M02A1/A2
Certificate of Competence in Educational Testing (leading to the British Psychological Society Test User Educational qualification) – Skills & Knowledge

1.	Module Code	M02A
2.	Title	Certificate of Competence in Educational Testing – Skills & Knowledge
3.	Level	7
4.	Credit Points	30
5.	Start Term	Autumn, Spring, Summer
6.	Module Leader	Kate Fieldhouse, Alan Macgregor
7.	Accredited by	
8.	Module Requisitions	
	(a) Pre-requisite	None
	(b) Programme Restriction	None
	(c) Level restrictions	None
	(d) Other restrictions or requirements	None
9.	Automatic deferral	No
10.	**Aims** • To develop competence in educational testing. • To understand the role of assessment and testing in educational contexts.	
11.	**Learning Outcomes** **Knowledge** On successful completion of this module, students will have the following knowledge and understanding: 1. Purposes of testing and assessment. 2. Theories about testing and psychometrics, including relevant statistical concepts. 3. Different types of tests and assessment. 4. The legislative and policy framework. **Skills** On successful completion of this module, students will be able to: 5. Select, administer and interpret a range of educational tests. 6. Carry out an assessment of a learner and report the findings in a way that is intelligible to a lay person.	
12.	**Syllabus** The syllabus for this module is informed by the competencies for educational testing as specified by the British Psychological Society. The competencies cover the following:	

	Assistant test user • **Introduction to testing:** the difference between tests of ability, aptitude and attainment and between formative and summative assessment. Testing as a subset of the overall process of assessment. The impact of technology on modes of test administration. The benefits and issues associated with each of these. • **Administering tests to one or more candidates:** practical administration of tests in a realistic context. The practical skills of test scoring, converting raw scores into standardised scores and making appropriate checks to ensure the accuracy of these. Development of skills in use of individual tests in an educational setting, including the ability to build rapport with the candidate and administer the test according to the instructions laid down in the manual. • **Maintaining security and confidentiality of the test materials and the test data:** the ethics of testing, acting in an ethical manner. The importance of providing candidates and other stakeholders where appropriate with a clear indication of how test results will be used and show how they will make suitable arrangements for the storage of test materials and data. Test user • **Educational attainment and ability testing:** major theories of intelligence, justification for test use, Identification of factors affecting test scores such as influence of the environment and group membership may affect attainment test scores. • **The basic principles of scaling and standardisation:** normal and non-normal score distributions and how measures of central tendency and spread relate to different score distributions. Differences between raw and standardised scores and the implications of different scoring systems when comparing candidates. • **Basic principles of norm-referenced interpretation:** norm-referenced interpretation of test scores, including how norm-referencing is one of a number of methods of test score interpretation. Sampling issues, including the size of the sample and sample representativeness, and how these relate to the selection of appropriate norm groups and any caveats around interpretation that need to be made. Recognition of the issues in the use of pooled and separate norms, especially for selection. • **Classical test theory and reliability:** correlation and the conditions under which it is maximised, plus interpretation of correlation coefficients. Reliability as one of the key characteristics of psychometric tests, classical test theory and the assumptions it is based on, and the main sources of error in testing. Methods of estimating reliability, including how to interpret reliability figures. Describing test scores with appropriate levels of confidence. • **Validity:** The nature of validity, its relationship with reliability and the different types of validity evidence that may be obtained, and how all validity evidence contributes towards construct validity. • **Deciding when psychological tests should or should not be used as part of an assessment process:** Practical skills in selecting a test or tests from a selection of specimen sets or reference materials. Systematic analysis of test materials according to a range of criteria and considerations (including relevant legislation) in order to determine suitability. • **Making appropriate use and interpretation of test results:** interpretation of test scores, Including selecting appropriate transformations of raw scores

	and describing the process of interpretation in a way that is clear and meaningful. Interpretation of test scores in light of information regarding reliability, validity, standard error of measurement and any accommodations to the test or test session that were made.
13.	**Learning and teaching** will be via distance education using Real Training's online Virtual Learning Environment, Campus Online. Students access the study topics, including the learning activity instructions and supporting content through Campus Online. Campus Online is an integrated environment that: • Guides the student through the module, giving instruction of what to do to complete the module's series of Learning Experiences. These experiences are designed to cover the Learning Outcomes so that the student can pass their assessments. • Allows students to manage and track their progress through the activities and assessments. • Enables students to submit their evidence and assignments, and receive feedback from their tutors. Learning Experiences are based around Practical activities that encourage the student to 'learn to do' rather than 'learn about'. These are supported by other activities that promote Review and Reflection and provide access to relevant Theory and Policy, Case Study and Exercises. These activities include: • Reflection on practice, structured through 'learning log' online entries. • Formative exercises such as multiple choice quizzes with instant feedback, and self-assessment scales. • Problem-based learning scenarios. There is access to supporting content including: • Directed reading of selected papers, book chapters, specialist online materials. • Use of case study examples, videos and other learning materials. • Use of Test Publisher's catalogues. • Use of samples of reports that report assessments using educational tests. Campus Online also supports a collaborative learning environment with: • Fellow students via peer review, presentations by students, group forums and participation in online discussion forums including action learning sets. • Interaction with tutors and learning coaches including receiving feedback, support (for learning, technical questions and course administration) via private messaging and forums. Both students and tutors via forums and webinars (online seminars, live and recorded) by tutors and visiting professionals and academics. **Assessment:** Assessment is through coursework assignments covering the 6 learning outcomes. The BPS requires that all competencies for the Test User Educational qualification must be assessed. Assessment of this module will therefore comprise a range of assessment exercises that assess all competencies, as follows (numbers in brackets refer to learning outcomes assessed):

	• Multiple Choice Questionnaire on purpose and types of assessment. Approximately 15 questions, notional word equivalent = 500 (1,2,4) • Written paper on the statistical principles that underpin psychometric tests. Approximately 1500 words (2) • A written review of an educational test in line with European standards. Approximately 1500 words (3,4,5) • Invigilated online test on statistical principles and calculations. Approximately 30 questions, notional word equivalent = 500 (2) • Written test paper on intelligence testing and discrimination. Approximately 1000 words (2,4) • Video evidence of test administration competence. notional word equivalent = 1000 (6) • Comprehensive written report of an assessment including test scores from at least two administered psychometric tests. Approximately 1500 words (5, 6) • Video evidence of competent oral feedback to a client or the clients parents/carers. notional word equivalent = 500 (6)
14.	**Assessment Weighting**

	Seen examination	%
	Unseen examination	%
	Coursework (no examination)	100%
	Seen examination	%
15.	Timetabled examination required	No
16.	Length of exam	N/A

17.

Learning materials

The core reading list for this module can be found on the relevant module page on the Campus Online learning platform.

Any reading materials that are required for the course will also be made available to students, embedded within Campus Online. This may be as a journal article or extract from a key text, etc.

List supplied for revalidation event:

Macgregor, A, Turner, M. (2005) Certificate of Competence in Educational Testing, course manual, Real Training.

Optional Reading

If your wish to extend your reading, you may find the following resources give a useful starting point for further exploration. Please note, however, that we are not able to provide online access to these resources.

Anastasi, A. (1988) Psychological Testing. 6th ed. London: Macmillan.

	Bronfenbrenner, U. (1979) The Ecology of Human Development: Experiments by Nature and Design. Cambridge, MA: Harvard University Press. Coaley, K. (2010) An Introduction to Psychological Assessment and Psychometrics. London: Sage. Dancey, C. and Reidy, J. (2004) Statistics without Maths for Psychologists. London: Prentice Hall. Dockrell, J. and McShane, J. (1993) Children's Learning Difficulties: A Cognitive Approach. Oxford: Blackwell. Fisher, S, Boyle, J. (2006) Educational Testing: A Competence Based Approach. Oxford: Blackwell. Gregory, R.J. (2000) Psychological Testing: History, Principles and Applications. 3rd ed. London: Allyn and Bacon. Gipps, C.V. (1994) Beyond Testing: Towards a theory of educational assessment. London: The Falmer Press. Kline, P. (2000) A Psychometrics Primer. London: Free Association Books. Rust, J. and Golombok, S. (1999) Modern Psychometrics – The Science of Psychological Assessment. London: Routledge. McGrew, K. S. (2005). The Cattell-Horn-Carroll theory of cognitive abilities. In D. P. Flanagan & P. L. Harrison (Eds.) Contemporary intellectual assessment: Theories, tests, and issues (2nd ed., pp. 136-181). New York: Guilford Press.