Access to H.E.
National Programme Unit

Unit Title:	Organic Chemistry		
Graded Unit Code:	GA33CHE02	Ungraded Unit Code:	UA33CHE02
Pathway(s):	Science and Engineering		
Module(s):	Chemistry		
Level:	3	Credit Value:	3
Valid from:	1st August 2014	Valid to:	31st July 2028

The following QAA grade descriptors must be applied if you are delivering the graded version of this unit:

1	Understanding of the subject
3	Application of skills
7	Quality

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	**The learner can:**
1. Understand the IUPAC system of nomenclature for simple organic chemicals	1.1 Calculate the empirical formula of an organic compound and recall the meaning of the terms homologous series and functional group
	1.2 Name simple organic compounds included in this unit and represent these compounds using their molecular, structural and displayed formula
	1.3 Draw the structures of chain, position and functional group isomers
2. Know some of the properties and reactions of alkanes	2.1 State the use of alkanes
	2.2 Explain how alkanes are produced from crude oil
3. Know some of the properties and reactions of haloalkanes	3.1 Show the reaction mechanism of an alkane with a halogen

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	**The learner can:**
	3.2 describe the polarity in the C-X bond and the mechanism of the reaction of primary haloalkanes with the nucleophiles OH^- and CN^-
	3.3 Describe the elimination mechanism for haloalkanes with KOH
4. Know some of the properties and reactions of alkenes	4.1 Describe the structure of alkenes including isomers
	4.2 Outline the mechanism of electrophilic addition to alkenes with Br_2 and HBr and outline a test for unsaturation using Br_2
5. Know some of the properties and reactions of alcohols	5.1 Classify alcohols as primary, secondary or tertiary and predict the products of oxidation
	5.2 Use a simple chemical test, such as Fehling's solution of Tollen's reagent, to distinguish between aldehydes and ketones
	5.3 Show how alkenes can be formed from alcohols by acid-catalysed elimination reactions (mechanism not required)