

PROGRAMME SPECIFICATION

Awarding body/institution	Glyndŵr University
Teaching institution (if different from above)	
Details of accreditation by a professional, statutory or regulatory body (including link to relevant website)	Accredited by the Chartered Institute of Occupational Safety and Health(IOSH) www.iosh.co.uk
What type of accreditation does this programme lead to?	Graduate membership of IOSH with the designation Grad IOSH
Is accreditation in some way dependent on choices made by students?	No
Final award/s available eg BSc/DipHE/CertHE	BSc (Hons) BSc Dip HE Cert HE
Award title	BSc (Hons) Occupational Health, Safety and Environmental Management
JACS 2 code	N620
UCAS code (to be completed by admissions)	
Relevant QAA subject benchmark statement/s	None
Other external and internal reference points used to inform the programme outcomes	
Mode/s of study (p/t, f/t, distance learning)	Part time
Language of study	English
Date at which the programme specification was written or revised	Updated September 2012

Criteria for admission to the programme

Generally

In line with Glyndŵr University's admission policy students should normally have a minimum of 240 UCAS points or equivalent for entry to an honours degree. As a guideline students would be considered for entry if they meet one of the following standards:

- (1) GCSE PASSES (A, B or C grades) in five subjects including English and Mathematics, together with two GCE 'A' level pass, or equivalent, normally a minimum of 240 points being the entry target.
- (2) A B/TEC Certificate or Diploma in an appropriate area of study including Merits in at least three Level N units.
- (3) An equivalent pass at GNVQ Advanced Level.
- (4) Scottish Certificate of Education including four higher certificates at grade C or above
- (5) Irish Republic Leaving Certificate including four higher certificates at grade C or above
- (6) 2 years experience in the vocational area and be selected by interview

Students who do not satisfy the normal academic entry requirements may be admitted to the first year of the programme, after interview, at the discretion of the programme tutor and in general accordance with the Glyndŵr University's Academic Regulations for Bachelor Degrees, Diplomas, Certificates and Foundation Degrees.

Through Advanced Standing arrangements, students with a Glyndŵr University FdSc Occupational Health, Safety and Environmental Management qualification may be granted exemption from 120 credits at Level 4, 100 credits at Level 5 and 20 credits at Level 6 (Risk Management module only). Similarly, holders of the NEBOSH Diploma in Occupational Health and Safety will be admitted directly to Level Six.

Students with other Relevant Qualifications

Applications for Accreditation of Prior Learning for this programme will be made in accordance with published University procedures.

Students may be considered for accelerated entry to the level 5 of the programme, after interview, at the discretion of the programme board. Typically, holders of The NEBOSH Construction Certificate, TUC Certificate or NEBOSH Diploma Part 1 will be admitted directly to level 5 of the programme. These arrangements have previously been verified by the appropriate University committee and by IOSH. The rationale for this is the common curriculum base that exists between ENTO, IOSH, NEBOSH and Glyndŵr University.

All students are interviewed on application

The programme board will have discretion to require the students to take additional modules where necessary to strengthen areas of weakness in preliminary courses.

Due to the vocational nature of the award it is likely that students will apply with non-traditional backgrounds, or qualifications falling just short of those outlined above. Two factors will mitigate problems for recruiting these students:

- Prior experiential learning will enhance the ability of mature students and returners
- In the first semester the programme has a significant element of modules to support such students.

However, where appropriate, students will be offered pre-induction support in the form of the NEBOSH General Certificate concentrating on preparing them for studying on the programme.

The programme team has a strong professional and personal commitment to widening access:

- One of the reasons for developing the programme is to enhance student applications from a wider background including trade, vocational and professional and a range of age groups.
- Relationships have been developed with a range of FE providers to enable progression onto the degree programmes within the Department
- Many of the students on existing programmes are from 'non-traditional backgrounds' and as such may be entering higher education for the first time or after a long break in studies.

Interviews for entry, for applicants of all categories, will take account of personality, experience, intellectual ability and motivation in addition to formal academic/technical qualifications.

The team is aware of the need to broaden the appeal of these technical disciplines as a career area and has always made a special effort to attract women and members of ethnic minority groups into professional studies.

Aims of the programme

The overall aim of the programme can be expressed as the desire to provide the philosophy, knowledge and skills required to work at a managerial level in the manufacturing, process or service sectors. The overall objective of the programme is, along with the key transferable skills and subject knowledge, to give students the vocational skills and knowledge to operate as chartered health and safety practitioners across a range of sectors and to provide a positive influence on the health and safety culture of those areas. The curriculum as developed is linked closely with the educational standards set by the Chartered Institute of Occupational Safety and Health (IOSH) who are the lead professional body in this area and who are accrediting body for this programme. The links with IOSH standards for academic and professional standards are shown in Appendix Three where the curriculum is mapped against IOSH requirements in respect of knowledge, core competencies and personal and professional development.

In this context the course through the modular context and then use of portfolio development explores a number of professional issues related to health and well being as well as safety: to ethical concepts relating to matters such as compliance and non compliance: risk prevention as well as risk management: the application of the precautionary principle and the different applications in environmental as opposed to health and safety management. These issues are explored as ethical dilemmas in problem solving exercises using cases studies taken from real incidents and increasing in complexity as the course develops.

In addition to this the course maintains close contact with industry through the North Wales Branch of IOSH. Students are encouraged to become members of IOSH and are encouraged to attend IOSH meetings. The course team try to facilitate branch meetings at Glyndwr University and contribute annually to the programme of presentations.

The use of sessional lecturers also promoted close links with industry and ensures that the lecture content and the professional issues it reflects are both topical and relevant.

The course will lead to the award of an Honours Degree. The purpose is to create Honours Degree level practitioners capable of entering and pursuing a successful career in a range of health, safety and environmental management. It is also intended to provide within the course the academic element in the requirements for corporate membership of IOSH, which is the lead professional body in this area. To this end, the course will seek to provide a broad and academically rigorous educational experience, which will engender attitudes of innovation, critical analysis and professionalism.

In a time of change the emphasis must be on flexibility, innovation and the ability to manage change within the professional environment. For this reason the skills engendered within the educational process are essentially transferable skills with the students being encouraged to show both innovation and originality in their work. To this end the following course objectives seek to demonstrate the manner in which both flexibility and practice will be combined.

Distinctive features of the programme

The overall aim of the programme can be expressed as the desire to provide the philosophy, knowledge and skills required to work at a managerial level in the manufacturing, process or service sectors. The overall objective of the programme is, along with the key transferable skills and subject knowledge, to give students the vocational skills and knowledge to operate as chartered health and safety practitioners across a range of sectors and to provide a positive influence on the health and safety culture of those areas. The curriculum as developed is linked closely with the educational standards set by the Chartered Institute of Occupational Safety and Health (IOSH) who are the lead professional body in this area and who are accrediting body for this programme. The curriculum is mapped against IOSH requirements in respect of knowledge, core competencies and personal and professional development.

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Programme structures and requirements, levels, modules, credits and awards

Progression through the course will be in accordance with the University Regulations for Bachelor Degrees, Diplomas, Certificates and Foundation Degrees, and the approved derogations.

The course is taught over six years on a part time basis. Students would normally be encouraged to take the University's validated FdSc Occupational, Health, Safety and Environmental Management first, and then to proceed to the BSc or BSc (Hons) as an element of further study. Part time study at levels 4 and 5 is taken over 2 years for each level. Part time study at level 6 is undertaken over 2 years with the 80 taught credits being completed in the first year and the 40 credit dissertation being undertaken in the second. This has proved very popular with students and employers.

The exit awards to be offered are:

- Certificate of Higher Education in Occupational health, Safety and Environmental Management
- Diploma of Higher Education in Occupational health, Safety and Environmental Management
- BSc in Occupational health, Safety and Environmental Management
- BSc (Hons) in Occupational health, Safety and Environmental Management

The modular matrix of the programme is shown in Table 1 below

Table 1 Programme Modular Matrix

Proposed Module Numbers	Occupational Health Safety and Environmental Management	Credit Value
	Level 4	
AURF102	Health and Safety Law	10
AURF103	Biological Principles and Microbiology	20
AURF103	Chemistry and Safety	10
AURF104	Physics and Safety	10
AURF105	IT and Statistics	10
AURF106	Materials Science	10
AURF107	Health and Safety at Work	10
AURF108	Health and Safety Management	10
AURF109	Health and Safety Information	10
AURF110	Hazardous Agents at Work	10
AURF111	Communication	10
	Level 5	
AURF201	Health and Safety Legislation	10
AURF202	Management of Health and Safety	10
AURF203	Occupational Psychology, Work Equipment and Ergonomics	20
AURF306	Risk Management	20
AURF205	Fire Safety	10
AURF280	Construction Site Safety	10
AURF207	Occupational Hygiene and Health	20
AURF208	Quality and Environmental Management	20

	Level 6	
AURF301	Dissertation (Core)	40
AURF302	Construction Health and Safety Management (Option)	20
AURF303	Occupational Health and Safety (Core Option)	40
AURF304	Integrated Management Systems (Core Option)	40
AURF305	Environmental Management (Core)	20
AURF307	Project Management (Option)	20
AURF308	Accident Investigation and Outcome Management (Option)	20
AURF309	Negotiated Learning (Option)	20

Course Structure

The course comprises modules with a total of 360 credits studied over a six year period. The course is designed using primarily 10 and 20 credit modules and reflects the nature of the market for vocational courses of this nature. The method of delivery is flexible.

The modules which are 10 credit are existing modules validated in 2008 as part of the re-validation process for the FdSc in OHSEM. Although Glyndŵr University is progressing towards a standard timetable of 20 credits with electives this was not the case at the time of that validation. The modules have been incorporated as part of the BSc (Hons) OHSEM because the FdSc and BSc Hons are taught jointly for the first 2 levels and to do otherwise would create differing learning outcomes and a fractured student learning experience.

In terms of professional accreditation these modules have already been fully accredited by IOSH and so form the basis for accreditation of this course as well.

For operational and professional accreditation purposes it is submitted that it is necessary and desirable that in this instance to use recently validated and accredited 10 credit units in determining the modular mix in the honours programme

Level 4 study is designed to provide the student with underpinning knowledge in the areas of law, health and safety management, human biology and communications. Overall the intention is to provide an underpinning framework of knowledge which combines theory with aspects of practice.

Level 5 study builds upon the foundations established at level one. Legal and managerial studies are further developed as are the more vocational issues in occupational hygiene, occupational psychology work, design and ergonomics. All contribute to the overall level of transferable skills needed to support career progress in this specific vocational area. The modules taken at Level 2 are more management orientated and require more comprehensive and critical study on the part of the student.

Level 6 study builds upon a more critical appreciation of the subject matter and requires the student to take a more independent role in his or her personal development in an academic and vocational context. The emphasis at this level is primarily managerial and provides the student with a series of optional studies. Two distinct routes exist, one which takes an essentially industrial route comprising Integrated Management Systems or the other taking an occupational health route comprising Occupational Health and Safety with either option being reinforced through the choice of dissertation topic.

The course structure requires derogation from current regulations since the programme comprises 120 Level Four, 100 Level Five and 140 Level Six credits, and Bachelor Degrees

normally comprise 120 credits at each level. However, this programme structure mirrors that of the University's FdSc Occupational Health, Safety and Environmental Management which needs to include 20 Level Six credits in order to address the IOSH requirement for graduate membership. Therefore, to enable the revised structure to be in place, derogations from academic regulations have been approved and for the purposes of regulations pertaining to this programme:

- Level 5 is defined as 100 Level 5 credits and the 20 credit Level 6 module Risk Management for the purposes of regulations for compensation, module referral and reassessment, Honours classification, borderline cases, progression and the Ordinances;
- The award of Dip HE in Occupational Health, Safety and Environmental may be awarded upon achievement of 120 credits at Level 4 and 120 credits at Level 5 or above;
- The BSc Occupational Health, Safety and Environmental programme will comprise 120 credits at level 4, 100 credits at level 5 and 80 credits at level 6;
- The BSc (Hons) Occupational Health, Safety and Environmental programme will comprise 120 credits at Level 4, 100 credits at Level 5 and 140 credits at Level 6;
- Level 6 is defined as 120 Level 6 credits, excluding the Level 6 module Risk Management.

The Modular Maps for these optional routes at level six are given in the table below

Route	Core Modules		Core Option	Options
Industrial	Dissertation (40cr)	Environmental Management (20cr)	Integrated Management Systems (40cr)	Health and Safety Management in Construction (20cr) or Project Management (20cr) or Accident Investigation and Outcome Management (20cr) or Negotiated Learning (20cr)
Occupational Health			Occupational Health and Safety (40cr)	

The structure and content as evidenced by professional body accreditation is appropriate and the programme team have consistently sought ways to incorporate into their lecture content practical examples from industry through case study and with constant reference to professional body and government publications incorporating both policy and research.

Each of the modules benefits from specialist input.

There are no learning and teaching hours that are not associated with the credits listed above

Intended learning outcomes of the programme

The programme aims to develop the theoretical and practical aspects of the student by means of personal development, knowledge acquisition, problem analysis evaluation and solving in preparation for a career in Occupational Health, Safety and Environmental Management in a supervisory role. Following the course will also provide the basis for an appreciation of the value of education and life-long learning through additional study and continuing professional development. In this way the student will be provided with the range of academic and professional values and attitudes necessary to meet the needs of a rapidly changing technical and industrial environment

On completion of **Level Four (Certificate Level)** it is envisaged that students will be able to:

- (1) Understand the fundamental principles underlying the technical, economic and legal issues affecting the manufacturing, process and service sectors.
- (2) Apply such understanding to the solution of broadly based problems set within the context of the manufacturing, process and service sectors
- (3) Communicate those solutions clearly and effectively both as an individual and within a team.

Specifically in the following areas:

Knowledge and Understanding: Demonstrate an understanding of the legal principles underpinning occupational health, safety and environmental management: demonstrate an understanding of the scientific principles underpinning occupational health, safety and environmental management: demonstrate an understanding of the mathematical principles underpinning the production use and interpretation of statistics

Intellectual Skills: Assess and evaluate data from a variety of sources and situations: synthesise and summarise information

Subject and Other Skills: Demonstrate an understanding of the principles of risk management: demonstrate an understanding of the purpose structure and necessary content of reports; Demonstrate an awareness of the range of health and safety information available

Professional Skills and Abilities and Employability Skills and Abilities: To work as part of a team; demonstrate an ability to communicate in a variety of media

On completion of **Level Five (Diploma Level)** it is envisaged that students will be able to:

- (1) Identify and critically evaluate the nature of the legal, environmental and managerial constraints affecting the manufacturing, process and service process.
- (2) Undertake appropriate analysis and, based upon this analysis, select practical, economic and technical solutions to health and safety and quality management problems.
- (3) Understand the role and responsibilities of the professional health, safety and environmental manager and the contribution they make to the establishment, management and review of health, safety, quality and environmental management

systems

Specifically in the following areas:

Knowledge and Understanding: Analyse and apply the organisational principles underpinning the application of occupational and environmental health and safety in industrial and other situations: Evaluate and explain the role of the Health and Safety Manager

Intellectual Skills: Analyse Integrate information to produce reports on a variety of manufacturing, process and service situations

Subject and Other Skills: Analyse and apply the principles of risk management to a variety of situations: analyse given situations using a variety of analytical techniques: effectively select and utilise data and data bases in specific situations

Professional Skills and Abilities and Employability Skills and Abilities: Understand the importance of team work and the strategies for leadership: work in unfamiliar situations and learn from the experience

On completion of **Level Six (Ordinary Level)** it is envisaged that students will be able to:

- (1) Critically appraise the current and consider the future role of the Health Safety and Environmental Manager in dealing with economic, technical, legal, managerial, organisational and environmental constraints.
- (2) Understand, apply and critically appraise the procedures and methodologies used by the Health, Safety and Environmental Managers.
- (3) Demonstrate a critical understanding of the key aspects of health, safety and environmental management and of the need to update and manage their own continued learning in a vocational context.
- (4) Understand and critically evaluate the nature of responsibilities encountered in the management of health safety and the environment and critically appraise the ability of the Health, Safety and Environmental Manager to exert influence in this respect.
- (5) Analyse complex problems and be able to prepare, justify and effectively communicate solutions in a manner that reflects professionalism and vocational expertise
- (6) Comment critically on current research in the field of health safety and environmental management.

In addition to the above at **Level 6 (Honours Level)** it is envisaged that students will be able to

- (1) Undertake an piece of independent study within which they develop their study skills, field work and research skills; demonstrates a level of independent enquiry which provides both insight and critical analysis and which further demonstrates an ability to communicate complex problems and their analysis in a clear and effective manner

Overall, and in keeping with QAA National Qualifications Framework (NQF) Guidelines “An Honours graduate will have developed an understanding of a complex body of knowledge, some of it at the current boundaries of an academic discipline. Through this, the graduate will

have developed analytical techniques and problem-solving skills that can be applied in many types of employment. The holder of such a qualification will be able to evaluate evidence, arguments and assumptions, to reach sound judgments, and to communicate effectively.

An Honours graduate should have the qualities needed for employment in situations requiring the exercise of personal responsibility, and decision-making in complex and unpredictable contexts and have the learning ability needed to undertake appropriate further training of a professional or equivalent nature.” (NQF Guidelines August 2008, Quality Assurance Agency for Higher Education).

Specifically in the following areas:

Knowledge and Understanding: Critically appraise current and future developments in occupational health, safety and environmental management; Critically evaluate and explain the changing role of the Health and Safety Manager

Intellectual Skills: Apply specifically and strategically the principles of occupational health, safety and environmental management to a variety of manufacturing, process and service situations and problems: critically assess complex organisational and human resource problems and implement decisions to problems

Subject and Other Skills: Critically analyse and apply the principles of risk management to a variety of complex situations: critically analyse complex situations and report on the same: critically appraise the use of specific analytical techniques on specific situations

Professional Skills and Abilities and Employability Skills and Abilities: Undertake independent study demonstrating a critical understanding of a specific health and safety issue: critically understand the nature of professional ethics and the duty of care owed by the health and safety professional to manage self development

Learning and teaching strategy used to enable outcomes to be achieved and demonstrated

The eclectic nature of the course and the nature of the market require a careful selection of appropriate teaching and learning processes. In addition to the formal class contact hours students will be supported through email contact and the Glyndŵr University website where Moodle is used. The backgrounds of the students are quite diverse and that, as a result, considerable time is needed for personal support and the development of study skills and confidence within the HE environment.

One of the most important features of the learning process will be the application of taught principals to realistic case studies and the development of problem solving skills. It is in this context that the web sites with their directed links to specific information sources will provide specific student support. This will be enhanced within the lecture programme by group discussions, role playing exercises and practical exercises; however the main vehicle for this activity will be in the execution of assignments. These form a major part of the assessment profile whilst also being an essential part of the learning process. A survey of assessment methods follows in Section 6. - Assessment.

The programme team use of a range of resources and have developed modes of delivery relevant to the module content and learning outcomes to encourage an innovative learning experience for the students. Examples of methods used include laboratory practical work, presentations, workshops, computer aided learning including accessing the Internet, seminars, project work, the open forum, case studies, visits and attendance at lectures presented by specialist guest speakers. The team uses Moodle, the University's Virtual Learning Environment (VLE) as the preferred method of communication with students. The VLE should not be seen simply as a repository for information but also as a gateway to encourage students to use the other interactive resources and as communications portal. One such resource is the HIS Technical Index: this provides a professional standard data base of academic and work based documents that support all modules of the course. The students also receive each year a dedicated CD Rom containing detailed notes which underpin their specific studies.

The establishment of the wireless network on the Plas Coch campus has proved a positive benefit for the delivery of the course. It has allowed the internet to become an immediate and integral part of the teaching on the course allowing students to participate in and see immediately the results and the benefits of using the internet generally and the dedicated data bases in particular.

The Programme Team has developed a range of information on its intranet pages and this will be developed to incorporate the revised programme. The essential element in the programme is the use of the Structured Contact Sessions but these will be supplemented by contact with the students through e-mail and web support. The University supports the use of Moodle as a means of web communication and this will form the basis of contact between students and tutors outside of normal contact hours. The application of technology to enhance students' learning is being developed, for example students are currently working collectively on a wiki to develop a chemical information database; the objective being a student-developed, student-reviewed and student-monitored resource available for future cohorts. The Programme Team anticipate further developments in this area.

Because the range of resources used is essentially industry based and is web based IT and statistics in level 4 of the course forms a key element of the provision and introduces students to this medium of study. This medium is further explored and expertise built up in modules such as Health and Safety Information and Hazardous Agents at Work. Use is also made of

the university facilities to provide examples of workshop arrangements and ranges of machines and workstations in both industrial and office based settings. Students are as part of their induction introduced to the range of electronic sources offered by Glyndŵr University generally and by the course team specifically. The course handbook and the teaching support material on Moodle also provide support in the effective use of this resource.

Because of the difficulty of obtaining external sites on a regular basis the team has commenced the creation of a library of virtual visits. This has commenced with the creation of a series of construction site visits and with a virtual tour of an oil rig manufacturing facility which allows the student to undertake hazard identification and risk assessment in a controlled environment.

As stated previously, contact with practitioners is encouraged through contact with the North Wales branch of IOSH and attendance at the CPD seminars which are offered throughout the year.

As part of Glyndŵr University's Widening Access initiative APL/APEL is used to facilitate entry to higher education. Specifically, the course has been mapped against relevant NEBOSH and TUC qualifications to permit advanced entry to level 5 of the course. The programme team has considerable experience of teaching students with differing needs and will meet regularly and frequently in order to monitor and plan for a co-ordinated curricular experience. The programme leader will assume immediate overall responsibility for ensuring that co-ordination is facilitated.

The structure of contact hours for the various modules will be as follows:

10-credit module: 2 hours/week x 12 weeks: 24 hours taught, 76 hours student centred
20-credit module: 2 hours/week x 24 weeks: 48 hours taught, 156 hours student centred
40-credit module: 4 hours/week x 24 weeks: 96 hours taught, 312 hours student centred

Welsh Medium

In line with the University's Welsh Language Scheme, students are entitled to submit assessments in Welsh if they wish.

Assessment strategy used to enable outcomes to be achieved and demonstrated

The assessment of students will be by means of a wide range of strategies currently being used by the team. This will include case studies, portfolios and in-programme assignments as well as other more innovative strategies. The criteria adopted to balance the weighting between programme work and examination was based on the assessments required in each module and the practical skills and theoretical skills required across the level of study and the programme as a whole.

For the students, assessment will:

- establish progress through a programme or module and provide feedback on it;
- diagnose strengths and weakness so that remedial action or extension studies may be implemented;
- consolidate work done so far and fuel motivation for continued study;
- establish a level of achievement at the end of a programme or module, which may be used to anticipate future student performance, which in turn may be used to select for entry onto

further programmes of study or employment.

For the staff, assessment would provide:

- feedback for individual staff on the efficiency of their teaching methods and the effectiveness of the learning environment allowing the dissemination of good practice and the elimination of bad;
- evidence of the extent to which programme aims have been achieved. These would include knowledge and understanding, and the development of intellectual, practical and transferable skills
- a monitoring of standards over time so that consistency of standards can be achieved;
- confirmation that the requirements of external regulating bodies and professional bodies are being reached.

Students that do not reach the required standard in the programme work will be allowed to re-submit work in accordance with the regulations established by the University for assessment and progression.

The assessment schedule is outlined below. There is an University-defined 'maximum assessment load per module' which is as follows: -

10-Credit Module. 1.5 hour exam and 1500 word in-programme assessment* or 2 hour examination or 3000 word project or Portfolio.

20-Credit Module. 3 hour exam and 2000 word in-programme assessment or 5000 word project or 2 hour examination and 3000 word in-programme assessment or Portfolio.

* In-programme assessment includes: - essay, oral presentation and notes, lab report, group work with report.

The assessment procedures for each module conform to these requirements, utilising a format most appropriate in order to assess the learning outcomes of the module. An indication of assessment methods to be used is given in each module syllabus. A summary of the balance of assessment within each module is given in the assessment schedule below.

It is expected that at Level 4 the coursework for each module will be relatively discrete. However, increasingly through Level 5 the modules will interact with each other. The intention is to reflect the practice that exists within the current course portfolio and use cross modular projects. These will be designed to reflect current practice and issues arising in the workplace. They will be substantial pieces of work and will form the main vehicle for assessment. The purpose of these is to enable the student to reflect on issues in the workplace from a variety of perspectives. Hand Arm Vibration Syndrome for example, is an important issue across a range of sectors including service, industrial and construction and can be reflected upon as a piece of legislation (Health and Safety Legislation), as a factor in workstation design (Work psychology, Ergonomics and Work Equipment) as a factor in task safety analysis (Construction Health and Safety Management) or as an issue for health surveillance, health protection and health promotion (Occupational Health).

At level 5 therefore the emphasis in assessment will be on developing the students' problem solving skills. Implicit in this is the application of problem solving techniques such as hazard identification and risk analysis. At this stage of the course presentations are also used to develop the students' communication skills and to provide an intermediate assessment of the students' progress.

At level 6 students are required to demonstrate an ability to self manage their programme of study through a medium of assignments and project work which will require them to undertake a critical appraisal of problems and issues with which they are presented and which they uncover through their studies. Included in this appraisal will be an appreciation of the ethical issues arising from the problems under review. At the heart of the level three studies is the Dissertation the purpose of which is to present the student with a problem or issue for which there is no immediate or obvious solution against which the student must develop a strategy for the exploration of the issue or problem and for the preparation and presentation of an appropriate response.

The Quantity and Quality of Assessment

The purpose of this process is to assess the programme objectives. To this end assessment will incorporate all relevant subject specific and vocational skills, key transferable skills and cognitive skills. Within the overall assessment strategy key skills such as report writing will be assessed at level four and level five, whilst cognitive skills will be addressed at level five. Critical assessment and the analysis of complex problems and ethical issues will be addressed for the most part at level six. Within the framework assessment will either be:

Diagnostic: designed to provide an indicator of the learner's aptitude and preparedness for a programme of study and identify potential learning problems

Formative: designed to provide the student with feedback on progress and inform development

Summative: designed to provide a measure of performance in relation to the learning outcomes for the programme or module

Within these broad classifications and the parameters provided by the learning outcomes the learning strategy for each module will reflect a balance between key transferable skills, vocational skills and cognitive skills. In Management of Health and Safety, for example, assessment is directed towards practical issues in the workplace. Risk assessment is undertaken to provide experience of vocational application but the process is critically analysed to determine the benefits of descriptive or numerical representations of risk given the stage the project is at when the assessment is made.

Essays are used to develop the learner's communication skills and can be in the form of either referenced papers or reports. Again these develop key vocational and cognitive skills. Portfolios are used to enhance the students' breadth of knowledge in key vocational areas. Table 2 below indicates the spread of assessments

Portfolios are also widely used in the programme. Portfolios address each of the learning outcomes for the module in a structured way against a detailed framework of evidence. They provide the student with an opportunity to facilitate their own learning as well as providing a medium for assessment. The LTSN Assessment Series publication no. 6, "A Briefing on the Assessment of Portfolios" identifies the utility of using portfolios in assessing learning outcomes with learning outcomes which are both academic and professional/vocational in nature.

Assignments are provided to the students at the commencement of the module and are due in on the last teaching week in the semester in which the coursework has been issued

Table 2 Assessment Schedule

Code OHS	Title Level 4	Cr	Coursework %				Ex %
			Essay	Pres	TCA	Port	
102	Health and Safety Law	10	50		50		
103	Biological Principles and Microbiology	20	30		70		
104	Chemistry and Safety	10	40		60		
105	Physics and Safety	10	40		60		
106	IT and Statistics	10	40		60		
107	Materials Science	10				100	
108	Health and Safety at Work	10				100	
109	Health and Safety Management	10				100	
110	Health and Safety Information	10				100	
111	Hazardous Agents at Work	10				100	
112	Communication	10				100	
	Level 5						
201	Health and Safety Legislation	10	60		40		
202	Management of Health and Safety	10	60		40		
203	Occupational Psychology, Work Equipment and Ergonomics	20				100	
306	Risk Management	20	100				
207	Fire Safety	10	40	10	50		
280	Construction Site Safety	10	40	10		50	
209	Occupational Hygiene and Health	20				100	
210	Quality and Environmental Management	20				100	
	Level 6						
301	Dissertation	40	100				
302	Construction Health and Safety Management	20	50		50		
303	Occupational Health and Safety	40	50		50		
304	Integrated Management Systems	40	50		50		
305	Environmental Management	20	50		50		
307	Project Management	20	50			50	
308	Accident Investigation and Outcome Management	20	50			50	
309	Negotiated learning	20	100				

In assessing students, staff follow the principles and precepts set out in the QAA Code of Practice for the Assessment of Students. In particular assignments are clearly linked in the module to module outcomes with grading a marking schemes published on the intranet through Moodle. All assignments are internally verified and all marks are verified prior to being assessed by the external examiner.

Assessment regulations that apply to the programme

Assessment is carried out in accordance with Glyndŵr University's Regulations for Bachelor Degrees, Diplomas, Certificates and Foundation Degrees.

Derogations have been approved in respect of the composition of the programme – see Programme Structure section above.

The Level Six Dissertation module is designated as the Borderline Module. That is to say, the marks for this 40 credit module would be used in determining the degree classification in borderline cases at Assessment Board. Therefore, in considering borderline cases, the Assessment Board shall raise the classification to the next level if the following criteria are met:

- At least 50% of the credits at Level Six fall within the higher classification
- All Level Six modules have been passed at the first attempt
- The Level Six Dissertation module mark must be in the higher classification

There is no assessment that is not associated with the gaining of the award.

Programme Management

General

This will be in accordance with Glyndŵr University and Department practice within the parameters of the Glyndŵr University Quality Assurance Procedures and Assessment Regulations.

The Course Management Team will comprise the following personnel:

Programme Leader
Level 4 Level Tutor
Level 5 Tutor
Level 6 Tutor

The specific roles of the above may be briefly summarised as follows:

Programme Leader

The programme leader provides overall academic direction to the Course and oversees matters relating to the programme of study and assessment.

Level Tutors

The Level Tutors are responsible to the Programme Leader for the day to day running of the course. They will liaise with module tutors to ensure an even balance of assessment and that the level of course work and examination is appropriate to the level of the Course. At level 6 the tutor will also take responsibility for the management of the Dissertation.

Programme Management

The programme will be managed by a Programme Leader, based in the Department, who will lead the Programme Team, chair the Programme Board and be a member of the Department Management Team. The Programme Team will comprise all those involved in the delivery of the programme i.e. module tutors, level tutors and the Programme Leader. The programme team are given in the table below.

All members of the programme team undertake scholarly activity and research. Dr Clive Buckley is currently enrolled on an Open University course on e-learning and Brian Heath has recently completed an MSc in Applied Public Health and the work done here on health

protection, managing change, public health, integrated research methods and epidemiology have fed into all aspects of the programme as a new range and area of public health perspectives are brought to the programme.

Dr. Clive Buckley has expertise in Chemistry and Biology and is in addition a specialist in e-learning. He has recently been awarded an e-learning consultancy with the Open University and is a regular reviewer for the Higher Education Academy, Physical Sciences Educational Reviews. Dr Lynne Kennedy is an authority in nutrition and public health. Clive is currently teaching on the existing course and both will contribute to the FdSc in September 2008.

Dr Lynne Kennedy has 14 years experience teaching on the Masters in Public health programme at the University of Liverpool. Her particular research interests include obesity prevention, health promotion, nutrition inequalities and lay helping. She has completed a PhD in the field of public health and has had two papers from this accepted for publication (2008). Dr Kennedy is a co-applicant on an MRC grant examining the feasibility of conducting and RCT of Lay Health Trainers to prevent CHD (2006-09); she is also co-applicant on a grant in collaboration with colleagues in the Liverpool Obesity Research Network at the University of Liverpool to develop a population-wide obesity prevention initiative targeted at children of breastfeeding mothers. She has also published recently co-authored a chapter on the politics of health (2008) in a reader on Health Studies and is currently in collaboration with European partners on two publications for the international journal of health promotion on the European Healthy Cities Initiative.

As stated previously, these three full time members of staff will form the nucleus of the team that will direct the strategic development of occupational and public health related studies within the Department.

Nick Lodge has recently completed the honours programme in Occupational Health, Safety and Environmental Management and Paul Williams in Construction Management.

Brian Heath has published in this year in Tolley's Health and Safety At Work Handbook, 19th Edition and has been appointed a contributing editor to that publication. Other recent activity includes presentation of a Research Paper, 3rd International Commission on Implementation of Health and Safety in Construction. Promoting Health and Safety Management in Construction (2002), publication of a book chapter, Heath BC (2004) 'An investigation into the effect of partnering in promoting health and safety management on construction sites' in Construction Safety Management Systems Steve Rowlinson (Ed) Spon Press, London, pp 133 -146. This year Brian has co authored a chapter on Alcohol and Drug abuse in the work place in "promoting wellbeing in the Workplace", Neil Thompson (Ed).

Brian Heath has also made a number of invited presentations: as listed below.

- Revitalising health and safety in the construction industry
- The draft Work at Height Regulations
- Asbestos, the duty to manage
- Duties under the new asbestos at work regulations
- Corporate manslaughter: developments to date
- Work at height and suspension trauma
- The Noise at Work Regulations
- The Asbestos Regulations 2006: occupational and public health implications

These have been fed into a range of modules at levels 4 and 5 including health and safety law, health and safety at work, construction health and safety management, hazardous agents at work, health and safety information.

The team as a whole has been involved in two submissions to the HSE in: response to Discussion Documents: Revitalising Health and Safety in Construction; Response and the Draft Work at Height Regulations These were organised in the form of local conferences and were attended by representatives from local industry, practitioner groups and employers and were made available also to students.

Staff Development

Programme team will be encouraged to engage in appropriate and relevant staff development to support the continued development of individuals and the programme. The team will be encouraged to share best practice in teaching and learning. Individuals will be encouraged to take the PGCert in E-learning or equivalent to underpin improved web based delivery and student support Staff training needs can be identified and raised through the monthly programme meetings and Annual Department Staff development day.

The Postgraduate Certificate in E-learning: Theory and Practice is a new programme aimed at those working in teaching and training and offers participants the opportunity to study the theory and practice of applying e-learning within their own professional context.

The programme consists of three twenty-credit modules:

- Pedagogy and Practice, which explores the nature of learners, how learning styles might influence the mode of delivery and how teaching 'on-line' may differ from conventional teaching.
- Technology and Design, which explores those technologies that can be used to support their learners.
- Implementation and Management which examines issues of implementing and managing on-line programmes

Programme team:

Name	Position	Module Leadership
Brian Heath	Principal Lecturer Programme Leader	Health and Safety Law, Occupational. Psychology, Work Equipment and Ergonomics, Quality and Environmental Management. Integrated Management Systems, Accident Investigation and Outcome Management. Risk Management, Project Management
Clive Buckley	Principal Lecturer	Chemistry and Safety, IT and Statistics, Physics and Safety. H&S Information, Hazardous Agents at Work Communication Biological Principles and Microbiology, Occupational Hygiene and Health, Occupational Health and Safety, Dissertation
Yvonne Williams	Sessional Lecturer	Occupational Health and Safety
Paul Williams	Sessional Lecturer	Health and Safety Legislation, Construction Site Safety, Health and Safety Management in Construction Health and Safety at Work, Health and Safety Management, Materials Science,
Nick Lodge	Sessional Lecturer	Management of Health and Safety at Work, Fire Safety

Stan Moore	Sessional Lecturer	Environmental Management
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Particular support for learning

Generally

Detail of the learning infrastructure has been interspersed though this document. Reference has been made to the VLE that exists and the utility of the Moodle site and of the wireless network that exists within the Glyndŵr University campus. The IHS data base is a particularly good example of this: it contains a complete record of health, safety and environmental publications emanating from government, local government and professional sources as well as a large number of key texts. This, along with LexisNexis and HSE online, forms a professional data base which is up to date and of a high professional standard.

In addition students are provided with a data stick which contains underpinning notes related to the module content and a series of reference papers that form the readings for a range of modules. The disc also contains module guides and other support material.

Overall there is a vast amount of material available for students and part of the support for these students is guidance through the range of resources available.

Study Methods

Students will be expected to use a range of study methods. In addition to the formal lecture periods students will be expected to learn through reflection and further private study using web based resources and with appropriate guidance as described above. To facilitate this, academic support will be provided through counselling/tutorial session where students are advised directly on the path that their learning should take and the steps that have to be taken to reach a successful module outcome.

The programme team use of a range of resources and have developed modes of delivery relevant to the module content and learning outcomes to encourage an innovative learning experience for the students. Examples of methods used include laboratory practical work, presentations, workshops, computer aided learning including accessing the Internet, seminars, project work, the open forum, case studies, visits and attendance at lectures presented by specialist guest speakers. The team uses Moodle Virtual Learning Environment (VLE) as the preferred method of communication with students. The VLE should not be seen simply as a repository for information but also as a gateway to encourage students to use the other interactive resources and as communications portal. As stated above, one such resource is the HIS Technical Index: this provides a professional standard data base of academic and work based documents that support all modules of the course.

Again, the establishment of the wireless network on the Plas Coch campus has proved a positive benefit for the delivery of the course. It has allowed the internet to become an immediate and integral part of the teaching on the course allowing students to participate in and see immediately the results and the benefits of using the internet generally and the dedicated data bases in particular.

The Programme Team has developed a range of information on its intranet pages and this will be developed to incorporate the new programme. The essential element in the programme is the use of the Structured Contact Sessions but these will be supplemented by contact with the students through e-mail and web support. The University supports the use of

Moodle as a means of web communication and this will form the basis of contact between students and tutors outside of normal contact hours. The application of technology to enhance students' learning is being developed, for example students are currently working collectively on a wiki to develop a chemical information database; the objective being a student-developed, student-reviewed and student-monitored resource available for future cohorts. The Programme Team anticipate further developments in this area.

Equality and Diversity

Applicants are considered on an equal basis irrespective of disability, sex, sexual orientation, marital or parental status, religion, social class, nationality or ethnic origin.

Recognising the requirements of current regulations and legislation in relation to the (Disability) and Equality Act 2010 all information that is produced for students will use plain language that is free from bias. The programme team have ensured that all areas of the programme are accessible to students on the programme.

Students who present with a specific learning difference or physical disability will be referred to Student Services where they can be formally assessed and the appropriate support can be implemented in accordance with the University's Disability Policy.

The team is aware of the need to broaden the appeal of vocational disciplines as a career area and has always made a special effort to attract women and members of ethnic minority groups into professional studies.

Despite having had considerable success it is also conscious of the need to improve in these key areas. The team will therefore ensure that requirements regarding equal opportunities are strictly adhered to,

Where students with particular needs apply the course team in line with the University as a whole take a positive view of such applications. The use of Moodle and on line learning permits assimilation of material at a rate to suit the learner, Student Services also offers specialist learning support to the student body. Linked to the programme team the University can be said to have an integrated support mechanism for students with special needs.

In terms of its estate the University has created a flexible access pattern to all buildings with lift access to the upper floors. Within the Learning Resources and Library building designated space is made available to students with specific learning difficulties and on an organisational basis Glyndŵr University is the Welsh Partner in the European Socrates project "Second Chance" promoting wider access to higher education for adults with learning difficulties.

Students who encounter any difficulties arising during the course of the study can approach a member of the team or the Programme leader or any one of the above Student Services. In addition academic support is available through University and Department provision:

- Basic Skills Support – range of resources, Basic Skills staff
- Extra Sessions – Basic Maths, English
- English as a Foreign Language support
- Welsh Language Classes

The vocational nature of the course itself encourages students to critically evaluate the challenges placed on both individuals and organisations by issues of equity and equality.

