

PSY 211
Sensation and Perception

Spring, 1985
V. K. Kool

Faculty: Dr. V.K. Kool	Teaching Ass't: Julie Redner	Sriram Natarajan
448 Straub	253 Straub	304 Straub
686-4999	686-4954	686-4912x44

Offc. Hr: 1:00-2:00 MWF
or by appointment

Course Schedule

Parts	Content	Chapters
I	Introduction to psychophysics	1-3
II	Sensory mechanisms	4-8, 11
	April 26; MIDTERM EXAM I	
	Sensory mechanisms (cont.)	12-13
III	Perceptual system	14-16
	May 22; MIDTERM II	
	Perceptual system (cont.)	17
IV	Perceptual development	18-19
V	Current trends and review	20-21
	June 15 (Friday) 1:00; FINAL EXAM	

Textbook: Schiffman, Harvey Richard. Sensation and Perception. New York: John Wiley & Sons

Reading Assignments: mostly from the above textbook--will be announced during lecture hours.

Exams: mostly multiple choice type questions. No penalty for errors

SAMPLE QUESTIONS

1. J.J. Gibson argues for
 - a. classification of environmental input on the basis of receptor specialization
 - b. emphasizing the whole experience, i.e., the interaction of person and environment
 - c. the existance of affordances
 - d. b and c
 - e. a, b, and c
2. Examples of the evolution of specialized sense receptors which have survival value include
 - a. bats' auditory structures
 - b. raccoons' sensitive hands
 - c. dogs' sense of smell
 - d. all of the above
 - e. none of the above
3. The minimum magnitude of a stimulus necessary for detection is called the
 - a. subthreshold
 - b. relative threshold
 - c. absolute threshold
 - d. suprathreshold
 - e. differential threshold
4. One method used to determine the absolute threshold uses a series of ascending and descending stimuli value trials. This method is called the
 - a. method of adjustment
 - b. method of constant stimuli
 - c. method of limits
 - d. none of the above
5. Which of the following is not one of the human vestibular (balance) organs?
 - a. utricle
 - b. semicircular canals
 - c. malleus
 - d. saccaulus
6. The vestibular organs detect
 - a. acceleration
 - b. deceleration
 - c. constant motion
 - d. a & b
 - e. a, b, & c
7. If acceleration of rotation is sustained, the feeling of motion will gradually decrease and may eventually subside. This phenomenon is called
 - a. the oculogyral illusion
 - b. vestibular habituation
 - c. vestibular nystagnms
 - d. vestibular stimulation
8. Changes in a sound's pitch are most closely related to variation in a sound wave's
 - a. frequency
 - b. amplitude
 - c. complexity
 - d. phase
 - e. intensity
9. Reception of low-frequency tones is best explained by the_____, whereas high-frequency tone reception is better explained by_____
 - a. place theory; volley frequency notion
 - b. volley frequency notion; place theory
 - c. place theory; place theory
 - d. place theory; volley theory
10. Which of the following are the two main types of hearing loss?
 - a. conduction & transmission
 - b. transmission & nerve
 - c. conduction & induction
 - d. nerve & stimulation
11. Pitch is to_____ as frequency is to_____.
 - a. intensity; density
 - b. loudness; density
 - c. intensity; loudness
 - d. loudness; intensity
12. The frequency range in which the human ear's differential sensitivity is the greatest is about
 - a. 30-90 Hz
 - b. 1000-2000 Hz
 - c. 2500-3000 Hz
 - d. 9000-10,000 Hz
13. _____ occurs when two tones close in frequency are sounded and the one of greater intensity reduces or eliminates the perception of the softer one
 - a. drowning
 - b. masking
 - c. beating
 - d. dissonance
14. The neural message originating in the right ear is primarily registered in_____ of the

brain

- a. the right hemisphere
- b. the left hemisphere
- c. both the right and left hemispheres
- d. the ipsilateral side

15. _____ is necessary for precise location of a sound-emitting object

- a. binaural hearing
- b. monaural hearing
- c. echolocation
- d. the Doppler shift

16. Position and movement information registered from mechanical stimulation of the mobile parts of the jointed skeleton

- a. is called cutaneous sense
- b. is called kinesthesia
- c. is one type of somesthesia
- d. a and c
- e. b and c

17. The most pressure-sensitive part of the body in terms of absolute threshold values is the

- a. trunk
- b. fingers
- c. face
- d. arms

18. The temperature range of stimuli to which a response of neither warmth nor coldness occurs is called

- a. psychological zero
- b. physiological zero
- c. thermal zero
- d. temperature equilibration

19. The sense of temperature (thermal sensitivity) was conclusively explained by the

- a. vascular theory
- b. theory separating receptors for cold and warm sensations
- c. nociceptor theory
- d. all of the above
- e. none of the above

20. _____ is to wavelength as _____ is to physical intensity

- a. Color; hue
- b. Hue; color
- c. Color; brightness
- d. Brightness; color

21. The process of adjustment to a dimly illuminated environment is characterized by

- a. light adaptation with decrease in visual threshold
- b. dark adaptation with increase in visual threshold
- c. dark adaptation with decrease in visual threshold
- d. light adaptation with increase in visual threshold

22. Dark adaptation is complete for the cones after about _____ minutes of dark exposure and after about _____ minutes of dark exposure for the rods

- a. 15 and 30
- b. 2 and 20
- c. 5 and 25
- d. 5 and 10

23. We are successful at locating a faint star if we do not fixate directly on it. This is consistent with

- a. the dominance of photopic vision and the presence of rods in the center of the retina
- b. the dominance of scotopic vision and the presence of rods in the periphery of the retina
- c. the dominance of scotopic vision and the presence of rods in the center of the retina
- b. the dominance of photopic vision and the presence of rods in the periphery of the retina

24. Hue is related to _____, brightness to _____, and saturation to _____ of light

- a. intensity, colorimetric purity, wavelength
- b. colorimetric purity, intensity, wavelength
- c. wavelength, colorimetric purity, intensity
- d. wavelength, intensity, colorimetric purity

25. Colored lights _____ their dominant wavelengths in a mixture of lights while colored pigments _____ some wavelengths striking them

- a. subtract, add
- b. add, divide
- c. multiply, divide
- d. add, subtract

26. A person who confuses red and green, both colors appearing as desaturated yellow is likely to be a/an
a. dichromat b. anomalous trichromat c. monochromat d. none of the above
27. The subjective contrast enhancement effect occurs at the contours of _____ bands which constitute the points of the _____ change in luminance
a. mach, greatest b. dark, least c. dark, greatest d. mach, least
28. A Ganzfeld is
a. a field with a variegated structure
b. a completely unstructured field of uniform brightness
c. a translucent globe
d. smog
29. When grouping occurs according to the distance separating elements in the perceptual field, the Gestalt principle in operation is
a. similarity b. common fate c. closure d. proximity
30. The edge of the retina is sensitive only to
a. color b. form c. movement d. brightness
31. The perception of movement when there is no corresponding physical displacement of an object in space is known as
a. an illusory perception c. motion sensitivity
b. a stroboscopic effect d. an apparent movement
32. To induce the autokinetic effect, one must fixate on a _____ light in a _____ room
a. moving, dark b. fixed, dark c. moving, bright d. fixed, bright
33. The apparent convergence of railroad tracks in the distance is due to the use of the monocular cue called
a. interpretation b. shading c. linear perspective d. elevation
34. The process of focussing the lens to form a sharp natural image is known as
a. accommodation b. adjustment c. sharpening d. convergence
35. The stability of perception in the presence of variation in physical stimulation is called
a. perceptual constancy c. visual adaptation
b. perceptual feedback d. perceptual consistency
36. A rudimentary form of auditory localization is present in infants
a. at one week after birth c. at one month after birth
b. soon after birth d. at six months after birth
37. The _____ effect occurs when time perception is influenced by the manipulation of distance
a. kappa b. tau c. gamma d. phi
38. _____ memory is to audition as _____ memory is to vision
a. bionic, mnemonic c. echoic, iconic
b. iconic, short term d. echoic, long term
39. The dichotic listening task uses the technique of
a. shadowing b. spying c. eavesdropping d. selective attendance
40. The Stroop effect could be demonstrated by presenting the following stimulus
a. RED written in red ink c. GIRL written in blue ink
b. COWARD written in yellow ink d. GREEN written in brown ink