Social science statistics textbooks quite commonly contain misleading or outright false statements about significance level and/or p-value. Apparently, mistaken notions are common among social scientists. We show these persistent errors are due vague terminology coupled with lack of understanding of conditional probabilities. We argue that the only way to put a stop to these errors is to change the terminology and increase the emphasis on conditional probability in the social science statistics curriculum. (Received September 14, 2014)