

## Morning Session

### Session Start

- Introductions
  - Instructor intro
  - Attendee introductions
    - Why are you here?
    - What do you hope to learn?
    - Do you have any special needs?
  
- Housekeeping
  - Using the syllabus as a guide
  - Rules for interruptions (cell phones verboten)
  - How to use the handouts and presentation materials
  - Note taking - - there will be a test at the day's conclusion
  
- Review course objectives
  - Course goals
  - Overview of the day

### Color Identification

- What color is this? (Hands-on #1)
  - Write color description and pass forward
  - Shuffle descriptions and pass out
  - Use description to identify color
  
- How do people try to correct color in the real world
  - Roundtable slides
  - At the paint store
  - In the press room
  
- Why do I respond to color the way I do?
  - Inherited, learned, geographical factors, etc.

- Does my eye have limitations?
  - Retinal fatigue
  - Color memory
  - Background effects
  
- One artists solution – Munsell
  - Munsell’s color description (words)
  - Let’s play Munsell (*Hands-on #2*)
  
- Review & test

## Morning Break

### Color Definition – What is Color?

- Light
  - Spectrum & speed
  - Different lights = different energy
  - Illuminants
  
- Object
  - Why is red red?
  - Objects are reflectors
  
- What is metamerism (*Hands-on #3*)
  
- Observer
  - How does the eye work
  - Rods & cones
  - How about an instrument?
  
- Color models
  - Additive -demonstrate with lights (*Hands-on #4*)
  - Subtractive -demonstrate with finger paint
  
- Review & test

## Lunch on your own

## Class Reconvenes In One Hour!

### Afternoon Session

#### Color Control

- Density
  - What is it?
  - How do I use it?
  
- L\*a\*b\*
  - What is it?
  - How do I use it?
  
- L\*C\*h°
  - What is it?
  - How do I use it?
  
- Instrumental measurement (*Hands-on #5*)
  - Measure density (no difference)
  - Visual assessment (big difference)
  - Measure color L\*a\*b\* (big difference)
  
- Which method is best?
  - MacAdam's ellipsoids
  - Introduce CMC
  - Introduce CIE94
  - The eye vs. L\*a\*b\*, L\*C\*h°, CMC, CIE94
  - Screen grab of each tolerance
  
- Review & test

## Afternoon Break

### Color Management

- The artists creation
  - Follow the color from creation to completion ...
  
- Ends in production
  - Vehicle paint
  - Interior plastic
  - Interior fabric/leather
  - Printed displays
  - Printed advertisement
  
- Measured how?
  - Different instruments, different answers (*Hands-on #6*)
    - Compare readings from hands-on #5
    - Different instruments, different ill/obs, different results
  
- Measure vs. the eye
  - Limitations of the eye

### Color Manufacturing

- Why doesn't it match?
  - Process variation
  - Raw materials
  
- Application methods
  - Real world situations
  
- Customers issues

## Wrap-up

- Review & Test
- Getting HELP from X-Rite
  - Use the web:  
<http://www.xrite.com/contact/ContactUs.asp>
  - Send E-Mail to:  
<mailto:CASupport@xrite.com>
  - Try the Bulletin Board:  
<http://www.xrite.com/helpdesk/bulletinboard.asp>
  - Contact Customer Service by phone:  
[888-826-3042 \(US & Canada only\)](tel:888-826-3042)
  - Send a Fax to:  
[616-534-0723](tel:616-534-0723)