# **Cropping & Resizing**

Introduction to Photoshop

#### **Lecture Outline**

- Cropping
  - Rotating image
  - Rule of thirds grid
  - Cropping shield
  - Fixed ratio crop
  - Exit cropping

- Resizing images
  - Image resolution
  - Image size dialog box
  - Enlarging images
  - Downsizing images

- Crop tool [C]
- 4
- Hidden tools: slice tools (web graphics)
- Make selection, press RETURN key to execute
- Another way to crop
  - Rectangular marquee tool [M]
  - Make selection, position it on image
  - Menu: Image → Crop
- CAN BE DESTRUCTIVE EDIT; AFFECTS EVERY LAYER!

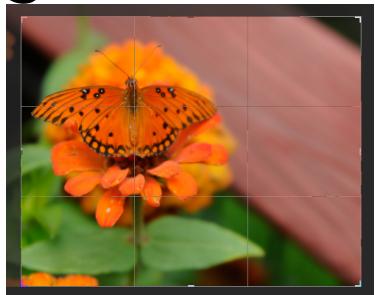
Option bar elements (left to right)



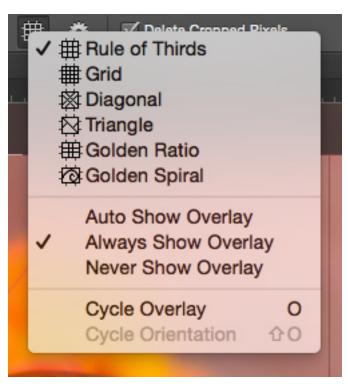
- Ratio crop (fixed width / height)
- Clear (clear crop)
- Straighten tilted images
- Grid overlay
- Crop options (gear)
- Delete cropped pixels (checkbox)
- Reset crop / Cancel crop / Execute crop

- Rotating image
  - Make selection with crop tool
  - Move cursor outside of cropping border to corner
  - Cursor changes to double-headed arrow
- New with 2015.5+: Content aware crop
  - Uses content aware algorithm to fill in areas of crop that have no information
  - See Photoshop Café video (link on website) for more information

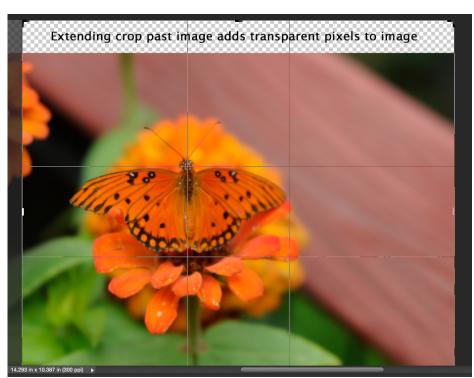
- Rule of thirds grid
  - Option bar
  - Focal point at intersection of lines
  - Place horizon on either top or bottom horizontal line
  - Place vertical on left or right vertical lines



- Cropping guides
  - Various options for cropping images
  - Golden Ratio / Golden Spiral based on Phi (Φ) which is approx. 1.618
  - We find ratio of Phi pleasing (1:1.618);
    examples:
    - Business cards (2 x 3.5")
    - Photographs (4 x 6, 5 x 7 ...)
    - Parthenon



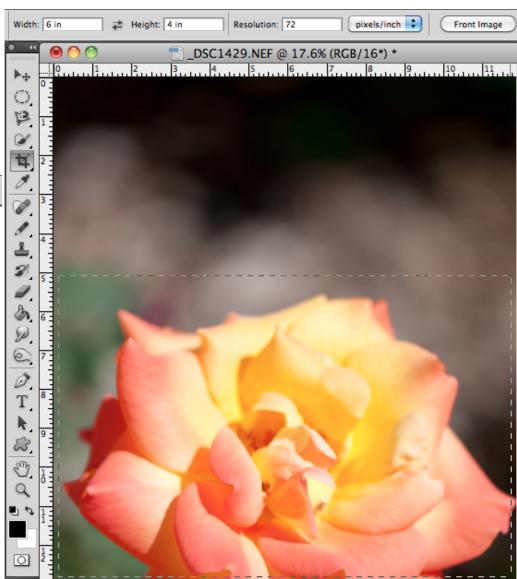
- Extending crop
  - If you extend a crop past the image, you get transparent pixels that you can fill unless you're using Content Aware Crop



- Fixed ratio crop
  - Enter in width, height, and resolution

Width: 6 in ## Height: 4 in Resolution: 72 pixels/inch

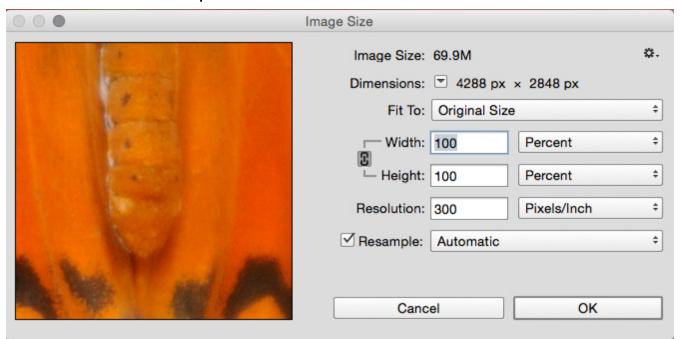
Make selection



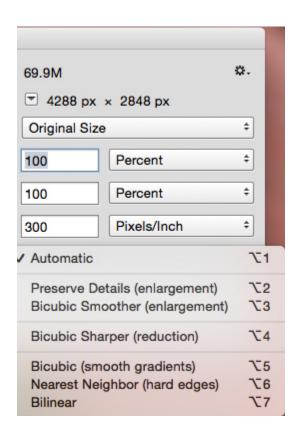
- Exit cropping
- 0
- Before executing selection
  - [ESC] key
  - Option bar
- After executing selection
  - PC: [ctrl] + z OR Menu: Edit  $\rightarrow$  Undo OR History panel
  - Mac: [cmnd]+z OR Menu: Edit  $\rightarrow$  Undo OR History panel
  - Several steps in?
    - [alt + ctrl] + z / [opt + cmnd] + z OR History panel
    - Note: can only undo the maximum number of history states set (default: 50)

- Image resolution sizes
  - Web / email: 72 pixels / inch
  - Print:
    - Minimum: 180 pixels / inch
    - Maximum: 240 pixels / inch (most cameras RAW default size)
    - > 240 ppi? Don't gain much in way of resolution

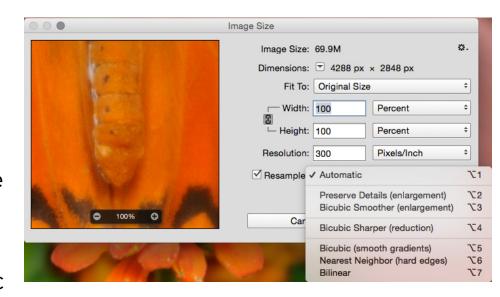
- Image size dialog box
  - Menu: Image → Image Size
  - Keyboard:
    - PC: [ctrl + alt] + i
    - Mac: [cmd + opt] + i



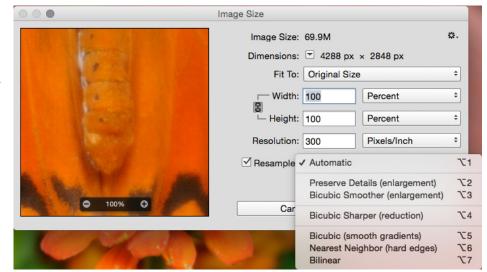
- Image resample
  - Enlarge
    - Preserve Details
    - Bicubic Smoother
  - Reduction
    - Bicubic Sharper



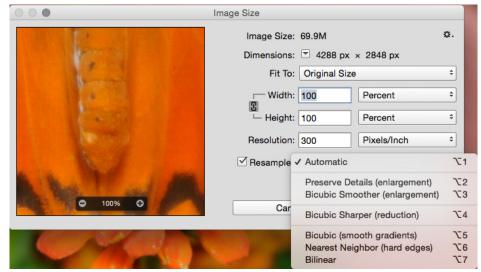
- Enlarging high res images
  - Bring up Image Size dialog box
  - Put Pixel Dimensions to percent, click lock to preserve aspect ratio
  - Make sure that Resample
    Image is selected and Bicubic
    Smoother or Preserve Details
    is selected
  - Enlarge in increments of 100% (i.e., 200%, 300%)
  - Go no larger than 300%
  - Need larger than 300%, use third party plugin



- Enlarging low res images
  - Bring up Image Size dialog box
  - Deselect Resample Image
  - Enter new resolution
    - Print: 180 240 pixels/inch
  - Photoshop will maintain proportions (width & height) of image



- Downsizing high res images
  - Bring up Image Size dialog box
  - Select Resample Image
  - Enter Width & Height in Document Size fields
  - Select Bicubic Sharper to sharpen image as it is reduced



- Image dimension measurement options
  - Allows you to work in multiple measurements
  - Points / Picas: typography measurements (72 points to the inch)

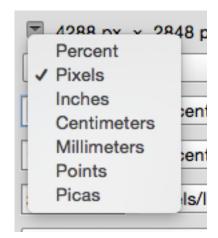


Image size default options

– Web

– Paper (A4/A6: Europe & Asia)

- Photographs

Original Size Auto Resolution... 960 x 640 px 144 ppi 1024 x 768 px 72 ppi 1136 x 640 px 144 ppi 1366 x 768 px 72 ppi A4 210 x 297 mm 300 dpi A6 105 x 148 mm 300 dpi Legal 8.5 x 14 in 300 dpi Letter 8.5 x 11 in 300 dpi 4 x 6 in 300 dpi 5 x 7 in 300 dpi 8 x 10 in 300 dpi 11 x 14 in 300 dpi Load Preset... Save Preset... Delete Preset...