***Supplement #3: Functional Group Chemistries Studied in 1st Year Organic Chemistry1***

***Chemistry 3514 Organic Chemistry I***

**Y functional group name R-Y condensed form2**

**-OH alcohols ROH**

**-OR’ ethers ROR’**

**-F,Cl,Br,I alkyl halides RX**

**-N(H orR)3 amines RNH2, RNHR’, RNR’R”**

**-C=O aldehydes RCHO**

**|**

**H**

**-C=O ketones RCOR”**

**|**

**R”**

**-C=O esters RCOOR”**

**|**

**OR”**

**-C=O carboxylic acid RCOOH**

**|**

**OH**

**-C=O acid chloride RCOCl**

**|**

**Cl**

**-C=O amide RCONH2, RCONHR’, RCONR’R”**

**|**

**N(H,R”)2**

**1 You should be able to recognize all 10 on sight in their several forms !**

**2  R- =CnH2n+1 alkyl group; can be substituted by alkenyl (C=C- ); alkynl (C ≡C-) and aryl ( )**

