

CHMC 16 Instrumental Ana..1xH0 I IS

Section 4. UV-VIS (Emphasis on Food Chem.)

This practical is for a single week. In UV-VIS spectroscopy you will develop an experiment to study the concentration of iced tea in commercial samples. You must describe and assess the wide spread applicability of the method you devise.

Section 5. FT-IR (Environmental Emphasis)

This will be a 2 week practical. You will look at a range of components that would commonly be found in the environment and to become familiar with their IR spectra that are produced by the different materials, and different methods of preparation. It will be important to see if characteristic signals for different types of materials are observed. This will provide preliminary information and experience for the practical in week 2 which will deal directly with natural samples such as plant tissues directly.

Section 6. GC and GC-MS (Industrial Emphasis)

This will be a 3 week practical. Week 1. Will introduce you to the GC. You will learn the basic of the instrument, how to inject basic samples, and some of the important experimental parameters. Week 2. You will run some hydrocarbons and then gasoline. This week will introduce you to working with complex mixtures and "real" samples. Week 3. You will now run the same gasoline on a GC-MS. You should begin to appreciate the advantages of MS

Assessment for CHM C16

Irrespective of which instrument you are using, we will always meet in S165.

Assessment

There will be *no* final exam for this course. Students will be assessed on the following criteria.

- 1) 5 x Lab reports. Lab reports are worth 12% each.
- 2) 1 x term paper (20%)
- 3) Ability and Performance in the Lab sessions (20%). Remember this is a lab