

Teaching Plan

Unit 1: Science at Work

The following plan is based on 12 weeks at 5 hours per week (4 hours contact time + 1 hour directed study). The learning activities are suggestions only. Teachers may wish to develop alternative strategies.

Week number	Specification Unit Reference and Assessment Objectives	Suggested Learning Activities	Resources
1	1.2.2: Organisations Using Science AO1a (part)	Introduction to research techniques: survey of one service organisation. Induction assignments Research techniques: work on research methods and extraction of specific information.	NHS resource pack www.nhs.uk/careers 0845 6060655 Assianment Brief 1.1
2 (induction activities may need less time)	1.2.4: Practical techniques and procedures	Introduce practical assignment Suggest possible induction activities –fit to basic assignment brief <ul style="list-style-type: none"> • Vinegar problem (supplied) • Microscopy work • Analysis of unknowns • Measurement of electrical resistance Induction work covers: practical techniques , risk assessments, work based on GCSE practical experience This could be completed after the survey assignment of preferred)	Assignment Brief 1.2 (Vinegar Problem Assignment) GCSE practical work –adapted to a vocational context

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3-4	1.2.2 Survey of five science based organisations AO1a Include 1.2.1: The importance of health and safety AO1c	Suggest: <ul style="list-style-type: none"> • One organised visit • Candidates to visit local health club/health care services/ supermarket • Use Internet facilities for research of two other organisations • Use paper based /leaflets for other Candidates can work as a group for this activity but suggest presentation/leaflet is done individually Candidates can link the work on health and safety here – need to be aware of requirements.	Exemplar Assianment Brief 1 (Survey in the Work Place) Range of resources see Unit 1 Specification
5-8	1.2.4: Practical techniques and procedures AO3a,b,c 1.2.1: The importance of health and safety (Risk assessments for practical work) Calculations AO2 c	Either: Both practical tasks can be completed here or Complete one in week 5-6 and a further after the study of one organisation. Integrate work on calculations linked to practical activities or introduce worksheet based calculations.	Refer to assignment briefs supplied with exemplar material, e.g. Exemplar Assianment Brief 3 (Aspirin – A Useful Drug) linked to pharmaceutical industry. Reference exemplar material It must be noted that practical work from other units can be used here.

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9-10	1.2.2: Organisations using science 1.2.1: The importance of health and safety AO1c	Complete in depth study of organisation <ul style="list-style-type: none"> • Suggest possible visit of organisation • Candidates to devise suitable questions to link to assignment brief 	Exemplar Assianment Brief 2 (An In-depth Study of The Gum Company). Exemplar material available for standard of work required.
11 -12	1.2.3: Science and the Community AO2a	This work can be linked to the in-depth study if appropriate or could be a new organisation or one looked at in the survey.	Exemplar Assianment Brief 4 (The Impact on Society of Snodkins plastics).