MITOCW | MITRES_10-001S16_Track09_300k

For this second week, week 2, we'll be taking you from the pretty straight-forward process of creating images on a flatbed scanner to what you probably expected in the first place when you enrolled in our class using a camera and lens to capture images of your work in the lab.

We'll first take a look at what kind of equipment you'll need.

We'll look at specific lighting next week.

And we'll go over the very basics of making an image.

Because this course is about photographing certain material with a certain scale, we're going to be very specific in our suggestions for a camera and lens and for other equipment.

These photographs will be staged.

You have control.

You're not going to wonder what the image will look like after it's done.

You will see your process and your thinking as you create the set-up and light it and compose it.

We're also going to review the important issue of getting the right exposure for our specific requirements.

Now we're assuming you already have some basic knowledge of picture making.

And, we'll just be modifying what you hopefully already know.

If you're really brand new to all of this, you'll find some useful websites on our resource page.

SO FIRST YOUR CAMERA: You don't a camera with all sorts of bells and whistles.

You just need one which will take various lenses and that will allow you to change your ISO, aperture, and shutter settings.

And most important, one that will create a large enough image measured in file size that could be submitted, let's say, for a publication, or even a cover submission.

You will generally need, for example, about a 27 meg file.

So something like 300 dpi for an eight and half by eleven cover.

So you need a camera that will give you that size image.

NOW FOR YOUR LENS: You'll need a 105 macro lens.

This particular lens will allow you to get close to your material or device, basically using macro photographic techniques.

Don't use enlarging filters on a normal lens: The quality of the optics just doesn't compare to the optics of a very fine macro lens.

You'll also need a tripod and I suggest getting a quick release mechanism so that you can take your camera on and off the tripod easily.

I'm not going to suggest a copy stand, which I see around many labs.

Using a copy stand where the camera is placed only in one position really limits your point of view and we don't want to do that.

You'll see in our discussion of point of view about having the ability to move the camera around on a tripod, which not only slows you down, which is a good thing, but it teaches you to learn to see and encourages you to look carefully at your material.

Finally, I'm also suggesting that you use your computer to decide on the various settings for exposure.

You'll use a software to make the right settings and you'll store the images right onto your computer, not a card in your camera.

Make sure you get the right software for your camera.

But, for those of you who decide not to use software, you'll just have to learn how to set all of those settings within your camera.

Okay, the best way to go about learning all of this is to make a picture.

So, we'll work with a device you've seen before: The inside of a music box.