

Sample Teaching Plan  
Unit G632: The Mind and the Brain

**Suggested teaching time**

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 will wish to develop alternative strategies. The plan should be read alongside the G632 Specification and, in particular, the Assessment Evidence Grid (attached for your reference).

Week number	Specification Unit Reference and Assessment Objectives	Suggested Learning Activities	Resources
1	3.13.1: The Mind, Stress & Illness	<ul style="list-style-type: none"> <li>• <b>Discussion:</b> stress/possible causes/ implications of stress in relation to physical illness</li> <li>• introduction of physiological and psychological measurement of stress (teacher-led)</li> <li>• <b>Research activity:</b> give topics for individual research – students to feed back outcomes: define stress; possible causes; effects on health; methods of coping with stress – students to collect information on websites used/make notes on research completed</li> <li>• remind students of referencing techniques.</li> </ul>	<p>Any Advanced level general psychology and health and social care textbooks.</p> <p>General health and BBC website addresses.</p> <p>Applied Science AS and A2 textbook (Heinemann).</p>
2	3.13.1: The Mind, Stress & Illness	<ul style="list-style-type: none"> <li>• students to complete <i>sample assignment A</i></li> <li>• students to complete peer assessment activity – to check coverage</li> <li>• students to feedback in group</li> <li>• students to correct work – submit to staff.</li> </ul>	<p><i>Sample Assignment A:</i> Factsheet on Stress.</p>

Week number	Specification Unit Reference and Assessment Objectives	Suggested Learning Activities	Resources
3 – 4	3.13.1: The Mind, Stress & Illness	<ul style="list-style-type: none"> <li>• introduction to the brain to include the structure and functions of the following brain structures (teaching and learning activity) linked to: frontal lobes; temporal lobes; parietal lobes; occipital lobes; corpus callosum; ventricles; limbic system; basal ganglia; brain stem</li> <li>• discussion to include: alzheimer's, huntington's, schizophrenia, epilepsy, use of cocaine, use of prozac</li> <li>• students to complete <i>sample assignment B</i>.</li> </ul>	<p><i>Sample Assignment B:</i> The Brain: Damage, Disease or Drug Abuse.</p> <p><a href="http://www.enchantedlearning.com/subjects/anatomy/brain">www.enchantedlearning.com/subjects/anatomy/brain</a></p> <p><a href="http://faculty.washington.edu/chudler/nsdivide.html#structure">http://faculty.washington.edu/chudler/nsdivide.html#structure</a></p> <p><a href="http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Brain/Aboutbraintumours/Thebrain.aspx#DynamicJumpMenuManager_6_Anchor_3">www.macmillan.org.uk/Cancerinformation/Cancertypes/Brain/Aboutbraintumours/Thebrain.aspx#DynamicJumpMenuManager_6_Anchor_3</a></p> <p><a href="http://www.alz.org/alzheimers_disease_4719.asp">www.alz.org/alzheimers_disease_4719.asp</a></p> <p>- Good interactive tour of brain</p> <p><a href="http://www.bbc.co.uk/health/conditions/huntingtons1.shtml#what_is_huntington's_disease">www.bbc.co.uk/health/conditions/huntingtons1.shtml#what_is_huntington's_disease</a></p> <p><a href="http://www.nhs.uk/conditions/schizophrenia/Pages/Introduction.aspx">www.nhs.uk/conditions/schizophrenia/Pages/Introduction.aspx</a></p> <p><a href="http://www.epilepsy.org.uk/info/whatisepilepsy.html">www.epilepsy.org.uk/info/whatisepilepsy.html</a></p> <p>There is an abundance of easily accessible information on the topics for discussion.</p>

Week number	Specification Unit Reference and Assessment Objectives	Suggested Learning Activities	Resources
5	3.13.4: Everyday Cognition	<ul style="list-style-type: none"> <li>• introduce investigative study</li> <li>• discuss neurobiological and molecular basis of memory</li> <li>• introduce basic statistics to be used to analyse results</li> <li>• factsheet can be prepared to support processing data for investigative study.</li> </ul>	Applied Science AS and A2 textbook (Heinemann).
6 – 8	3.13.4: Everyday Cognition	<ul style="list-style-type: none"> <li>• begin practical activities – discuss elements involved in ‘eye-witness testimony’</li> <li>• introduce: risk assessments/ethical issues in practical activities</li> <li>• carry out a simple experiment within the class on chosen tests</li> <li>• discuss implications of memory loss and research carried out linking to memory loss either linked to neurological deficit or head injury</li> <li>• carry out an investigative study on memory – use <i>sample assignment D</i>.</li> </ul>	<p>Note that this section is worth 26 marks – ensure sufficient time is spent on the practical.</p> <p>Check also suitable risk assessments are completed and a range of data is collected.</p> <p>Any Advanced level general psychology, health and social care textbooks.</p> <p><a href="http://www.zefrank.com/memory/">www.zefrank.com/memory/</a> - a number of memory games.</p>
9 – 10	3.13.3: Methods and Ethical Issues in Brain Research	<ul style="list-style-type: none"> <li>• use of assignment brief as a teaching and learning tool for students to complete suitable assessment to cover AO2a and AO2b.</li> </ul>	<p>Useful bioethics education project <a href="http://www.beep.ac.uk">www.beep.ac.uk</a></p> <p>Useful if visit to hospital could be made, to see MRI scanner</p>
11 – 12		<ul style="list-style-type: none"> <li>• allow time throughout to revisit portfolio work and feedback.</li> </ul>	

## Unit G632 - Assessment Evidence Grid

Unit G632: The mind and the brain				
What the candidate needs to do:				
<p><b>The candidate needs to produce</b> evidence of a comprehensive exploration of research methods employed in the study of mind and brain <b>[50 marks]</b>.            This evidence needs to include:</p> <p><b>AO1:</b> the production of <b>two</b> sets of factsheets designed to raise mental-health awareness, one set on stress and illness, and the second set on research methods employed in the study of the healthy and the damaged brain <b>[10]</b>;</p> <p><b>AO2:</b> an evaluation of the scientific methods and techniques used in the study of mind and brain, together with a consideration of associated ethical issues and evidence of statistical research <b>[14]</b>;</p> <p><b>AO3:</b> the design and safe execution of a simple experiment to investigate <b>one</b> aspect of cognitive function and an investigative study on memory <b>[26]</b>.</p>				
How the candidate will be assessed:				
Assessment Objective	Mark Band 1	Mark Band 2	Mark Band 3	Mark Awarded
AO1	Candidate will produce <b>one</b> factsheet including selected information about stress and related illness that has been clearly presented;  <b>[0 1 2]</b>	candidate will produce <b>one</b> detailed set of researched factsheets including a clear definition of stress, its possible causes and its effects on health, with relevant information selected and clearly and logically presented;  <b>[3]</b>	candidate will produce <b>one</b> set of detailed factsheets, detailed work based on thorough research, including a clear definition of stress, its possible causes and its effects on health with reference to intervention programmes; candidate will provide evidence that relevant information has been selected from a variety of sources and is clearly and logically presented.  <b>[4 5]</b>	<b>/10</b>
	Candidate will produce <b>one</b> factsheet including selected information about the study of the brain that has been clearly presented;  <b>[0 1 2]</b>	candidate will produce <b>one</b> detailed set of researched factsheets that have been clearly presented, based on the study of the brain;  <b>[3]</b>	candidate will produce <b>one</b> set of detailed factsheets, detailed work based on thorough research, into both the healthy and the damaged brain, with evidence that relevant information has been selected from a variety of sources and is clearly and logically presented.  <b>[4 5]</b>	

<b>Unit G632: The mind and the brain (continued)</b>				
<b>Assessment Objective</b>	<b>Mark Band 1</b>	<b>Mark Band 2</b>	<b>Mark Band 3</b>	<b>Mark Awarded</b>
<b>AO2</b>	Candidate will demonstrate a basic knowledge of the methods used in studying the brain and how they are used in an experimental or a clinical setting;  <b>[0 1 2]</b>	candidate will demonstrate knowledge and understanding of the methods used in studying the brain and explain how they are used in both an experimental and a clinical setting; candidate will mostly use scientific terms accurately;  <b>[3 4 5]</b>	candidate will demonstrate a thorough knowledge and understanding of the methods used in studying the brain; candidate will explain how such methods are used in both an experimental and a clinical setting, and how they are used in confirming hypotheses regarding normal brain function and in the diagnosis of brain diseases; candidate will use appropriate scientific terms accurately throughout.  <b>[6]</b>	
	Candidate will carefully select information and present it clearly; candidate will acknowledge the ethical aspects of brain research;  <b>[0 1 2]</b>	candidate will select carefully a wide range of information, giving reasons for their choice of resources; candidate will present information clearly and logically; candidate will discuss the moral and ethical implications of brain research;  <b>[3]</b>	candidate will demonstrate an ability to identify the preferable methods for investigating a particular research question; candidate will evaluate information both for and against a method, presenting it clearly and logically; candidate will discuss comprehensively moral, ethical and conceptual considerations associated with the various methods employed in brain research; candidate will provide evidence of statistical research.  <b>[4 5]</b>	
	Candidate will show evidence of completing simple calculations either using researched statistical evidence or that obtained from their investigative work and prepare a factsheet showing the results;  <b>[0 1]</b>	candidate will show evidence of completing simple and complex calculations either using researched statistical evidence or that obtained from their investigative work and prepare a factsheet showing statistical-test calculations with some summary of results;  <b>[2]</b>	candidate will show evidence of completing calculations either using researched statistical evidence or that obtained from their investigative work and present a factsheet with full explanation of the rationale behind the test and result gained.  <b>[3]</b>	<b>/14</b>

<b>Unit G632: The mind and the brain (continued)</b>				
<b>Assessment Objective</b>	<b>Mark Band 1</b>	<b>Mark Band 2</b>	<b>Mark Band 3</b>	<b>Mark Awarded</b>
<b>AO3</b>	Candidate will carry out a simple experiment to evaluate a particular cognitive function following ethical guidelines; <b>[0 1 2]</b>	candidate will design and carry out a simple experiment to evaluate a particular cognitive function showing evidence of consideration of ethical guidelines; <b>[3]</b>	candidate will design and carry out an experiment to evaluate a particular cognitive function showing evidence of all relevant ethical guidelines and steps taken to reduce risk. <b>[4 5]</b>	
	Candidate will plan and investigate a research problem and show that he/she has considered appropriate ethical issues; you will include evidence of basic research using correct punctuation and grammar and show referencing of sources used; <b>[0 1 2]</b>	candidate will plan confidently and complete their research problem, identifying its advantages and limitations; candidate will provide evidence that they have considered ethical issues; candidate will include evidence of selected research generally using correct punctuation and grammar and show detailed referencing of sources used; <b>[3 4 5]</b>	candidate will plan thoroughly and complete their research problem; candidate demonstrates a clear understanding and justification of their work; candidate demonstrates consideration of ethical issues in their design; candidate will include evidence of selected and detailed research using correct punctuation and grammar with detailed referencing of all sources used. <b>[6]</b>	
	Candidate will record data relating to their design and display the data; candidate will show some processing of their data; <b>[0 1 2]</b>	candidate will record precisely relevant data and display the scientific data accurately in a range of ways using tables simple graphs; candidate will show processing of their data; <b>[3 4 5]</b>	candidate will record precisely a detailed data set; candidate will display the scientific data accurately in a range of ways; candidate will collect sufficient data to complete simple statistics on the results. <b>[6]</b>	
	Candidate will offer a basic interpretation of the results and draw a basic conclusion; <b>[0 1 2]</b>	candidate will interpret the results and draw basic conclusions, explaining their results clearly, making real-life application wherever appropriate; <b>[3]</b>	candidate will interpret the results in detail using secondary sources to support their findings and draw conclusions relating to their results. <b>[4 5]</b>	
	Candidate will offer a basic evaluation of their work; <b>[0 1]</b>	candidate will provide examples of how their work could be improved upon and whether their chosen method is the most suitable, identifying advantages and limitations; <b>[2 3]</b>	candidate will provide practical and clinical analogies wherever appropriate and discuss how their experimental design could be modified using other existing methods and suggestions for further research. <b>[4]</b>	<b>/26</b>
<b>Total mark awarded:</b>				<b>/50</b>