Topics selected primarily from chapters 6, 7, 8, (ch. 9 — know major hue schemes)
Be able to **chart color schemes** using color wheel, value staff, and by noting limits and dominants.
Be able to **specify a palette** of colors (H/V/C) based on a prescribed scheme. (scheme + dom's + sub's)
Understand Chevreul's basic law: "Two adjacent colours, when seen by the eye, will appear as
dissimilar as possible". Be able to identify consequences of this law in juxtapositions of colors.

**Topics**

**Hue, Value, Chroma**

**Dominance, Subordinance, Proportions**

**Ch. 6**

C.I.E. Color Space (73-74), spectral sensitivity, just-noticeable difference, spectrophotometer, luminance, chromaticity, Chromaticity Diagram.
CIE System advantages (light-based; digital; repeatable.)
Why is no single color model complete? (74)

**Chapter 7 — Subtractive Color** (p. 75ff)

Conditions motivating color spec systems (91)
Dyes vs. Pigments vs. Lakes (75)
Original (oldest) sources of dyes (75) (e.g. indigo, cochineal, royal purple)
First use of synthetic dyes; diversity of synthetic dyes now available. (75)
Consistency, vibration & permanence of dyes vs. pigments (75)
Earliest pigment sources (75), (e.g. earth(s), minerals, charcoal, etc.) Permanence and color range.
Progress in Renaissance (75-6) (chemical Rx)
Advent of manufactured/synthetic colorants (industrial age, c.1850)
Reliability of early synthetic pigments (as used by Van Gogh, Gauguin, Seurat, Fauves, etc.) (76)
Critical color matching (192); ideal lighting conditions (lect) light booths of varied bulbs.
Munsell Notation System (H/V/C) notation (e.g. 5R 6/4 = “5R” — red hue; “6” — value; “4” — mid-low chroma) (76-77)
(be able to recognize a color by its Munsell spec.
Questions won’t be highly specific. You will need familiarity with the H/V/C notation.)
Straight line mixing method (78-9)
complement-mixed neutrals (79), mixed primaries (80), Glaze, Tint (80)
Ceramic Glazes: basic ingredients & factors effecting final color (82); role of test chips. (82)
Colored Glass: source of coloring, permanence (83). Chihuly’s role in art glass.
Fiber Dyes: number of available fiber dyes. (84)
Sources of, & typical colors of, natural dyes Lorraine Smith’s optically mixed fibers (87)

**Mordant**

Color Printing – 4-color process (CMYK), (91ff) (including colors via transparent inks & overlap, screening/half-toning, separations, hues) (91)
Order of CMYK printing (92)
Benefits of 6- 8-color presses ()
Continuous Tone Art vs. Line Art (91)
Spot color/flat color (non-process colors/inks) (93)
Maximum ink coverage in 4-color process
Pantone Matching System (PMS) (“U” vs “C”) (94)
Why 5 Pantone “fans” (color swatch books)? (94)
Pixel = ? (95)
Giclée Printing technology, benefits and uses (97)
RGB to CMYK conversion problems; Color Mapping, Color Management software.
Color Profiling, device gamut, clr conversion (99, 112)
Imaging Devices & Color gamuts (lect & web)
Factors affecting the reliability of printed color (97-99)
Disadvantage of proofing systems (99)
Metamerism (100)
Color fading—causes & protection against (101) Human sensitivity to color

**Ch. 8**

Light as a creative/expressive medium.
Color model in analog television. (103)
Chromaticity (103). Luminance in analog TV signal.
Basic additive color mixing: what combinations of RGB combinations that create R/O/Y/G/B/V/RV, White & Black & Mid-Gray
Cause of limited color gamut in computer monitors and CMYK printing. (104 )
C.I.E. chromaticity chart’s range of color (104)
Device gamuts; C.I.E. representations of device color gamuts; white/neutral centers; wavelength-based angle or border position. (104)
HSB vs. CMYK vs. RGB (vs. Hex vs. Lab) (105/111)
Photoshop “out-of-gamut” warning. (105)
Pixels (106) Resolution ( )
Discrimination of human color vision (hues and colors) (108)
The goals of, and the need for Color management software, e.g.ColorSync. (99)
Gamma differences between Mac & PC (PC darker midtones). Gamma and value representation. (112)