How to Photograph Glass

Due to its translucent and reflective nature, photographing glass poses a unique challenge. It's very tricky to get a perfect photograph of a glass object, but once accomplished, the photo possesses a beauty which makes the whole effort worthwhile. Let us learn the nuances of this fine art of photographing glass.

The Essentials on How to Photograph Glass

You might just need to capture that beautiful vase or crystal wineglass that sits on your mantelpiece, or maybe put up a glass item for sale on eBay. Whatever the need, if not done the right way, photographs of glass can quickly turn into a disaster, replete with bright spots and myriad reflections. To eliminate these, we need to ensure that the lighting is at the right angle, and the environment immediately around the glass subject is controlled, so as to prevent reflections. This is done by ensuring the following:

Use diffused light:

Taking good quality pictures of glass objects can seem intimidating. However, there are some simple techniques which even amateur photographers can use to obtain dramatic results with minimal effort. The following examples show several basic setups that should allow anyone to achieve results they can be proud of. The first technique is a favorite of many hired professionals who need to get instant, fast, clean shots of clear glass. The second and third techniques illustrate dark field and light field photography (don’t be intimidated by the terminology the techniques are actually quite simple). The last technique is a personal favorite, under lighting. Under lighting some glass or acrylic objects can give you very dramatic, impressive results. The technique you choose depends on the style you prefer and the results you are trying to achieve.

These images were all obtained using an inexpensive two megapixel digital camera. To simplify our setup we used an EZcube® light tent to diffuse the light and provide the seamless background. We used a photoflood light set with daylight balanced bulbs as the main light source and a daylight balanced illuminated flat panel for bottom lighting. It is very important that all light sources match and have the same color temperature. In this case we used all 5000k, daylight balanced lights. (More details on the equipment can be found at the end of this page).
The kind of light used is the one most important aspect to consider when learning how to photograph glass. The light has to be diffused and not hard or direct. Diffuse glass reduces glare and uniformly lights up the reflective surface. One may diffuse light in the following ways:

1. Use natural diffuse light like outdoors on a cloudy day.
2. Place the object in a white box with walls made of white sheet or thin white plastics or even plexiglass or a white cotton cloth.
3. **Bounce light** off a white surface like a poster board or the ceiling.
4. Using multiple low power lights placed uniformly around the subject gives a more diffuse light than one or two bright lights.

**Use a polarizing filter:**

The polarizing filter can cut reflections from shiny surfaces like glass and metal.

Another tip for cutting out glare if photographing small glass beads or marbles is to put them in water and then take the photo through the water. This helps cut off most of the glare.

**Have an uncluttered background:**

An uncluttered, preferably plain and out-of-focus background draws the attention of the viewer to the foreground; in this case, the glass subject. Placing the object on a piece of colored paper or cloth, and placing the sheet both below as well as behind the subject would ensure a clutter-free surrounding.

**Don't forget your tripod:**

The one most important photographic accessory you will need for this exercise would be your tripod. You don't need an expensive professional grade tripod – even a small, portable one would do just as well. The advantages of using a tripod are many:

1. It lets you place your camera in an optimal position in relation to the subject as well as the light sources.
2. You can have longer exposures using softer sources of light to get the perfect tonality in the photograph.
3. Use of longer exposures also enables using smaller apertures, allowing one to effectively blur the background much better.
How to Photograph Glass: Techniques Used to Photograph Glass

There are three main techniques used to photograph glass:

1. The light cube method
2. Bright field method
3. Dark field method

1. The Light Cube Method:

The object to be photographed is placed within an opaque white cube, which is illuminated from outside. The material of the cube is such that it diffuses the light entering the cube in all directions, resulting in an even and uniform lighting and eliminating all reflections. A piece of colored paper can easily be placed within the cube to get a background of choice.

There are two disadvantages of using this method:

- One has limited choice over the way light falls on the subject. The glass object sometimes loses dimension due to the unilateral source of light and looks quite flat.
- One also has limited angles of composition. It’s almost impossible to get action shots, say water or a fruit falling into the glass object, as it’s enclosed within a cube!

2. Bright Field Method:

A better way of photographing glass is to manipulate the reflections so as to define the boundaries and shape of the glass subject. As the name suggests, in bright field lighting, the background is white or bright and the outline of glass is dark or black. This is obtained by placing two sheets of black on either side of a white background sheet. The glass subject is then placed right in front of the white sheet. A source of light should be placed such that it illuminates the white sheet from below and behind the glass subject. Now composing the scene so as to avoid the black sheets produced a photo wherein the background white is visible right through the glass and the surrounding black sheets are reflected by the borders, thus giving sharp black borders which define the shape of the glass.

One can also place the light source right below the glass subject for a different and beautiful effect.

3. Dark Field Method:
Contrary to the above method, here the background is dark and the outline of the glass is bright or white. It is done exactly as in bright field method, except that the positions of the white and black sheets are now interchanged.

A simple shortcut popular with professionals, and commonly seen on trade magazine covers, is the use of a graduated continuous-tone background.

The background creates the illusion of light falling off into blackness. These backgrounds are custom made to fit the EZcube® perfectly; they are longer to fill the EZcube from top to bottom & no trimming is required.

The results are always amazing, and the final image looks as if it was taken by a professional. This background is also fantastic for making short-work of shooting clear glass.
Photographing Waterford Crystal on light backgrounds

Place the illuminated flat panel inside of the EZcube®, beneath the nylon sweep. Align the illuminated flat panel so that the longest side is running from the front of the EZcube® to the back.

Place the glass on top of the sweep, over the light panel, 1 inch from the front of the light panel, so that most of the light is behind the glass. This will illuminate more of the glass, from the bottom on up.

Add lighting from both sides (outside of the EZcube® so it will be soft and diffused without harsh light reflections).

Insert black paper as rolled tubes, on either side of the stem. (This adds nice black reflections back into the stem, to help define the shape). Adjust the paper until you can see the black reflections appear where you like them.

Photograph with a digital camera on a tripod to avoid blur. Set aperture f 8.0 for a maximum depth of field, with a exposure compensation of E.V. +1.0 to lighten the background still more.
Photographing Waterford Crystal on a dark background

Place the illuminated flat panel inside the EZcube®, beneath the standard nylon sweep.

Cut a hole in a piece of black, matte paper from an art supply store. The hole should be slightly smaller than the base of the stemware.

Place the stemware on the paper, over the light panel, aligned with the hole so the light can shine through the hole and illuminate the glass. The paper should continue on up following the curve of the sweep, creating a seamless black background.

Add one light source from behind the EZcube®, be sure to shoot over the top of the paper just a little. This will help illuminate the upper rim.

Photograph with a digital camera on a tripod to avoid motion blur. Set the aperture at f 8.0 for a maximum depth of field, with a exposure compensation of E.V. -0.7 to darken the background still more.
Shooting a glass goblet using underlighting to create a graduated background with an illuminated effect

*Underlighting videos* [Windows] [Quicktime]

The orientation of the light panel will effect your image. Pull it forward, push it back, rotate it, until you see the effect you desire.

In the image on the left we have a shorter, dramatic transition from white to gray created by running the light panel sideways.

In the image on the right we see a smoother, longer gradation of white to grey. By rotating the light panel lengthwise more of the glass, shown right, is illuminated.

In both cases, we positioned the goblet toward the front of the light panel. With more of the light panel behind your glassware, the higher the illumination effect will travel up your glass.

6x8" Illuminated panel in a horizontal position

Daylight balanced illuminated flat panel

Illuminated panel rotated 90 degrees, the illumination travels further up the goblet.

Under lighting works well with acrylic cosmetics too
The lighted panel will create the same special effect with acrylic cosmetics and perfume bottles. Translucent acrylic and glass respond dramatically to the under lighting technique.

On the left we show a thick acrylic perfume bottle with blue liquid inside placed on top of the lighted panel. The liquid really lights up!

Remember to slide the panel beneath the EZcube sweep to hide the panels back edge. This gives you the nice graduated background.

On the right we placed the light panel beneath a colored acrylic cologne bottle.

Be sure the light panel matches your primary light source color temperature. We used 5000k here.
Photographing a crystal mouse on a black background with underlighting creates a glowing effect

1. Place the illuminated flat panel inside the EZcube®, beneath the standard nylon sweep.

2. Cut a hole in a piece of black, matte paper from an art supply store. The hole should be slightly smaller than the base of the crystal.

3. Place the crystal on top of the paper, which is over the light panel. Align the crystal carefully with the hole that's been cut, so the light can shine through the hole and illuminate the glass. The paper should continue on up following the curve of the sweep, creating a seamless black background.

4. Do not use any additional lighting in this case; just the illuminated flat panel. Due to the small size, and shape of this crystal, the illuminated panel can light up the entire mouse. This was evident during set-up.

5. Photograph with a digital camera on a tripod to avoid motion blur. Set the aperture to f 8.0 with a exposure compensation of E.V. -0.7 to darken the background still more.

Even amateur photographers can obtain dramatic results with minimal effort. Below images were taken using the equipment listed below.
Glass Photography Tools

**EZcube® light tent**
For soft, diffused lighting, softer shadows, and reflection control.

**Illuminated Flat Panel**
- Underlighting for special effects
- "daylight color" 5000k

**TableTopStudio lights**
- 10" Flood lights/stand mounts
- Adjustable 6’ stands

**Trumpet top bulbs™**
- 5000K CFL "daylight color"
- cool to touch {very little heat}
- 10,000 hr lamps
- *Graduated Background*
  - Helps define clear glass
  - Professional background
  - Illusion of light fading to darkness

*Photoshop/Photoshop Elements*
*These items are sold separately*
through the looking glass
Try photographing glass, it is the background and reflections from the background that light the glass. Glass objects can be pictured clearly by lighting them in such a way that they stand out as dark outlined shapes against a light background or as a light outlined shape against a medium or dark background. These techniques of lighting are actually variations of a basic silhouette method. **The Set** The setup for photographing glass products consists of white seamless background paper. The
background paper is curved forward on the floor so it is completely underneath the area containing the setup. Place two supports, such as sawhorses or tables, on the forward part of the background paper. The supports should be spaced to hold a sheet of plate glass. The plate of glass gives you a transparent worktable through which light bounced off the background paper in back of and underneath the glass product will pass. Strips of colored or black paper can be attached, out of camera view, to the background paper for edge effects to the glass products. Because the light reflected from the background is usually the only source of illumination, the film exposure is relatively long. Proper camera equipment and a sturdy tripod are necessary to prevent movement during the rather long exposure. The height or camera angle varies for different subjects and showing the ellipse or oval of the rim adds depth and roundness to the picture, since most glass items you photograph are three-dimensional. **Lighting** You should be able to darken the studio completely. An overhead light, an exit sign, or even a light leak around a door can cause problem reflections. And note eliminating unwanted reflections results in much time and effort wasted.

---

**Photographing Glass**

This page is a few notes on photographing glass with examples. I am not an outstanding photographer, but better than many and I try to pick up good habits and look for good practice.

Photographing glass is more of a problem than it might seem because glass can pass light in so many ways, not just the usual matt reflection we experience from people's faces and clothing and the surfaces of buildings and nature. A piece of glass can reflect light from the surface, bounce light around inside, carry light from the back to the front, subdue light by translucency, and block/reflect light with opaque colors. Clear glass with curved portions can pick up/reflect the surroundings and make that part of the glass. Even glass that can not be seen through may pass
One debate the starts arguments about photographing glass is the color or lack of it in the surroundings and the light source. There are people who believe that the best way is to surround it with black and hit it with light. This produces some spectacular images, but is, to my mind, hardly the way people display their glass. The goblet photographed below at Corning represents a variation on this style - dark surround with a pool of light behind. Many people object to using colored light on glass, saying it distorts the colors of the glass, and I generally agree. It is possible to surround glass with diffuse light, so all of the reflections are white. It can be posed on clear glass, so the immediate background is far enough away to be out of focus.

Color film is rated as to color temperature, referred to in shorthand as Daylight, Tungsten, etc., and specifically with a temperature like 3200°K. The higher the Kelvin temperature the more blue in the light, just as a cooler flame is redder and hotter flame is bluer. If a color film (or a digital camera, see below) is not matched to the light source, then an overall color tone is added to the picture which distorts the colors. Tungsten balanced indoor film used outdoors will have a blue cast, daylight film under fluorescent will have a green cast. These can be corrected with color filters, but that topic is well beyond what I want to do here and it is certainly cheaper to just match the film to the lighting conditions.

If a specific high quality film is to be used, then among the choices are buying light sources that match the film and buying voltage supplies that boost or drop the cooler temperature. Photographers operating at this level should have a color temperature meter. In the Corning setup, Variacs raise the voltage to increase the color temperature of the lights. The four pictures below were taken with a digital Nikon CoolPix 995 using opaque white plastic as background and overhead lighting by a halogen bulb in a fixture. The two with the blue white tone were taken with onboard small flash added - thus the halogen shadow to the left is washed out and a darker shadow is behind the piece. The two with the pink tone were taken with the halogen (and a room light on ceiling to right rear of camera) only. Stronger shadows, better definition. In terms of color of the pieces, the upper is closer to the original glass. The camera was mounted on a monopod because exposures were long for hand held - 1/8 second for halogen only.
This is my outdoor photo rig with a picture taken using it. It is modeled after the Corning rig below, scaled down to fold for storage. I welded a 1/2" (12mm) square tubing frame with pivots at the lower corners so it folds relatively flat in 2x4 feet (60x120mm) The white panel is Plexiglas sanded one side (ordered that way) which is held by spring clamps to the frame (not drilled holes) Originally, I expected the plex to sag more than it does and pull the vertical frames to position. As it is, I add a rope to keep the frames in position and bend the plex to level out the bottom. The white background reflects light through the glass. What I have not used so far is either key lighting (low level accent) or back lighting through the plastic. This image was taken on film and either scanned in or scanned to disk at the time of processing. Since that time I have used the same rig with my Nikon 995. Sanded white Plexiglas is available at most plastics supply
houses "white Plexiglas sandblasted F95"

These three pictures were taken at the Corning Museum of Glass during a session in the photographic department when I took a class. In the picture below is the photographer for the museum, and the automated rig with a huge sheet of plex after which the rig above is modeled. At right is a reference shot showing a goblet set up with lighting from below and a key light (about a 1" spot). Below that is a proper front shot, hand held on 400 speed film

2002-05-15   [query on photographing a glass chain.]   I would suggest the following as a non-permanent way to take a pretty good picture of glass. (See note* at the end about location.) On a sunny day, preferably in mid afternoon so the sun will be over your shoulder, but not too low,
take a clean white sheet outdoors and tie it up at the corners facing the sun and just high enough so the bottom can curve toward the camera on the ground. This will form a seamless background reflecting light into the glass.

Run a light white string or rope, or clear monofilament used for fishing or hanging pictures, across the scene so you can hang the chain over it, bunched up. Set the speed on the camera as high as you can, so the lens is open as much as possible, and get as close to the glass as possible - these two steps will reduce the depth of field so the white background is blurred, more or less, so it doesn't show as a sheet. Take pictures from varying angles so the sun is seen as striking the glass in different ways.

* To use the sheet and rope/string, you clearly have to have two sets of places to tie off - sheet and line a couple of feet in front - and this may be the hardest part. Two clothes lines work if far enough apart. Trees or fences in the right places may work. Two cars parked several feet apart, with the sheet tied to or trapped in the tops of the windows/doors and the rope for the chain tied to the rearview mirrors or antennas may work. If it works for you do it.

If you can get a piece of clean window glass or Plexiglas, you can put the edges of it on two somethings (chairs, stools, boxes) and lay the white background on the ground, laying the chain on the glass and shooting down at it. You may wish the sun higher in the sky for smaller shadows from the supports.

One of the problems photographing glass in indoors that is not mentioned above is the size and shape of reflections, including the various lights, the camera and the photographer!! The usual recommendation is to diffuse the light sources by putting a white translucent panel between them and the glass - including a white tent. Another method is to put a dark panel or cloth up and put the camera lens through the barrier so only the dark surface is visible in the glass. In the Corning setup, the reflections are controlled by surrounding the lighted area with dark and using small snouted lights positioned to avoid reflections.

---

A feature of the stand is that it comes apart and the pieces fit inside the 1'x2'x3.5" base. The two side arms are carefully fitted to the inside and are held by 1/4"-20 machine screws and T-nuts. Different mounting holes permit different
angles for the arms, which are 1x2 with 1/4" plywood panels glued across the top. The outlet strips with plug in sockets are each glued to smaller plywood pieces which are bolted to the arm pieces. Aluminum reflectors throw light back down from behind the bulbs and have a bent edge to fit between the two plywood pieces. Two 1/4" plywood panels fit to form the photographic surface and are just wide enough to fit in the base and so are notched to fit around the various arms. The camera mount is two pieces of 1x2 held at a right angle with 1/4" plywood gussets. Note that the mount is off center to the right because when my camera is mounted the lens is to the left. (Can't show that because the camera is taking the pictures.) The mount must be adapted to each camera. My Nikon 995 has a pivot in the middle so the body with the tripod mount can stay upright while the lens points down (as used here), away, up, or back at the photographer (self portraits.) A digital camera with a pivoting screen but with the lens fixed at right angles to the tripod mount would require a vertical mount while a traditional SCR viewed only from the rear gets more interesting to use. When the mounting arm was centered and the lens off center part of the type was lost in the glare from the more direct reflection from the bulbs. For even lighting the reflection line from the lens to the bulbs must not fall on the page. Moving it over solved the problem here within the original design; wider spread of arms could also be done. 2006-02-13

I wanted to photograph fused glass panels as if they were in a window, but with more control and less cleaning than using an actual window. It was an immediate idea to make a small window, but took a bit longer to hold it up. I had two basic adjustable height stands that were used for many purposes in my shop. (left). They sit nicely on concrete with 3 adjustable feet each, but on grass they are stable only with applied weight, thus the gray board. The basic structure is 1" square steel tubing with 3/4" square to telescope inside. Nuts are braised to take a bolt to fix the height. I drilled and tapped some additional holes in the top of the T and made an elbow (upper right) to be fitting and tightened in the T top.

It was drilled and tapped to provide fixing of the T from the other stand. Aluminum plates were roughly cut from 1/16" bar stock and drilled off center to hang upright. One pair fitted to a 3/4" sliding bar for top bracing and the other used an existing center hole for the bottom. On the right is shown the finished frame installed between the sliding bars. A wrench is used for tightening the various 1/4" hex head bolts instead of putting handles on each. The glass being photographed is rested on a clear plastic panel which rests on a support bent from 1/8" aluminum wire pinned to holes in the side frames. The unit is obviously side and top heavy.
The usefulness of 3/4" welded to 1" tubing to make sliding fittings should be obvious. Less so might be the fact that the 1" will take 1/2" (nominal) thin wall conduit, which can be used to extend the base by several feet or make a long hanging rod at the top.

The glass panel was made from an existing piece scrounged from an abandoned popcorn popping cart. The frame was made from 1/2 x 3/4" molding and 1/2"x1/2" wood angle I had on hand from previous jobs. The angle fits over the glass and 2 screws on each side hold the glass in place. Both molding and angle are mitered, the molding being nailed and glued - a nuisance but stronger. 2007-09-29

In use, I found several problems I was able to deal with, somewhat awkwardly in a few cases. Because the sun was to be behind the window, there was a very strong reflection of my face and shirt. This was solved by forming a narrow frame to rest on the top of the window, be supported behind me, and be covered with a black sheet to shade the area, me. and near side of the glass. The unit was already top heavy and this cover made it extremely sensitive to wind, so it fell and I lost a piece of glass (later re-fused). So I put a wooden plate under the stand, weighted the stand and put a piece of 1/2" conduit through the T of the stand to give it a wider base. Because everything is light, I can still shift to change the sun angle and background. 2007-12-03.

In one of the first tests, the window shot looks like the left while the stand shot is at right. One difference is that almost all the light in the window shot is coming from outside into a fairly darkened room, while this side of the stand shot is reflecting all the sky behind the camera plus any light objects. A shade or dark surround may also help. Because the sun is facing the camera, reflections from the photographer are severe
Glass in buildings and windows

Whether we photograph from the inside of the building through the glass, or from the outside, capturing reflections, shooting glass is often about simplifying.

Stained glass windows in churches make a great subject, but people often fall into a couple of easy mistakes. Firstly they try to get all the window, including all the surrounding stone work in, and secondly, they stand too close.

Trying to get too much in the shot typically results in too much small detail, failing to bring across the real detail within the window. The surrounding area of dark stone usually records no detail, and by effecting the meter reading also causes blown-out highlights in the window. Standing near the window and pointing the lens up to get the whole window in creates converging verticals which need too much adjustment later in PhotoShop.

I try to find the element, pattern or scene in the window that I find appealing, and by using a long lens, from as far back in the church as I can get, point the camera up as little as possible. These techniques make metering easier (although if the window has a few clear areas, you might need to use -1/3rd stop compensation to avoid losing detail in those); and will minimise converging verticals. I have used up to a 400mm lens at the far end of a church for window details. If it is important for you to keep
detail in the surrounding stonework, you may find it necessary to bracket exposures and combine them using HDR software for the best results.

With stained glass, the weather makes a big difference too; a sunny day with the sun streaming in the window is about as bad as it gets – the best time for stained glass is on an overcast day, when the shadows of the protective mesh that is so often fitted outside does not show. If the sun is shining through the window, try shooting the abstract patterns of light that the sun creates.

Windows in modern office blocks can reflect the most amazing reflections and abstract patterns. Again, it’s not necessary to get the whole building in the shot, in fact, it often works well when juxtaposing two adjacent buildings of slightly different styles. Try a longish lens to help isolate detail, a 70–200mm would be ideal.
Another technique for glass could be shooting through a window on a rainy day, when the raindrops create a pattern in their own right. As an added dimension, try to get something appropriate through the window, as it can give a feeling of what you'd like to be doing if it wasn't raining.

Glass objects
With glass as a subject, there are many ways to shoot or light it. I took a wine glass full of white wine, and simply put it on a window sill, the inverted image of some trees outside the window lifted the simple composition and made the glass more interesting. To photograph glass indoors, it always looks best lit through the glass, I stood a lightbox on its side and placed a glass sheet in front of it – I actually used an old fish tank, this allowed the glasses to be lit from below and behind all with the same light source, to bring out the shape by highlighting the edges of the glasses. A good way of really emphasising the edges is by bringing dark panels in at the sides, which reflect and emphasise the shape still further.
Glass in all its forms can clearly make for an interesting and varied subject, with no real limitations – so get out and give it a go.

Photographing glass objects can be a challenge that frustrates the most experienced photographers. It reflects everything. It will give the most undesirable catch lights. And it can at times be almost impossible to get focused properly. A quick look at websites that cater to home craft vendors will reveal that only the best photographers have learned how to control the nuances of the glass object. So let's take a quick look at how we can improve our capabilities when it comes to glass.

Once we have come to truly understand how reflective glass is (usually after a couple of hours of trying to get a good photograph) we may come to the conclusion that it is something we are going to have to learn to live with. But what about all those beautiful advertisements of crystal with absolutely no reflections and a catch light perfectly placed. They must have done it in the computer - they surely could not have taken the
picture that way. Well there are ways to make that photograph in camera and one of the first rules to understand is you want a lot of black colored material around your set.

When you look at a high quality photograph of a glass object you will notice that the extreme left and right sides of the object are black. That is from the black corkboards set up just out of camera view on both sides of the object. The glass is reflecting the black but since it is black the picture is much more desirable. Additionally, the black color stops a lot of the back and forth repetitive reflection that other colors would not. In my studio, the walls are white and removing the black corkboards instantaneously results in a disastrous capture.

When lighting a glass object there are two primary places I light from; directly behind the object and directly above. When I have the object placed between the camera and the light source, with black corkboards on both sides, and a black curtain around the set it is very difficult to get a single sign of reflection in the object. The edges of the object are a rich black and the whole rendering looks very pleasing. I have had clients look at these pictures and immediately want a glass of wine - the desired effect.

When lighting from directly above I usually want a controlled catch light on the object. Using the modeling light on my studio strobe gets me in the neighborhood. Then it is a matter of shooting and moving the object slightly and repeating until I get the right effect.

In both of the above examples I can have liquids in the glass or pitcher but I find I am limited to water with a small amount of food coloring. Both of these lighting set ups require the liquid to be very translucent (near transparent). Getting the liquid into the container without splashing is a challenge. I use a funnel with a short tube and keep the bottom of the tube at the bottom of the container until I have filled to the desired level. I then use a
paper towel to wipe the tube as I am extracting it to minimize dripping.

But what about objects filled with a near opaque liquid such as a bottle of red wine? One of my favorite wine shots is when I place a softbox on the studio strobe and then put a piece of black tape horizontally and vertically on the face of the softbox and the reflection in the bottle changes from studio lighting to a window. Once again, I have to surround the set with black material to keep the light from bouncing back and forth all over the place.

I only use manual focus when photographing glass as the auto focus system can be easily confused. I always check my dioptic setting on my viewfinder first with a solid object to make sure it is set right. I check my focus before every shot as I am normally using a very shallow depth-of-field.

Photographing Glass

The latest, greatest challenge in my advanced techniques class is photographing shiny things, or more specifically, shiny, reflective metal and glass. Beyond the fun technical puzzles of controlling reflections and glare though, one of the toughest part of this for me was coming up with that damn "concept".

I've collected colored glass decanters for years now and my first thought was how lovely they'd be to photographs, but the idea suffered from the fact that they really weren't much more than pretty. They didn't say anything.
I took pictures of my beloved collection anyway, but also worked on a concept built around hot chocolate made with chili peppers. (Really, it's actually quite tasty.) The main appeal of this idea was that it gave me the chance to set stuff on fire.

Initially, my styling set-up was just too cluttered, then I needed to come up with a solution for blocking the light that left the whipped cream overexposed.

I felt like I was getting closer to something that would work once I traded out my black ceramic mug for a clear one that would show off the actual hot cocoa inside it, but got discouraged when both my project partner and my TA (who would be grading the thing) showed a marked lack of enthusiasm for the idea.

A weekend in St Louis gave me some more time to brainstorm and I came up with the editorial idea: "Grapes Go Green" which would involve creating a photo illustration about organic wines. I also had the germ of an idea involving key limes contrasting with regular-size limes, but not much beyond that.

The organic wine idea, while pricier than I would have liked, turned out quite nicely and gave me a chance to practice some of the glass/solid-object lighting combos we'd learned, but sadly, it was just really, really boring. Jack and I will still drink the wine, so it's not a total wash, but the idea that finally floated to the surface came to me on the drive back from St. Louis right before my final stint in the studio.

I'll remain a little mysterious about how I did it, but after an ungodly number of hours working on this and even more just thinking about it, this is what I finally came up with. I don't know how much of an editorial "concept" it really has, but at least it's fun.
Better known for their tart contribution to cream pies, Florida Key Limes can also shake up cocktails with a tangy citrus kick, as shown here in a photo illustration taken on March 2, 2009.
I think it depends on which way your window faces. Where I photograph is a south facing window and the afternoon sun is too strong especially in winter when the sun is lower in the sky. I have to block the direct sun coming in with shears or I'll use my light box just to diffuse the light. I find the soft morning light works best for me.

aDifferentview - if you'd like a tip I'd say simplify your backgrounds. Personally fabric backgrounds are very hard to make look professional. I've tried and the camera just picks up every piece of lint or wrinkle.

keep a piece of white, textured wallpaper to use as a background. It works especially well with multi-colored items and the colors seem more true. We've got a light therapy lamp that has a daylight bulb and I use it for soft, bright lighting. Taking pictures at an angle avoids any glare from the lamp.

My lifesaver is Photoscape photo editing. It's a free download and you can make adjustments to your photos, as needed.

I recently took some photos of antique glass apothecary jars using a technique called “bright field lighting”. Glass is tricky to shoot because it is both transparent and reflective. If you are not careful, you will lose the definition of the edge of the glass and get unwanted reflections and highlights.

In this shot, I used a white background and lit it with a single strobe facing the background and placed it behind and below the glass jar. The jar was on a table covered with white paper and placed on top of a clear piece of glass. I put black cards on each side of the jar to give more defined edges. I also used a reflector in front of the jar to increase the light on the label. The basic setup is shown in the lighting diagram.

I did some post-processing – changed the image to a sepia tone, using Lightroom and added a vintage photo to the background with Photoshop. I
used a levels adjustment layer to increase the brightness of the label.

Lighting setup for glass

The next photo shows a basic image of a glass of water with a couple of drops of food coloring, shot using the same technique without the Photoshop work. In this image I adjusted the contrast and removed a few stray water drops using the dust removal tool in Lightroom.

Lighting Glass with Bright Field Method

Another way to photograph glass is by using a dark background with highlighted edges such as in the photo of the glass vase below. The strobe was placed behind a black background, which was placed in front of a larger
white background. The strobe was facing towards the white background, so
the edges of the vase were lit by the reflected light.

Glass on Black

It is very helpful to use a tripod to aid in composing the shots and to help
tweak the setup. Although I used strobes for these shots, continuous lighting
will work too, and a tripod will allow you to use longer shutter speeds with
no problem.

Here are some more tips for lighting
glass:

Photographing Glass

OK, your glassblowing skills have progressed to the point where you'd like to
show people
the kind of glass art you like to make, maybe to show on your web page, or even
offer for sale on the web.
And you've got a nice digital camera, but your photos really are not turning out very well, and definitely not showcasing just how great your glass pieces look when you hold them.

So, there must be more to the photographing of glass art, and unless you can afford to hire a professional photographer, maybe part of becoming a better glassblower is learning how to take better digital photos?

It may seem like an obvious over-simplification to some, but photography, and especially photographing glass, is all about LIGHT!

I had already purchased through ebay a double-size medical x-ray "View Box". Instead of paying around $300, I was able to purchase this lightbox for only $35! It fits perfectly into the bottom of my 30" cube. For pieces subtly dark pieces like this there is no way I could have gotten this photo without a lot of "underlighting". The X-ray view box is shown inside my PVC cube in the photo below, if you scroll down a bit.

Now it is no accident that the light box is a cube of dimension 30 inches on each side. PVC pipe is sold in 10 foot sections, which is 120 inches. You can cut the pipe in half (into 5 foot sections) and then halves again (quarters) to end up with pipe segments which are 2.5 feet = 30 inches in length. You need 12 pipe sections to construct a cube, so you need to purchase three 10-foot lengths of PVC pipe. One of the confusing aspects is that when the pipe is marked as 3/4" pipe, that is the inside diameter (not the outside diameter, which is approximately one inch). Here are four photos to give you some idea as to the construction of a light box cube:
The hardest part might be finding the "PVC Corners" (also known as PVC Side Outlet 90's). You can start here: pvcfittings.com You can go to Lowe's Hardware store, where they carry as SKU#24085 a 3/4" x 3/4" x 1/2" Side Outlet 90 -- but note that the 1/2" outlet is threaded, and I had to grind away the threads with my dremel tool to insert a non-threaded 1/2" (ID) thread PVC pipe (about 3/4" outer diameter). The ten foot sections of PVC pipe are the least expensive part of this project -- at $1.86 each for the 3/4" PVC and $1.53 for the 1/2" PVC pipe. The corner connectors cost $1.37 each (and you need eight of them). My total cost (not including the fabric and lights) was $17.34. You can use a white sheet blanket to save some money.