Session 1. Lighting

8 November 2016

Housekeeping issues

- Plan ahead the borrowing of equipment and manage your eMoney wisely.
  - No deadline extensions for your final project.
  - Managing your time is part of your job.

- Please, find some time to complete the course evaluation. The deadline to complete the evaluation is December 4.

What can we do with lighting

- There are five basic reasons why we want to control lights when producing video
  1. To highlight the shape of objects and subjects (**modeling**)
  2. To create **depth** in a flat image.
  3. To suggest and emotional state or **mood.**
  4. To create an illusion or **effect** of a different time or place.
  5. To have enough light to record an image (**exposure**)

Exposure – How to control it

- There are three ways to change the exposure:
  - Manually changing the shutter speed.
    - Not recommended at this point – we will try to keep the shutter speed at 1/50 for the time being.
  - Manually changing the exposure (ISO).
    - Higher ISO more sensitivity to light (more grain).
    - Lower ISO less sensitivity to light.
  - Manually changing the aperture (*f*-stop).
    - Larger f-stops allow less light into the camera.
    - Smaller f-stops allow more light into the camera.

Hard vs. soft light

- Not all lights produce the same effects. Different lights create different shadows.
  - Hard lights (like small bulbs or the sun on a very sunny day) create sharp and very clear shadows.
  - Soft lights (like large sources of light or the sun on a cloudy day) create blurry and soft shadows.

- A good lighting set up uses **both hard and soft lights**.

Hard vs. soft light

http://www.michaeledgemedia.com/resources

Hard light

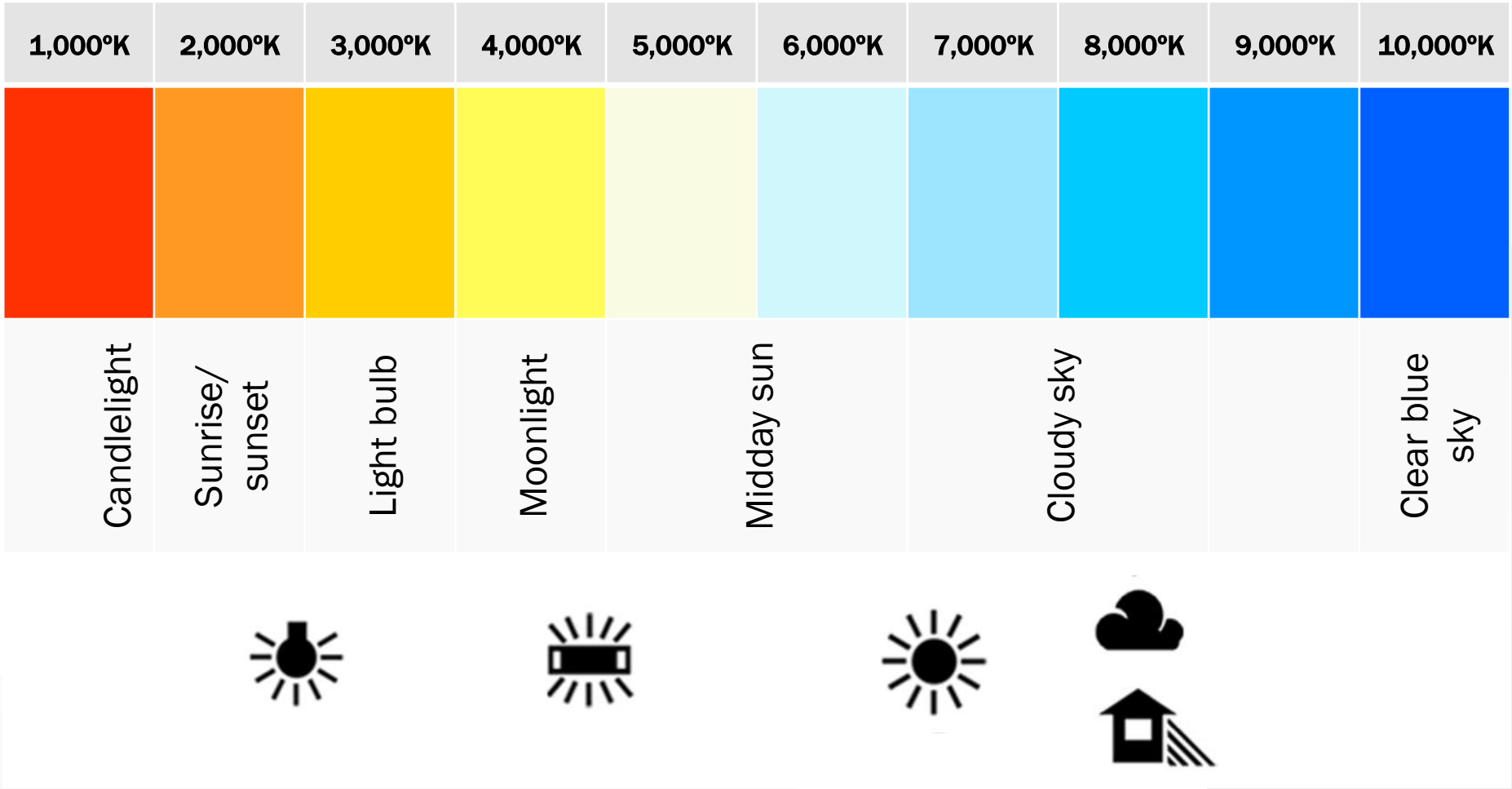
Soft light

Hard vs. soft light

- Two factors affect the type of light we are going to get
  - **Distance from the object**: the closer we are to an object or subject, the softer the light will be.
  - **Size of the source**: the bigger the source of light, the softer it will be.

- We can turn hard lights into soft lights, but not the opposite.

Colour temperature



Lighting instruments

- **Spotlights** create a defined beam that illuminates a specific spot and create a hard and dense shadow. They are directional sources of light.

- **Floodlights** provide a large quantity of diffused light and create almost transparent shadows. They are nondirectional sources of light.

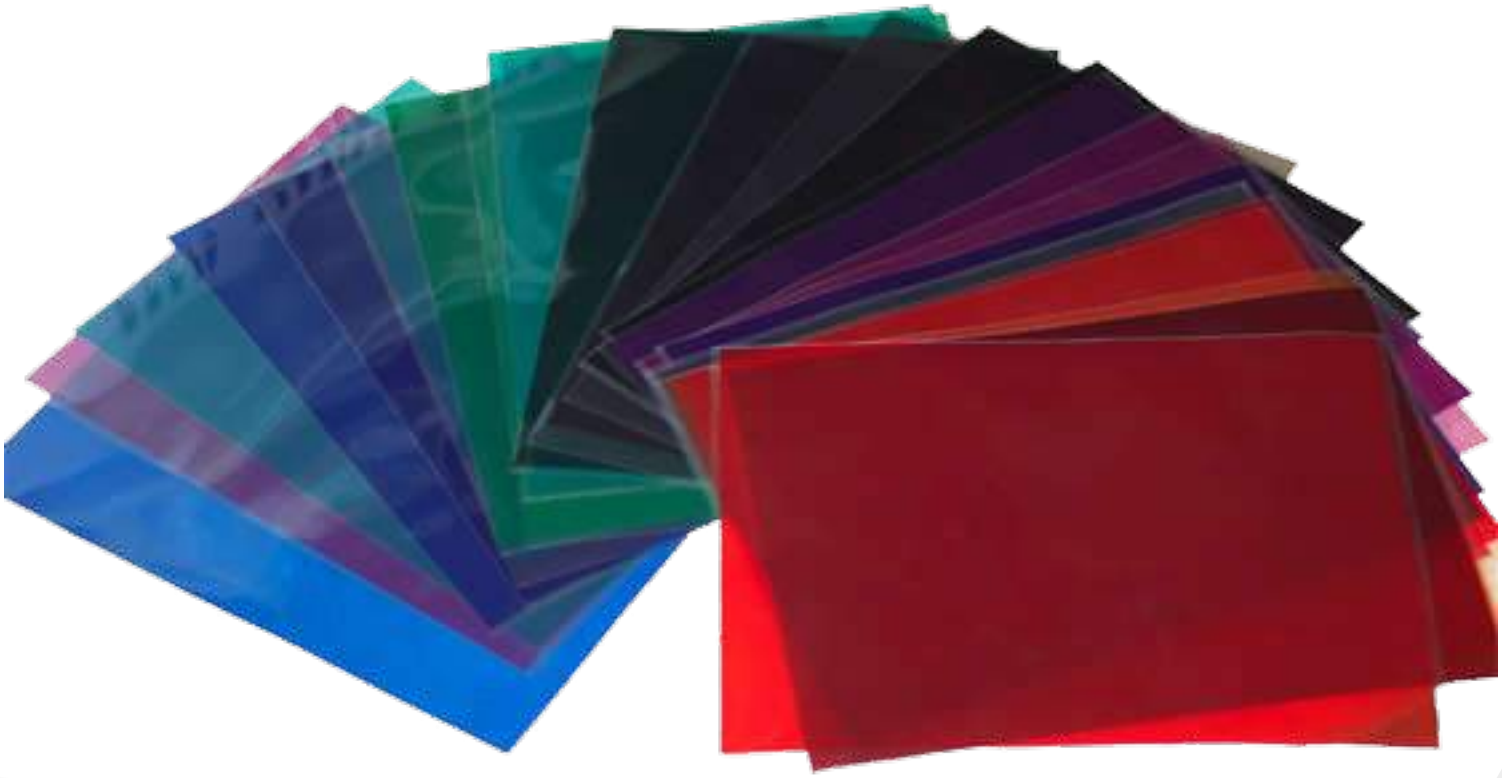
Fresnel Spotlights

Fluorescent light banks

Light stands

Softboxes (or Chimera)

Gels



Reflectors and bounce cards

Black Flags

Lighting techniques

- **Key light** – it is the main and most intense light in a set.
- **Fill light** – it complements the key light, it is less intense and is used to fill shadows.
- **Backlight** – it is any light placed behind a subject and it helps to create the illusion of depth.

Key light

- In natural lighting settings, light sources are above us. When we are lighting a set, we also tend to set the **key light** at a higher angle.
  - The rule of thumb is to set the light at a 45° angle above the eye line level
  - Key lights are usually placed slightly off front of the subject.
  - Placing a key light on the side, will highlight shadows.

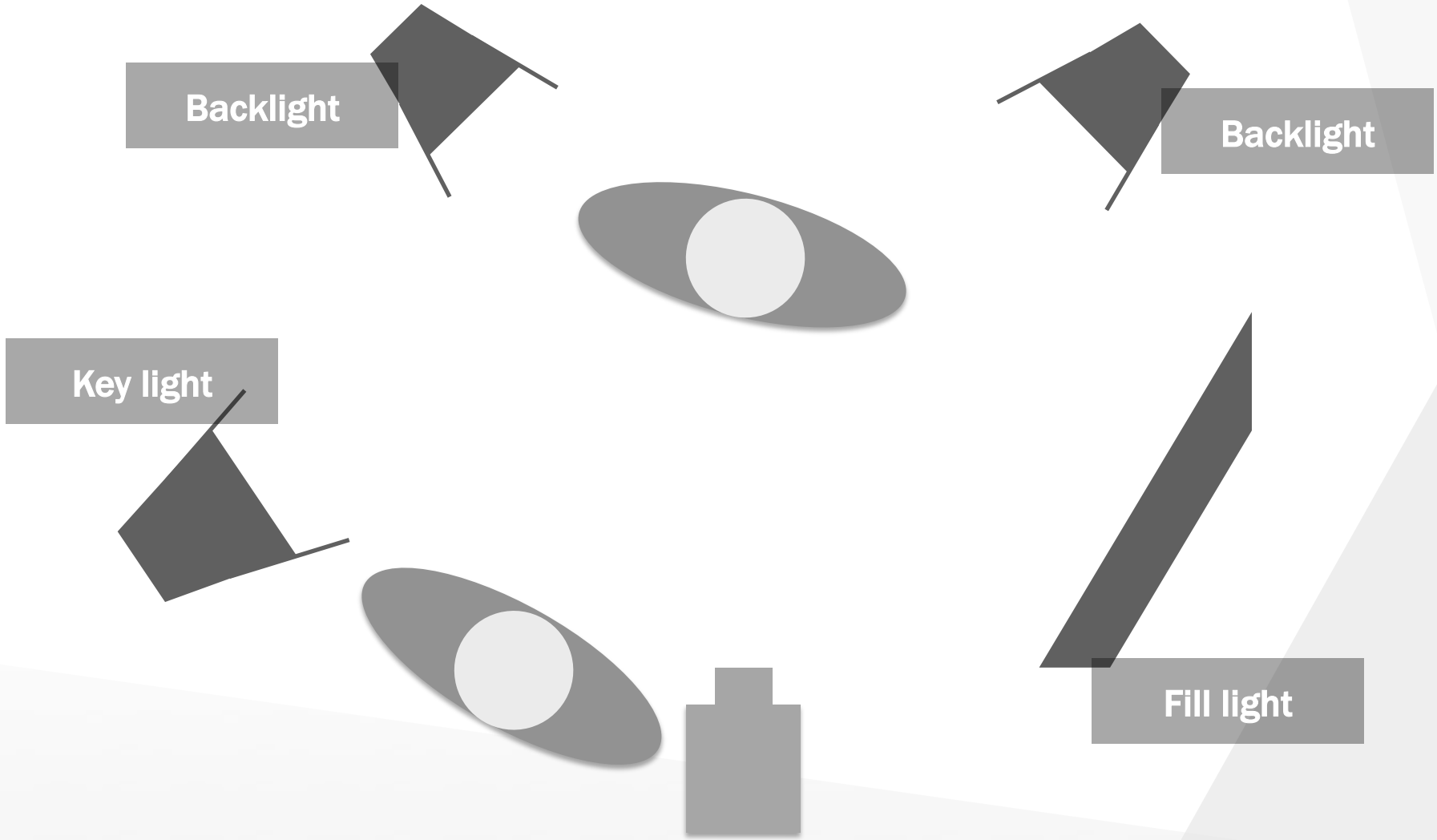
Fill light

- We use fill lights to get rid of shadows and to reduce the contrast of our images.
  - Fill lights should also come from a high angle and preferably very soft lights.
  - They are usually placed further away from the subject
  - A fill shadow should not overpower a key light.
- Sometimes we can fill in our image by simply using **bouncers and reflectors**.

Backlight

- We use backlighting **to add depth** to our set ups.
  - The steeper the angle, the brighter it will look.
  - We are better off using a Fresnel light for the backlighting at it is easier to control and point.
- We need to watch out for camera flares when using backlights – **black flags** can come handy to avoid that.

Three-point lighting



Shooting outdoors

- If you main source of lighting is the sun, pick the most suitable time to go outdoors.
  - The best times are early morning or early afternoon, when the sun is not too intense.
  - Sunny days will return a more vivid colour range than cloudy skies.
- You can improve your lighting conditions by using reflectors and bouncers to get rid of some of the shadows.

Session 2. Group Project

1 November 2016

Group Project

- Work with your group on the following documents and **upload them on Canvas.**
  - Script (template on Canvas)
  - Calendar & production timeline (templates on Canvas)
- Decide how you are going to divide your work
  - Assign (at least) the following tasks: producer, art director, director, cameraperson and video editor.

Next week

- Finish peer review of 4 projects before 12pm/noon/中午, Tuesday November 15.
  - Follow the instructions posted on Canvas.
  - Those who do not complete the peer review on time will get **0 points for this assignment.**
- We will watch your feature stories in class. Be ready to **get involved in class discussion.**
- You will have free time to work on your group project.