### Psychology 312-1 (Neurobiology & Behavior)
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#### COURSE OUTLINE AND READING GUIDE: 2002

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<th>WEEK</th>
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<td>Introduction</td>
<td>Carlson 65 Ch. 1,5 *</td>
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<td>2,3</td>
<td>Neuron Physiology</td>
<td>Carlson, 65 Ch. 2,3 *  &lt;br&gt; Sc. Am., 77, 54-66 @</td>
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<td>4,5,6</td>
<td>Synaptic Transmission &amp; Neuropharmacology</td>
<td>Carlson, 65 Ch. 4,6 *  &lt;br&gt; Axelrod 41 &lt;br&gt; Barker et. al. 80 @ &lt;br&gt; see also - Snyder 60 @ res &lt;br&gt; Llinas 88 @ &lt;br&gt; Raichle 98 *  &lt;br&gt; Posner &amp; Raichle 97  &lt;br&gt; Cooper, Bloom, and Roth, 30 @  &lt;br&gt; McLennan 18; Potter 84 @  &lt;br&gt; Shepherd 87 @  &lt;br&gt; Nathanson 89 @</td>
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<td>7,8,9</td>
<td>Neuroanatomy, sensory and motor function</td>
<td>Carlson 65 Ch. 7,8 *  &lt;br&gt; Gatz 8 all (peruse).  &lt;br&gt; Sc. Am., 77, 44-53, 88-111. @  &lt;br&gt; 150-179 @</td>
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<td>10-end</td>
<td>Types of neural events</td>
<td>Fox &amp; O'Brien <em>; reserve 92 &lt;br&gt; Heeger et al.</em>, reserve, 108 &lt;br&gt; Fox &amp; Norman @ reserve 91 &lt;br&gt; Phillips 31. &lt;br&gt; Rugh 9 Ch. 4 @.</td>
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#### Neural Coding

- **a. Physiological Codes**<br> Gross & Zeigler 11n pp. 113-128, 199-239 @; Landauer 12 Ch. 7 @; Proceedings 20 pp. 196-218
Mountcastle, Poggio, & Werner)
@; reserve
Neff 5, pp. 169-216.

Key

* - required: undergraduates and graduates. refers to entire line

@ - strongly recommended for serious undergraduate and graduate students

** - underscored numbers refer to numbers of items on source list

  unmarked items are optional; e.g., for the serious student's future reference.

* - refers to entire line.
Basic References for 312-1 and 2

1. Lashley: Brain Mechanisms and Intelligence. Hover (paper).
7. Stellar et. al. (Eds.) Progress in Physiological Psychology. (All Vols. to date)
11. Gross & Zeigler (Eds.) Readings in Physiological Psychology. (All Vols.)
15. Neurosciences Research Program Bulletins:
   15a. Vol. 6, #3, Neural Coding Perkel & Bullock (Eds.)
   15b. Vol. 7, #3, Evoked Brain Potentials MacKay (Ed.)
17a. The Neurosciences: A Study Program. Quarton, Melnechuk, Schmitt (Eds.)
17b. The Neurosciences: Second Study Program. 1970. (Rockefeller, etc. as in 17a)


44. Obrist et. al. (Eds.) *Cardiovascular Psychophysiology*, Aldine Press, 1974.


52. Liebeskind et. al., *Brain Research*, 50 (1973) 441-446.


60. Snyder Arch Gen Psychiat, excerpt too show transmitter systems.


83. Alkon, Daniel L. Scientific American, Learning in the Marine Snarl, pp. 70-84.


106. Papers by Lubar (p4-5), Rosenfeld (p8-9), Baehr & Baehr (10-11), and Birbaumer (12-13) in *Biofeedback*, vol. 25, #1, Spring '97 Res.
