to refine texture overlay
- Add **Curves Adjustment** on mask to control blending depth
- Further curves adjustment to match lighting direction for realism
- Final result: authentic logo-texture fusion using Blend If and custom masking



Understanding Apply Image in Photoshop

- **Apply Image** enables advanced blending using individual color channels (Red, Green, Blue)
- Useful for color correction, image blending, and creative effects
- Unlike standard blend modes, allows targeting or omitting specific channels
- Accessing via *Image > Apply Image* with a selected layer
- Requires two layers or images of the **same dimensions** to blend
- Provides options for source, layer, channel, and blending mode
- Allows preview of real-time changes to visual effects
- Masking can be applied using any image/layer and color channel



Key Functions & Workflow

- Demonstration begins by duplicating and unlocking base layer for non-destructive editing
- Choosing source image and selecting the working layer from the list
- Available channels: RGB, Red, Green, Blue, Transparency (if present)
- Each channel produces distinct effects during blending
- Blend modes include Normal, Multiply, Darken, Soft Light, etc.
- Using opacity slider for fine-tuning of the blending intensity
- Masking enables selective application using a second image or specific channel
- Real-time preview toggle assists in evaluating before/after results



Practical Applications & Creative Uses

- **Channel blending** enhance highlights, shadows, or isolate color effects
- Using Apply Image across different images after matching their resolution
- Using *Crop Tool* with **Front Image** setting to align sizes for cross-document blending
- After resizing, Apply Image can source from another open document
- Scaling and offsetting adjustments appear with certain blending modes
- Creative color grading or texture blending between two visuals
- Combining with Levels or Curves for extended correction
- Iterative Apply Image use allows multi-stage enhancement
- Highly versatile for compositing, retouching, and artistic imaging tasks



Introduction to Calculations in Photoshop

- Calculations are similar to Apply Image; focusing on **channel blending** with grayscale results
- Using Calculations to combine images through **blending modes** and **color channels**
- Primary output is a **black-and-white** image; used for further image processing
- Creating outputs as either a **new channel** or a **new document**
- Advanced workflows like **image selection** and **background removal**
- Workflow: *Image > Calculations*; choosing source image, channels, blending mode, and output method
- Supporting **opacity adjustment**, **invert option**, and **blending modes**
- Working on **single or multiple images** (dimensions must match for multi-image blending)

Practical Use of Calculations

- Converting an image of a person into a high-contrast black-and-white using Calculations
- Using Red/Green/Blue channels and blending modes to create dramatic effects
- Refining the result using Levels (**Ctrl/Cmd + L**) and Curves (**Ctrl/Cmd + M**)
- Enhancing features with *Dodge Tool* for selective brightening (eyes, beard)
- Adding sharpness using *Filter > Sharpen > Unsharp Mask* to emphasize details
- Ensuring both images are the same dimensions for blending with another image
- Using **Crop Tool** with **Front Image** setting to match sizes before calculations
- Blending two images via Calculations with chosen source, channels, and blending mode for creative output



Introduction to Auto-Blend in Photoshop

- Using **Auto-Blend** to seamlessly merge two or more images
- Helps in avoiding manual blending modes and layer masks by automating the blending process
- Ideal when combining elements with similar structures (face blending, exposure merging, panorama stitching)
- Working best when the source images are similar in lighting, alignment, and subject scale
- Accessing Auto-Blend via *Edit > Auto-Blend Layers*



Exercise 3

- Replacing one face with another using blending
- Use *Lasso Tool* to manually select and extract the face from the first image
- Duplicate selection using **Ctrl/Cmd + J**, move to the target image with *Move Tool*
- Resize, rotate, and position the face; use *Eraser Tool* to clean up edges
- Create a selection from layer thumbnail and use *Select > Modify > Contract* (16px)
- Delete selection from the base layer to prepare for blending
- Select both layers and apply Auto-Blend with **Stack Images**
- Use Spot Healing Brush and adjustments (Levels, Hue/Saturation) for refinements



Exercise 4

- Merging animal faces
- Drag tiger image into lion file and reduce opacity for alignment
- Align key features: eyes, nose, mouth, by scaling and rotating image
- Use *Rectangular Marquee Tool* to delete the overlapping half of tiger's face
- Contract the tiger layer selection and delete that region from the lion's layer
- Crop composition to frame content; enable **Delete Cropped Pixels**
- Apply Auto-Blend Layers to merge tiger and lion faces seamlessly
- Save final compositions (**Face Merge**) for review and reuse



Professional Selection Workflows in Photoshop

- Advanced selection techniques include **Quick Mask** and **Color Channels**
- Providing greater precision in complex image scenarios
- Quick Mask Mode allowing brush-based selections without traditional selection tools
- Color Channel Method useful for detailed elements like hair strands
- Both techniques extend beyond the basic selections learned in foundational courses
- Quick Mask modifies selection areas visually using red overlays
- Color channels focus on contrast differences between subject and background
- Enabling refined masking and professional-quality edits



Using Quick Mask Mode for Selection

- Activating Quick Mask by pressing Q; layer is overlaid in red
- Painting over the target area using the *Brush Tool* (B) to define selection
- The red overlay indicates non-selected areas
- Pressing Q again to convert brush strokes into a selection (after painting)
- Useful in situations where selection tools fail on complex shapes
- Inverting and applying mask to isolate the object
- Allows freeform, intuitive selection; ideal for **irregular subjects**
- Inverted selection and masking finalize the isolation of the desired object
- Demonstration using the basketball image



Channel-Based Selection for Complex Images

- Suitable for **intricate elements** like hair strands with fine detail
- Demonstration using the Old Lady image
- Navigating to the **Channels Panel** (RGB, Red, Green, Blue)
- Identifying the channel with highest contrast between subject and background
- Duplicating the optimal channel and using *Dodge Tool* to brighten highlights
- Using *Burn Tool* to darken shadows and strengthen edge contrast
- Using *Brush Tool* to manually paint subject areas white for clarity
- **Ctrl/Cmd + Click** on channel thumbnail to load selection from luminance
- Returning to Layers and applying Layer Mask to isolate the refined selection



Refinement & Decontamination Techniques

- Using Select and Mask to refine the masked selection
- Activating **Decontaminate Colors** to remove color fringing from the background
- Applying Clipping Mask with a new layer above the masked layer
- Using *Eyedropper Tool* (I) to sample natural hair colors from the image
- Painting with *Brush Tool* (B) set to **Color** blending mode to neutralize background tint
- Adjusting brush size and hardness for subtle, accurate blending
- Repeating sampling and painting to match hair colors across all regions
- Testing final mask over different backgrounds to verify selection quality



Exercise 5

- Practical application of the learned Photoshop techniques
- The **Apply Image** feature plays a central role in the effect
- Open the Smiling Woman portrait image
- Duplicate original layer (**Ctrl/Cmd + J**) before applying effects
- Use *Image > Apply Image*, select **Blue Channel**
- Set blend mode to **Multiply** for a strong base effect
- Apply **Blend If** adjustments to isolate tonal ranges
- Add shine with a soft brush on a new layer using sampled bright tones
- Change shine layer blend mode to **Screen**
- Refine shine with **Blend If** sliders for realism and subtlety



Exercise 5

- Enhance eye highlights using the *Dodge Tool* set to Highlights
- Use **Unsharp Mask** via *Filter > Sharpen > Unsharp Mask* on duplicated eye layer for added clarity
- Apply layer masking to selectively reveal sharpened areas
- Brighten teeth and skin highlights subtly with the *Dodge Tool*
- Add natural lip color by painting on a new layer in **Color blend mode**
- Clean up lips with eraser and refine tone using **Blend If**
- Reduce opacity for realism and consistency with image tones



Exercise 5

- Add final tonal correction using a **Curves Adjustment Layer**
- Apply subtle **S-curve** for contrast enhancement
- Review all applied layers and adjust opacity where necessary
- Ensure shine, eye glow, and lip color are balanced and consistent
- Compare before and after to ensure natural improvement
- Save file with clear naming convention (“smiling_woman_color_grading.psd”)
- Exercise demonstrates layered application of learned tools
- Combines masking, blending, tone control, and retouching
- Foundation for more advanced retouching and color work



Exercise 6

- Begin by opening the exercise folder and selecting the following files: Peeling wooden wall image, Photoshop Logo, Peeling paint texture
- Drag the images into Photoshop and scale them appropriately to fit the canvas
- Convert the Photoshop logo layer to a **Smart Object** for non-destructive editing
- Place the peeling wall texture above the logo layer
- Right-click the texture layer and select **Create Clipping Mask** to bind it to the logo
- Change the texture's **blending mode** to **Hard Light** for a realistic effect
- Access **Blending Options** on the texture layer and adjust **Blend If** sliders
- Hold **Alt/Option** and drag to separate the sliders for smoother transitions
- Aim to balance visibility of the logo with the realism of the texture overlay

Exercise 6

- Repeat the **Blend If** adjustments for the logo layer, but only affect the **Underlying Layer**
- Avoid using **This Layer** sliders on the logo, as it reduces visibility excessively
- Add a **Layer Mask** to the logo for manual refinements of the edges
- Use a soft, irregular brush to paint black on the mask, removing parts of the logo edge
- This simulates natural peeling and breaks the perfect edge of the logo
- Optional: Experiment with different brush shapes to enhance the worn texture effect
- Save the final result using **Ctrl/Cmd + S**



Questions & Answers Homework

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