

# Photo 148 Test Review

## Bring Scantron # 4521

In addition to the following material, the test will cover information on all handouts and discussions.

### FLASH EXPOSURE

Exposure = Intensity X Time

Intensity = f/stop

f stop is determined by the flash to subject distance

Time is determined by the flash duration  
or

The time film/sensor is exposed to light

With many flash units the duration of the flash will be 1/1000th of a second or faster.

More flash heads or power used = longer flash duration  
examples:

1/500th of a second with 4 heads in use.

1/2000th of a second with one head in use.

**Inverse Square Law:** doubling the distance between the light and the subject results in one quarter of the amount of light hitting the subject.

### SYNCH SPEED

The fastest shutter speed you can use with flash, period.

1. Focal plane shutters, generally found on 35mm SLR cameras, have synch speeds of 1/60th to 1/500.
2. Some digital cameras will synchronize at 1/500th of a second (especially useful for flash-fill).
3. Selecting shutter speeds that are faster than the synch speed results in only a fraction of the frame being exposed.
4. Leaf shutters, generally found on view cameras will synch at any speed.

High Speed Sync: Canon's High Speed Sync and Nikon's Auto FP both allow the flash to synch at any shutter speed, effectively doing away with the limits of maximum sync speed.

Slow Sync: a dedicated strobe setting that adjusts the shutter speed automatically to compensate for low ambient light level backgrounds.

Rear-Curtain Flash Sync: With normal flash synchronization the flash fires as soon as the shutter opens. With very long shutter speeds ambient light obscures a moving subject. When using rear-curtain sync the flash fires at the end of the exposure, rather than the beginning.

### LENSES

Wide Angle (short lens) :

1. Common wide angle lenses for a 4x5 view camera are: 90mm and 75 mm
2. Common wide angle lenses for a 35mm camera are: 18mm, 21mm, 24mm
3. Have more depth of field than longer lenses.
4. Increase feeling of space in interiors and exaggerate "round" forms in product shots.

Telephoto (long lens):

1. Common long lenses for a 4x5: 210, 300mm
2. Common long lenses for 35mm cameras: 105, 135, 200, and 500mm
3. Narrow angle of view which is useful in the studio because this lens requires less background material.
4. Are slower and heavier than wide lenses.
5. Less depth of field than shorter lenses. (Softens backgrounds and horizon lines in table-top scenes, separates backgrounds from subject on location.
6. Compress distance.

PC LENS: -- Lens shifts and tilts for perspective control. For 35mm format (film or digital).

### MODEL RELEASES

Model releases are documents signed by a person, guardian, or property owner granting permission for a photograph of a recognizable person or structure to be used, generally for advertising purposes.

Note: releases are for usage, not permission to take photographs

### INTELLECTUAL PROPERTY / U. S. COPYRIGHT:

A photographer owns a photograph and sells only the right to use that image to a client for a stated purpose, for a particular time period.

Copyright lasts for life plus 50 years.

This need not be stated in writing when the use of an image is sold.

Violation of copyright is the duplication of the entire or a substantial portion of a photograph exactly or by simulation or imitation.

Copyright notation: © 2004, Sue Smith

Place this notation on all digital files, prints, slides, & negatives that leave your possession.

### COPYRIGHT EXCEPTIONS:

- a. Work for hire - the photographer is an employee of the company, with all usual rights of a regular employee.
- b. Fair use - educational use, scholarly research, book review, or the photograph itself becomes newsworthy.

It is a serious violation of ethics, as well as copyright, to emulate, use or copy even a portion of another photographer's work, without their permission.

## ADVERTISING FEES

Understanding copyright is essential to understanding commercial pricing. A commercial photographer is selling the right to use a photograph (licensing or usage), not the photograph itself.

License for use must be conveyed in written form. All use beyond which the assignment was originally undertaken requires additional compensation to the photographer.

Fees are often based on these criteria:

1. Usage
  - a. The more people that view an image the greater potential revenue.
  - b. Usage is generally limited to a certain time period.

### 2. Materials / Expenses

Might include: digital capture, lab costs, travel, model fees, assistants, props, food stylists, equipment rental.

**EDITORIAL**-- An editorial photographer is a visual reporter that produces work for books, magazines or newspapers. He is dissimilar to an advertising photographer in that he generally does not try to sell a product or a service.

Photographs used for editorial purposes generally do not require models releases. The First Amendment protects a photographer's right to use a photograph when content & intent is for news or information.

When a commercial photographer accepts an editorial assignment he generally charges a lower rate than those billed to advertising clients.

Pay for editorial work is based on circulation of the publication. High circulation publications pay more for the same image than lower circulation publications.

Reasons to accept editorial assignments:

1. Self promotion
2. Future revenue for the images
3. Interest in assignment and creative potential.

**STOCK PHOTOGRAPHY.** Use of images sold by an agent or the photographer for a specific purpose.

Stock Agencies:

1. Distribute thousands of images a year.
2. Represent many different photographers.
3. Charge approximately 50 % (or more) of sales price for services.
4. Ownership is retained by the photographer.

## STOCK PHOTOGRAPHY (CONT.)

Royalty Free Images

1. Clients are able to purchase a license to use the photo, for an unlimited number of purposes. (Don't have to pay royalties to the photographer each time photo is used.)
2. May be purchased on CD's with hundreds of photos or as single images off the web.

Rights-managed Images

1. Images licensed for a defined scope of usage.
2. May be purchased on-line.

Clients use stock because:

1. Can view images before purchasing
2. Lower cost:  
no expenses of shoot, non-exclusive use
3. Huge selection
4. Fast access

Photographers shoot for stock because:

1. Using images more than once increases profits.
2. Recoups cost of images where there is no client.
3. Marketing, distribution and billing duties handled by agents.

## FASHION PHOTOGRAPHY

Can be editorial or advertising

Most common format 2 1/4 SLR (digital back or film)

Most common lighting:

## FOOD

Legal requirements vary depending on the use of the food photograph. The criteria for content of food photographs are much tighter for advertising specific brands than for editorial photography.

Often requires kitchen access and food stylist.

## PORTRAIT

Light used to soften features and flatter skin:

Umbrella or softbox-- diffused / bounced and close to lens.

Light used to emphasize features and show skin texture: Directional, side light, less diffusion.

## ARCHITECTURAL

Most common format: 4x5 view camera

Bag bellows, short focusing rail.

Most common lenses: wide angle (90, 75, & 65mm)

Filtration gels for color correction either on the lens or on individual light fixtures

For low Kelvin or color temperature light sources:

1. for existing building lights, interior or exterior --
2. tungsten films 3200° K
3. set digital camera to incident, tungsten or select actual Kelvin temperature

For illumination by electronic flash:

daylight films 5500 - 6000 °K  
set digital camera to flash or auto white balance

### **PHOTOGRAPHER'S RIGHTS**

1. In most countries photographers do not need permission to photograph most buildings, from locations where the public has free access.
2. Some city areas may have prohibitions on the use of tripods.
3. Recent increases in security precautions have made it more likely that photography will attract the attention of the public, security guards and police.
4. A court order is generally required for someone (security guard or other authority) to demand your film or any record of your images (compact flash card, sd card etc.)

### **ADDITIONAL TERMS**

#### **AMBIENT LIGHT**

Existing continuous light source (natural or artificial).

#### **BACK LIGHT**

Illumination from behind subject, helps separate subject from background

#### **FILL CARD**

Reflector (white, silver, gold) used to fill shadows created by the main light.

#### **FILL LIGHT**

Used to fill shadows created by the main light.

#### **GEL**

Transparent material placed in front of existing lights, hot lights, strobes or windows, to correct color, add color or diffuse light source.

#### **GOBO**

A light-blocking device to prevent illumination of a portion of a scene. (Slang for something that goes between your light and subject.)

Can be opaque cardboard (flag)

or

a complex pattern (cookie).

#### **GUIDE NUMBER**

Number that indicates the aperture setting for a given light-to-subject distance at a given ISO. Most small flashes have a guide number which indicates the flash's power.

#### **HOT SHOE**

U-shaped connection on the top of 35mm D/SLR cameras for battery operated flash connections and provides an electrical circuit connection for studio strobes

#### **HOT LIGHT**

A continuous light source, generally tungsten.

#### **KEY LIGHT/MAIN LIGHT**

Dominant source of light, determines contrast.

1. The farther the main light is from the subject the harder-edged the shadows.
2. The closer the main light is to the subject the softer the shadows.

#### **PATCH CORD OR PC CORD**

Cable that signals flash to fire from strobe to camera.

#### **WIRELESS FLASH TRIGGERING METHODS**

##### **1. Slave:**

A flash unit set up to fire by detecting the flash from another flash unit in a multi-light setup.

##### **2. Radio Signal**

Uses different radio frequencies to trigger flash.

##### **3. Infrared**

Uses infrared source to trigger flash.

#### **SPOT LIGHT**

Focusable light source containing a lens.

(TTL) Through-the-lens metering: the most accurate means of determining correct exposure for both flash and ambient light.

#### **WATT SECONDS (WS)**

Measure of electrical energy used in flash systems to indicate the amount of energy in the flash capacitors.

The Dynalite systems used in the Sac State studio are 1000 watt seconds. Also common are 2000 watt-second units (more powerful) and 500 watt-second units (less powerful)