NEBOSH National Diploma for Occupational Health and Safety Management Professionals

Qualification guide for Learning Partners

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Version: 3.1
Specification date: July 2020
Publication date: January 2023

Registered Charity Number: 1010444

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Qualification key features

Unit prefixes and titles	**Unit ND1**: Know – workplace health and safety principles (UK) **Unit ND2**: Do – controlling workplace health issues (UK) **Unit ND3**: Do – controlling workplace safety issues (UK)
Assessment	(see 'Assessment formats' and 'Qualification grading and issue of qualification parchment' for more detail)
Notional learning hours	Unit ND1: 195 Unit ND2: 145 Unit ND3: 135 (See 'Notional learning hours' for a breakdown of the hours)
Qualification level and number of credits	SCQF Level 10 (Equivalent to RQF Level 6) with 49 credits
Modes of study	A full-time block release course (minimum of six weeks (30 working days)) Part-time day release (spread over at least 30 weeks) Open, distance learning, eLearning
Entry requirements	No formal entry requirements but due to there being assumed knowledge (see 'Prior learning' section) it is recommended that learners have passed the NEBOSH National General Certificate in Occupational Health and Safety or an equivalent SCQF Level 6 or 7 qualification. See 'Entry requirements and recommended minimum standard of English' for further information.
Recommended minimum standards of English	Learner: International English Language Testing System (IELTS): 7.0 or higher Tutors: International English Language Testing System (IELTS): 8.0 or higher
Qualification grades	The percentage marks of all three units are combined and the qualification grade is based on the following boundaries: Distinction: 226 or higher Credit: 196 - 225 Pass: 150 - 195

Assessment	Assessment type	Assessment time	Pass marks
Unit ND1	Assignment	60 hours (approx.)	Provisional 50%
Unit ND2	Case study	40 hours (approx.)	Provisional 50%
Unit ND3	Case study	40 hours (approx.)	Provisional 50%

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Introduction

The NEBOSH National Diploma is the flagship NEBOSH qualification and, when launched in 1988, was the first UK vocational qualification to be developed specifically for health and safety professionals. The National Diploma is recognised and reliable; over 20,000 learners have achieved the qualification since its introduction.

The NEBOSH National Diploma is ***the*** qualification for aspiring health and safety professionals, building directly upon the foundation of knowledge provided by the NEBOSH National General Certificate. It is designed to provide learners with the knowledge and understanding required for undertaking a career as a health and safety professional and it also provides a sound basis for progression to postgraduate study.

The qualification deliberately looks at general workplace issues so that is can be applied in the many different sectors in which health and safety professional may work. On completion of the qualification, your learners will be able to:

- Understand how health and safety legislation is applied in a workplace and the possible enforcement actions that could be taken for non-compliance and how they contribute to health and safety legal actions.
- Use different types of health and safety leadership approaches and to be able to influence health and safety issues at all levels.
- Influence organisational and health and safety workplace culture.
- Proactively manage health and safety, taking account of human failures and factors.
- Manage health and safety competence (both their own and that of the organisation).
- Use a range of hazard identification, risk management and loss causation techniques.
- Monitor health and safety performance.
- Develop their role as a health and safety professional including understanding how it links with Corporate Social Responsibility.
- Effectively manage organisational change.
- Manage contractors and supply chains.
- Control a range of workplace health and wellbeing issues.
- Control a range of workplace safety issues.

Qualification type

NEBOSH offers Vocationally-Related Qualifications (VRQs) in England, Wales and Northern Ireland. In Scotland, VRQs are known as 'Other accredited qualifications'.

VRQs provide the knowledge and practical skills required for particular job roles through a structured, study-based training programme that combines the testing of knowledge and understanding in written examinations with practical application of learning in the workplace. VRQs are a popular type of qualification because they are nationally recognised, flexible and offer routes for progression to employment or further study.

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Syllabus development and review

The syllabus has been developed by NEBOSH following extensive consultation with key stakeholders, notably previous Diploma learners, Learning Partners, subject experts and employers.

NEBOSH would like to take this opportunity to thank all those who participated in the redevelopment and implementation of this qualification but, in particular, the following individuals and employers:

Simon Bown	KeolisAmey Docklands Ltd
David Campbell	Network Rail
Stewart Mardle	BT
Louisa Mead	
Gary Swayne	APS Group
Roger Schulp	BP
Darren Webb	Newsprinters (Broxbourne) Ltd

No 'stick in the mud' when it comes to adventure

Claire Guise has thrown herself into a number of challenges in recent years. Not only has she trekked across Vietnam, conquered the Grand Canyon and hiked along the Great Wall of China, she's also completed her NEBOSH National Diploma in Occupational Health and Safety.

Her achievements have been motivated by the charity Marie Curie, where Claire is employed as Health and Safety Manager. Claire has responsibility for health and safety across the organisation, which employs more than 2,000 nurses.

"There are a surprising number of issues that need to be managed here" explained Claire. "Besides the usual day to day risks, there's fire safety, issues around construction and contractors and, of course, all the exciting creative ideas our fundraising come up with. Taking the NEBOSH Diploma has helped tremendously with the depth of knowledge I've needed here at Marie Curie and with applying that knowledge of course. Tunnel vision is certainly not what's required here. It's also very important to keep that knowledge up to date and being part of the NEBOSH Alumni has been really beneficial from that perspective".

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Entry requirements and minimum standards of English for learners

The NEBOSH National Diploma syllabus assumes that learners will have knowledge of health and safety equivalent to that provided by the NEBOSH National General Certificate (NGC).

Many learners embark on the National Diploma already having gained health and safety knowledge either through previous study of the NGC, or a similar qualification. To avoid unnecessary duplication, increase value and provide progression for learners, the July 2020 specification of the National Diploma excludes much of the content that is already adequately covered in the NGC (this is classed as prior learning). The prior learning syllabus content that previously formed part of the National Diploma (November 2015 specification) and also forms part of the NGC (October 2018 and November 2014 specifications) is shown in the 'Prior learning' section of this Guide.

Further information on the NGC can be found via our website https://www.nebosh.org.uk/qualifications/#Certificates.

To ensure that learners will have this prior learning, it is strongly recommended that learners achieve the NGC or equivalent qualification prior to undertaking the Diploma course. However, we do not want this to be a barrier so you could also assess prior learning in some other way such as through a diagnostic questionnaire to establish broad topic understanding. The results of this could then inform a recommendation as to whether to proceed directly to Diploma study (albeit with additional support and self-study to fill small knowledge gaps) or whether to take the NGC first. Either way, you must be satisfied that your learners are ready to undertake the significant demands and commitment inherent in studying the Diploma.

Standard of English required

Your learners must be proficient in the use of written English. This is because the assessments are currently offered (and must be answered) in English only. The standard of English required by learners studying for the NEBOSH National Diploma must be such that they can both understand and articulate the concepts contained in the syllabus. It is important to stress that it is the responsibility of Learning Partners to determine their learners' standards of proficiency in English.

NEBOSH recommends that learners undertaking this qualification should reach a minimum standard of English equivalent to an International English Language Testing System (IELTS) score of 7.0 or higher in order to be accepted onto a National Diploma programme.

Further information on IELTS can be found here https://www.ielts.org/what-is-ielts/ielts-introduction.

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Notional learning hours

The qualification has the following notional learning hours:

Unit	Notional learning hours				Credits
	Taught hours	Self-study hours	Assessment hours	Total hours	
ND1	77	58	60	195	20
ND2	60	45	40	145	15
ND3	54	41	40	135	14
Total	191	144	140	475	49

A programme of study therefore needs to be based around a minimum of **191 taught hours** and approximately **144 hours of self-study** for an overall total of **335 hours** (excluding assessment time).

A full-time block release course would be expected to last for a minimum of 6 weeks (30 working days – teaching for 7 hours per day) and a part-time day release course would be spread over at least 30 weeks. The tuition hours should be added to the recommended self-study hours to give the minimum number of hours for learners studying by open, distance learning or e-Learning.

Tuition time should normally be allocated proportionate to the tuition time for each element but may require adjustment to reflect the needs of a particular learner group.

NEBOSH set me up for success

When Matt McDonnell, Health and Safety Adviser at B&Q, talks about health and safety, he tends to focus on the needs of his colleagues as well as the technical processes involved. It's hardly surprising given his background as a retail manager. Successful retailers tend to be customer orientated rather than simply being product focused. Matt told us: *"I absolutely love this job, especially when you give someone a little nugget of safety advice and you see the penny drop. As a safety professional you want to make a difference and you want your colleagues to respond positively. For me, this is the key to protecting everyone from harm.*
NEBOSH really set me up for success and helped me develop my career quite rapidly. After deciding not to go to university earlier in my life I'm really proud of my Diploma qualification. One of the reasons I chose the Diploma was the prestige that surrounds it. Everyone recognises there is a genuine challenge in achieving the NEBOSH Diploma and there's also great confidence in it. It gives B&Q reassurance and kudos to say they have a NEBOSH Diploma holder offering competent advice".

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Assessment formats

To achieve the National Diploma, learners must complete and pass the following assessments.

Unit	Assessment format
ND1	An assignment split over two papers (both papers must be submitted at the same sitting): Paper 1 – simulation questions Paper 2 – workplace activities, reflective tasks, and a research project
ND2	Case study (simulation only)
ND3	Case study (simulation only)

Your learners will need to ensure that they select a suitable workplace/organisation for ND1, Paper 2. **The workplace/organisation does not have to be their own; it just needs to be *suitable*.** The selected workplace should provide sufficient scope to carry out a range of activities. If a learner has difficulty finding a suitable workplace, you must help the learner to make arrangements. The workplace activities cover the following assessment criteria:

Assessment criteria	Topic
2.3	Consultation
2.4	Health and safety culture
3.1	Competence, training, information and supervision
3.2	High reliability organisations
4.2	Sensible risk management/types of risk assessment/ implementing risk assessment actions
4.3	Risk profile only
5.2	Health and safety monitoring and measuring
7.3	Organisation change
9.1	General management of contractors

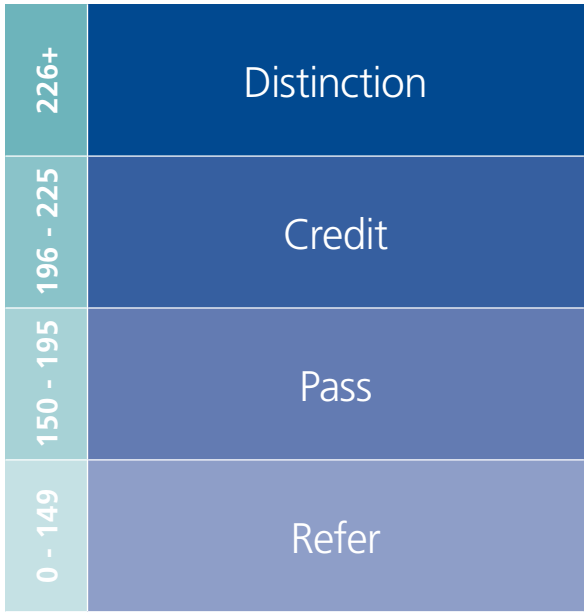
Qualification grading and issue of parchments

Learners must achieve a 'Pass' in all three units to achieve the qualification. The provisional pass mark for each unit is 50%. More information on how provisional marks are set can be found in our FAQs: https://www.nebosh.org.uk/faqs/how-does-nebosh-set-the-pass-mark-for-each-assessment/.

The percentage marks of all three units are combined and the qualification grade is based on the boundaries shown in the diagram below.

If a learner has retaken a unit to achieve a higher mark, the highest unit mark will be used to calculate the qualification grade.

Once the third successful unit has been completed, the learner will be issued with a qualification parchment. Parchments are normally issued 20 working days after the results declaration date for the third successful unit.



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Individual learner feedback

For more information on the assessment feedback provided for this qualification, please visit the NEBOSH website: https://www.nebosh.org.uk/faqs/how-can-i-gain-feedback-on-my-performance-to-assist-with-future/.

Re-sitting units

If a learner does not achieve a 'Pass', the learner may re-sit the unit(s) in which they have been unsuccessful providing that this happens within the 5-year enrolment period. However, each re-sit will incur an additional fee.

Learners may re-sit unit(s) at any time within their enrolment period. This includes re-sitting successful unit(s) to try to improve the qualification grade. When all three units have been successfully completed, learners will need to inform NEBOSH of their intention to re-sit the successful unit(s) **within 20-working days of the results declaration date for the final successful unit.** There is no limit to the number of re-sits which can be taken within the enrolment period.

If a learner sits a unit more than once, the highest grade achieved will count towards the final qualification grading.

If a learner registers for any unit of the National Diploma whilst awaiting a result from a previous assessment, the learner cannot then request a refund of the registration fee if the awaited resulted is a 'Pass' (except in the case of an Enquiry About Result).

Teaching of syllabus content

Although the syllabus sets out the units and elements in a specific order, tutors can teach the units and elements in any order they feel is appropriate. Learning Partners will need to reflect this in the timetables which are submitted for approval as part of the accreditation/re-accreditation process.

Conflict of interest

Learning Partner staff (including Head of Learning Partners, Tutors, Administrators, Examinations Officers and Invigilators) must declare in writing to NEBOSH any employment and/or familial, spousal or other close personal relationship with any examination or assessment candidate. Further information can be found in the 'Instructions for Conducting Examinations' document.

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Tutor references

These references are given to aid tutors with the teaching of the syllabus content; they are not an exhaustive list and tutors can use other references to those given. The tutor references are no longer included in the Guide but are available from the 'Qualification's Resources' section on the NEBOSH website.

Minimum standard of English required for tutors

Tutors must have a good standard of English. They must be able to articulate the concepts contained in the syllabus. If the tutor's first language is not English, the Learning Partner must provide evidence of the tutor's standard of English when submitting the CV for approval.

NEBOSH's requirement is for tutors delivering this qualification to have reached a minimum standard of English equivalent to an International English Language Testing System score of 8.0 or higher.

Available resources

In addition to this guide, the following resources are downloadable from the NEBOSH website:

- Tutor references;
- Leaflet;
- Case studies.

Find your voice with a NEBOSH Diploma

Crystal Danbury is Safety Director at Openreach, an organisation that is vital to the UK's national infrastructure and which employs around 33,000 people. Her role is strategic. After joining Openreach she reviewed safety performance and internal capabilities, which led to her forging a 5-year plan.

Crystal's approach puts a great deal of emphasis on engaging supervisors and frontline workers across Openreach aiming to ensure that they not only implement safety strategy, but also feel inspired to devise supporting solutions of their own.

"Perhaps it's because I started out as a technician and I know what it can be like to sometimes find yourself discounted from the conversation around safety. It's what lies behind my safety ethos of always trying to make sure everyone has a voice."

Crystal also highlights NEBOSH as having played a big part in her career success. *"It's often said that a NEBOSH Diploma opens doors for you, and since I passed mine (National Diploma in Occupational Health and Safety) back in 2010 I've definitely seen that first hand. I make no apologies for saying that for me NEBOSH holds something really special and it gives me huge confidence in members of my team when I know they too have that. I always say if you want to pursue a career in safety and you want a good grounding, something to make you feel confident, something to make you feel competent and something you will draw on every day at work, then NEBOSH is a fantastic way to go. People sit up and listen when you have a NEBOSH Diploma. It helps you find your voice. Yes, you need passion, drive, a great set of soft skills and a clear ethos around safety, but you also need something that will help you take on greater levels of responsibility and NEBOSH is unbeatable for that."*

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Learning outcomes

Learning outcome		Taught hours	Recommended self-study hours	Assessment
1	You will be able to source, develop, evaluate and interpret relevant health and safety information (such as legislation, guidance, best practice, procedures) and communicate it effectively to those who need it (both within your organisation and those affected by your organisation's activities such as contractors and insurers).	16	58	Unit ND1 assignment
2	You will be able to promote a positive health and safety culture by: • gaining commitment and participation; and • engaging, supporting and influencing leaders (and others) to change attitudes and behaviour and make health and safety a priority.	19		
3	You will be able to assess, develop and maintain individual and organisational health and safety competence.	5		
4	You will be able to understand risk management including the techniques for identifying hazards, the different types of risk assessment, considerations when implementing sensible and proportionate additional control measures and developing a risk management strategy.	6		
5	You will be able to develop and implement proactive and reactive health and safety monitoring systems and carry out reviews and auditing of such systems.	12		
6	You will be able to continually develop your own professional skills and ethics to actively influence improvements in health and safety by providing persuasive arguments to workers at all levels.	5		
7	You will be able to develop a health and safety policy strategy within your organisation (including proactive safety, Corporate Social Responsibility and the change management process).	5		
8	You will be able to contribute to health and safety legal actions.	4		
9	You will be able to manage contractors and supply chains to ensure compliance with health and safety standards.	3		
10	You will be able to advise the organisation on a range of common workplace health issues/ hazards including how these can be assessed and controlled and the legal duties associated with these issues/hazards.	60	45	Unit ND2 case study
11	You will be able to advise the organisation on a range of common workplace safety issues/ hazards including how these can be assessed and controlled and the legal duties associated with these issues/hazards.	54	41	Unit ND3 case study

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Part 1 – knowledge/thinking/planning

Unit ND1: Know – workplace health and safety principles (UK)

Learning outcome 1

You will be able to source, develop, evaluate and interpret relevant health and safety information (such as legislation, guidance, best practice, procedures) and communicate it effectively to those who need it (both within your organisation and those affected by your organisation's activities such as contractors and insurers).

Cross reference with assessment criteria 9.1 – manage contractors and supply chains to ensure compliance with health and safety

Assessment criteria	Topic	Ref	Content
Outline how Regulations are created.	Health and safety regulations	1.1	• Creating health and safety regulations: > procedure under section 15 of the Health and Safety at Work etc. Act 1974 - permissible subject matter of Regulations > role of the Secretary of State and the HSE in making Regulations > the various stages of consultation > the statutory procedures for making approved codes of practice.
Describe the possible routes that a criminal case could take through the UK court system and the basic procedure for bringing prosecutions.	Prosecutions	1.2	• The possible routes that a criminal case could take (including appeals) through the court system in the UK • The basic procedures for bringing prosecutions for breaches of health and safety legislation and for pursuing civil actions ***cross reference with assessment criteria 8.1 and 8.3***.
Know, and be able to advise on, the responsibilities and powers of enforcing officers and the principles of enforcement, enforcement options and enforcement penalties.	Enforcement	1.3	• The obligations of enforcing officers: duty to give information to workers or their representatives; the duty not to disclose information (Health and Safety at Work etc. Act Section 28) • The principles of enforcement with reference to the HSE's *Enforcement policy statement* (HSE41): proportionality of enforcement; consistency of approach; transparency • Enforcement options (where there has been a material breach) ***Cross reference with assessment criteria 1.2*** > choice of enforcement option linked to the HSE's *Enforcement Management Model* (EMM)

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Assessment criteria	Topic	Ref	Content
		1.3	• The application of common law Individual Gross Negligence manslaughter (culpable homicide in Scotland) to work-related accident/incidents • The legal criteria for prosecution and possible sentences under the Corporate Manslaughter and Corporate Homicide Act 2007 • The factors a judge will consider when passing sentence for health and safety offences with reference to the Health and Safety Offences and Corporate Manslaughter guidelines published by the Sentencing Council.
Understand the liability for damages (including foreseeability and date of knowledge of risk), the common law 'duty of care' and negligence defences.	Civil law	1.4	• Damage for which the tortfeasor is liable and relevance of damage of foreseeable type, date of knowledge of risk • The concept of vicarious liability • The concept of 'duty of care': > to whom a duty is owed (the 'neighbour test') > the duty of care owed by: - designers, manufacturers and suppliers to customers / users - occupiers of premises to those using or visiting the premises - contractors to clients and vice versa - employers to workers > extent of duty (reasonableness, foreseeability) > greater duty of care to more vulnerable individuals • The main defences to the tort (delict) of breach of statutory duty: > statutory duty not on the defendant > no breach of statutory duty > injured party not within the class of persons protected by the statute > harm not of the type that the statute was designed to prevent > no causal connection between the breach and the loss suffered > contributory negligence

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Assessment criteria	Topic	Ref	Content
		1.4	• The main defences to claims of negligence: > denial > no duty owed > no breach of duty (with reference to foreseeability, reasonableness) > the breach did not lead to damage > the type of damage not foreseeable > volenti non fit injuria > contributory negligence > time limitation.
Explain how the Social Action, Responsibility and Heroism Act (SARHA) can be used as a defence, what should be considered in the assessment of damage, what a joint tortfeasor is and what the personal injury pre-action protocol is.	Damages and liability	1.5	• How the Social Action, Responsibility and Heroism Act (SARHA) 2015 can be used as a defence against negligence or breach of statutory duty (applicable only to England and Wales) • What should be considered in the assessment of damages; general and special (solatium and patrimonial loss in Scotland) • The concept of joint tortfeasors: > the meaning of joint and several liability > the recovery of damages from joint tortfeasor • Personal Injury Pre-Action Protocol under the Civil Procedure Rules (England and Wales only). ***Cross reference with assessment criteria 8.1-8.4***
Outline occupiers' liability.	Occupiers' liability	1.6	• The main provisions of the Occupiers' Liability Acts 1957 and 1984 or the Occupiers' Liability (Scotland) Act 1960 or the Occupiers' Liability Act (Northern Ireland) 1957 and The Occupiers' Liability (Northern Ireland) Order 1987.
Know when discrimination is lawful and what protection is available to 'whistle-blowers'.	Lawful discrimination	1.7	• Situations where it is lawful to discriminate and protection for those undertaking safety roles at work or disclosing wrong-doing at work with reference to: > Employment Rights Act 1996 > Trade Union and Labour Relations (Consolidation) Act 1992 (Sections 152 and 153) > Equality Act 2010 > Public Interest Disclosure Act 1998.

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Assessment criteria	Topic	Ref	Content
Outline the role of insurers in health and safety.	Insurers	1.8	• How insurers can influence organisational health and safety • The role of loss adjusters and claims handlers • The purpose of Employers' Liability and Public Liability insurance.

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Learning outcome 2

You will be able to promote a positive health and safety culture by:

- gaining commitment and participation; and
- engaging, supporting and influencing leaders (and others) to change attitudes and behaviour and make health and safety a priority.

Cross reference with assessment criteria 9.1 – manage contractors and supply chains to ensure compliance with health and safety

Assessment criteria	Topic	Ref	Content
Recognise different organisational structures and where conflicts in goals could lie and how these conflicts can be resolved.	Organisational structures	2.1	• The concept of the organisation as a system • Organisational structures and functions – including formal and informal; hierarchical vs flat management structures; organisation charts; role of management • Potential conflict between organisational goals and the goals of the individual • The integration of the goals of the organisation with the needs of the individual – authority, responsibility, accountability • The internal influences on health and safety within an organisation eg, finance, production targets, trade unions, organisational goals and culture • The external influences on health and safety within an organisation eg, legislation, Parliament/ HSE, enforcement agencies, courts/tribunals, contracts, clients/contractors, trade unions, insurance companies, public opinion.

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Assessment criteria	Topic	Ref	Content
Recognise the different types of safety leadership and the behavioural attributes of an effective leader.	Leadership	2.2	***Cross reference with assessment criteria 6.1 – the role of the health and safety professional*** • The meaning of safety leadership • Types of safety leadership, their advantages, disadvantages, typical behaviours and likely impact on safety performance: > transformational > transactional > authentic > resonant • Behavioural attributes of an effective leader.
Understand how organisations can consult effectively with their workers.	Consultation	2.3	***Cross reference with assessment criteria 6.1 – the role of the health and safety professional*** • The functions and rights of representatives on health and safety (trade union-appointed, elected) reference to Sections 168, 168a, 169, 170 of the Trade Union and Labour Relations (Consolidation) Act 1992 • The four stages to consultation (with reference to HSE's *Involving your workforce in health and safety*, HSG263): > get started: prepare > get organised: plan > get it done: consult and involve > get it right: keep improving • Behavioural aspects associated with consultation – peer group pressures, danger of tokenism, potential areas of conflict • The role of the health and safety professional in the consultative process.

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Assessment criteria	Topic	Ref	Content
Understand what contributes to an effective health and safety culture and climate and the impact that behavioural change programmes can have on culture.	Health and safety culture Behavioural change programmes	2.4	***Cross reference with:*** - ***assessment criteria 2.5 – traditional vs proactive safety management models*** - ***assessment criteria 7.3 – organisational change*** • The meaning of 'health and safety culture' and 'health and safety climate'; what is organisational culture; how organisational culture interlinks with health and safety culture • Indicators of health and safety culture and measuring health and safety climate • What may promote a positive or negative health and safety culture or climate (ie, management commitment and leadership, high business profile of health and safety, provision of information, involvement and consultation, training, promotion of ownership, setting and meeting targets, organisational change, lack of confidence in organisation's objectives and methods, uncertainty, management decisions that prejudice mutual trust or lead to confusion regarding commitment) • Changing the culture: > planning and communication > strong leadership > the need for a gradualist (step-by-step) approach > direct and indirect action to promote change (including cultural benefits from risk assessment) > strong worker engagement > training and performance measurements and the importance of feedback > changes to work environment and the positive and negative impacts this has on workers > building trust in the workforce including psychological confidence ie, workforce know that their views matter and are not afraid to voice an opinion • Problems and pitfalls (ie, attempts to change culture too rapidly, adopting too broad an approach, absence of trust in communications, resistance to change) • The elements and levels of the HSE's *Safety culture maturity model* with reference to OTO 2000/049 report • The concepts of blame, no-blame and just culture (Dekker)

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Assessment criteria	Topic	Ref	Content
		2.4	• Behavioural change programmes: > why behavioural change programmes are used > advantages and disadvantages of behavioural change programmes > the principles of behavioural change programmes • The organisational conditions needed for success in behavioural change programmes.
Outline the main differences between traditional and proactive safety management models.	Traditional and proactive safety management	2.5	***Cross reference with:*** - ***assessment criteria 2.4 – health and safety culture*** - ***assessment criteria 5.2 – health and safety monitoring*** • Traditional safety (sometimes called 'Safety I') > focus on the absence of danger where as few as possible events/actions go wrong (the absence of accidents, errors and violations) > often reactive > main focus is compliance > negative outcome KPIs eg, number of incidents, counting/reporting on accountabilities > people mainly seen as part of the problem/cause > performance variation - should be avoided wherever possible

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Assessment criteria	Topic	Ref	Content
		2.5	• Proactive safety management (sometimes called 'Safety II' and 'Safety Differently') > extension of traditional safety with a different focus (safety is the presence of positives and not the absence of negatives) > ethical responsibility (removing unnecessary bureaucracy - devolve, declutter, decentralise) > reduces risk-based decisions to lowest possible level > continuous learning > people seen as the solution/an essential resource – treat people as experts; talk to the workforce regularly (ask them what they need); listen to the workforce (there may be more than one way to do a job safely) > the benefits of investigating the positives (what goes right rather than what goes wrong) > past success is not a guarantee for future safety – how can success be created > the four varieties of human work (work as imagined, prescribed, disclosed, done) > work as done: - builds trust in the workforce - can identify risks and where potential incidents could come from - events become more foreseeable - learning to improve by analysing normal work > look at low likelihood but high consequence events (unlikely to be considered in 'traditional safety' as events have not happened) > resilience – workers' ability to recover from adverse situation, change and absorb disruptions without failure occurring > performance variation – useful and unavoidable; to be monitored and managed; encourage sharing

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Assessment criteria	Topic	Ref	Content
		2.5	• Some limitations of traditional and proactive safety management: > traditional: - reactive/post event - bureaucratic and compliance driven - authoritarian > proactive: - future is uncertain – cannot foresee all events - predicted situations may not happen (wasted resources – people/time/money) - predictions may not be right (wrong assumptions and arrangements made – incident could still occur) - organisation may be averse to trying the system eg, as it is not as common as 'traditional' safety or it goes beyond traditional beliefs • The effects of proactive safety management on health and safety culture.
Know how perception of risk can affect health and safety in an organisation.	Risk perception	2.6	***Cross reference with assessment criteria 4.2 – managing health and safety risks*** • Human sensory receptors and their reaction to stimuli, sensory defects and basic screening techniques • The process of perception of danger, perceptual set and perceptual distortion • Errors in perception caused by physical stressors • Perception and the assessment of risk, perception and the limitations of human performance, filtering and selectivity as factors for perception.

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Assessment criteria	Topic	Ref	Content
Understand how human failures and factors are classified, connected and can contribute to incidents and how human reliability in the workplace can be improved.	Human failures and factors Improving human reliability	2.7	***Cross reference with assessment criteria 3.1 – competence, training, information and supervision*** **Human failure** • The classification of human failure (with reference to HSG48) • The application of cognitive processing: knowledge-based, rule-based and skill-based behaviour (Rasmussen) and the potential for human failure. ***Cross reference with assessment criteria 7.3 – organisational change*** **Human factors** • What are human factors (with refrence to HSG48): > Job factors: - the role of ergonomics in job design: » the influence of process and equipment design on human reliability » the worker and the workstation as a system » elementary physiology and anthropometry » the degradation of human performance resulting from poorly designed workstations - ergonomically designed control systems in relation to human reliability – ie, examples of applications: production process control panels, crane cab controls, aircraft cockpit, CNC lathe - matching the job to the person: » physical match: design of the workplace and working environment » mental match: consider the individual's information and decision making skills and perception of tasks and risks eg, task complexity - the application of task analysis in predicting the probability and prevention of error > Individual factors: - the relationship between physical stressors and human reliability - the effects of under-stimulation, fatigue and stress on human reliability - the effect of personal attitudes (including risk perception), skills, habits and personality on task demands

Assessment criteria	Topic	Ref	Content
		2.7	> Organisational factors: - the effects of organisational factors on health and safety culture including leadership and commitment at all levels - organisational factors that affect human reliability: patterns of employment, payment systems, shift work - the effect of weaknesses in the health and safety management system on the probability of human failure eg, inadequacies in the setting of standards, policy, planning, information, responsibilities or monitoring - the influence of formal and informal groups within an organisation - organisational communication mechanisms and their impact on human failure probability eg, shift handover communication, organisational communication routes and their complexity, reliability and degree of formality • Contribution of human failure and human factors to incidents. **Improving human reliability** • Initiatives for improving individual human reliability in the workplace: > motivation and reinforcement; workplace incentive schemes; job satisfaction and appraisal schemes • Selection of individuals – matching skills and aptitudes; training and competence assessment; fitness for work.

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Learning outcome 3

You will be able to assess, develop and maintain individual and organisational health and safety competence.

Assessment criteria	Topic	Ref	Content
Understand how providing information, instruction, training and supervision helps to develop and maintain a competent workforce.	Competence, training, information and supervision	3.1	***Cross reference with:*** - ***assessment criteria 2.7 – human failures/factors*** - ***assessment criteria 4.2 – competence relating to risk assessment programmes*** - ***assessment criteria 6.1 – the role of the health and safety professional (in relation to competence)*** • The meaning of competence • The difference between training and competence • The circumstances when training is likely to be required, including: > induction > changes in work activities > introduction of new technology or new equipment > changes in systems of work > refresher training due to declining skills • The groups of people having specific training needs including supervisors, young and vulnerable people; the need for training to be carried out upwards in the organisation • The relationship between competence and supervision (external and self-supervision) • The circumstances where there are specific training needs for certain hazardous types of work equipment (including self-propelled work equipment, chainsaws, woodworking machines, power presses, abrasive wheels) • The scope of information required for the safe use and operation of work equipment, specifically: the conditions under which the work equipment may be used; foreseeable abnormal situations and the action to be taken; and any conclusions to be drawn from experience in usage • The methods by which information and instructions regarding the operation and use of work equipment can be easily understood by those concerned • The requirements for training lift truck operators (basic, specific job training and familiarisation).

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Assessment criteria	Topic	Ref	Content
Recognise the characteristics of and what can be learnt from High Reliability Organisations (HROs).	High Reliability Organisations	3.2	• What is a HRO? • Characteristics of a HRO: > containment of unexpected events > effective problem anticipation > Just Culture > learning orientation through continuous technical training > mindful leadership • The lessons that other organisations can learn from HROs.

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Learning outcome 4

You will be able to understand risk management including the techniques for identifying hazards, the different types of risk assessment, considerations when implementing sensible and proportionate additional control measures and developing a risk management strategy.

Assessment criteria	Topic	Ref	Content
Recognise and apply different hazard identification techniques.	Hazard identification techniques	4.1	• Types of hazard identification techniques: using observation, task analysis, checklists, and failure tracing techniques such as hazard and operability studies • The importance of worker input.
Explain the principles of implementing and maintaining a sensible risk management programme.	Managing health and safety risks	4.2	***Cross reference with:*** - ***assessment criteria 3.1 – competence, training, information and supervision*** - ***assessment criteria 2.6 – risk perception*** - ***assessment criteria 6.1 – the role of the health and safety professional*** • The meaning of the term sensible risk management including the importance of proportionality when assessing and controlling risk • Principles of and differences between qualitative, semi-quantitative and quantitative assessments • How to engage workers at all levels in the risk assessment process • When dynamic risk assessments/situational awareness should be used • The link between the outcomes of risk assessments and the development of risk controls • Factors affecting the choice of sensible and proportionate control measures: long term/short term, applicability, practicability, cost, proportionality, effectiveness of control, legal requirements and associated standards, the competence of workers and training needs relevant to preferred controls • Organisational arrangements for implementing and maintaining an effective risk assessment programme including: procedures, recording protocols, training, competence, responsibilities, authorisation and follow-up of actions, monitoring and review • Acceptability/tolerability of risk; principles in HSE's *Reducing risks, protecting people* (R2P2) • Influence of the Financial Reporting Council Guidance on Risk Management and Internal Control (formerly the Turnbull guidance) on health and safety risk management.

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Assessment criteria	Topic	Ref	Content
Outline what should be considered in a risk management strategy for an organisation.	Risk management	4.3	• Organisational risk profiling: its purpose (including to convince top management when there is or is not a problem), practicality and organisational context • Why health and safety risks must be integrated into main business risk • The concepts of avoidance, reduction, transfer and retention with/without knowledge within a health and safety management system, with relevant examples (eg, redesign of tasks, automation of process, insurance policies, use of specialist contractors) • Circumstances when each of the above strategies would be appropriate • Factors to be considered in the selection of an optimum solution based on relevant risk data • The principles and benefits of risk management in a global context.

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Learning outcome 5

You will be able to develop and implement proactive and reactive health and safety monitoring systems and carry out reviews and auditing of such systems.

Assessment criteria	Topic	Ref	Content
Explain different types of loss causation theories/ models, tools and techniques and how loss data can be analysed.	Loss causation Quantitative analysis of data	5.1	**Loss causation theories/models, tools and techniques** • Understand some of the underlying principles connecting causes and outcomes: > incidents with the same cause(s) usually have a range of possible outcomes eg, near misses to injuries to fatalities > there is an underlying randomness to outcomes: - often difficult to predict exactly when or where incidents will happen or their severity - whether severity is minor or major can just be a matter of chance - more severe incidents will happen sooner or later if you just leave it to chance > consideration should be given to: - potential outcomes as well as actual outcomes - tackling root causes to avert far more serious outcomes > cautionary use of incident ratio data studies eg, Bird's Triangle: - still useful in communicating the importance of safety - limitations include: » accuracy in statistics – connection between near misses and serious injury eg, not all incidents are realistically capable of leading to a fatality » consider numbers as guide rather than an absolute (basic shape more important than detail) » does not consider failure of management systems (incidents often seen as being caused by operator fault) » usually look at incidents as a single sequence of events influenced by an intervention (multi-causality theories are ignored) • Understand the following theories/models, tools and techniques: > multi-causality theory (immediate, underlying and root causes) > latent and active failures: Reason's model of accident causation (Swiss Cheese Model) > the principles and application of root cause analysis tools: 5-Whys, fishbone diagram, fault tree, event tree and the Bowtie model.

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Assessment criteria	Topic	Ref	Content
		5.1	**The quantitative analysis of accident and ill-health data** • The impacts that statistics can have on an organisation and organisational reputation • Methods of calculating loss rates from raw data: accident/incident frequency rate, accident incidence rate, accident severity rate, ill-health prevalence rate • The limitations of accident and ill-health data eg, importance of representative samples, sampling a population, errors in data.
Outline the purpose and use of health and safety performance measurement, monitoring and review.	Measuring and monitoring	5.2	**The purpose and use of health and safety performance measurement** ***Cross reference with assessment criteria 2.5 – traditional vs proactive safety management models*** • The meaning of key performance indicators and their role in setting business objectives • The types, benefits and limitations of leading and lagging indicators • The assessment of the effectiveness and appropriateness of health and safety objectives and arrangements, including control measures • Making recommendations based on performance, for the review of current health and safety management systems • The benefits of measuring what goes right (proactive safety management). **Health and safety monitoring** • The objectives of active monitoring – to check that health and safety plans have been implemented and to monitor compliance with the organisation's systems/procedures and legislative/technical standards • The objectives of reactive monitoring – to analyse data relating to accidents, ill-health and other loss causing events • The distinction between, and applicability of, active/reactive, objective/subjective and qualitative/quantitative performance measures. **Health and safety monitoring and measurement techniques** ***Cross reference with:*** - ***assessment criteria 2.5 – traditional vs proactive safety management models*** - ***assessment criteria 6.1 – the role of the health and safety professional*** • Collecting and using sickness absence and ill-health data to develop occupational policy, strategy and targets

Assessment criteria	Topic	Ref	Content
		5.2	• The role, purpose and key elements of health and safety audits (improvement opportunities), workplace inspections, safety tours, safety sampling, safety surveys, safety conversations and behavioural observations • The in-house health and safety professional's role in audits carried out by external/third parties eg, during a certification audit • Comparison of previous performance data with that of similar organisations/industry sectors and with national performance data • Use and potential benefits of benchmarking. **Reviewing health and safety performance** ***Cross reference with assessment criteria 6.1 – the role of the health and safety professional*** • Need for formal and informal performance reviews • The importance of reviewing positive outcomes (what's gone well) • The review process • The inputs to a review process – internal performance data, health and safety objectives, organisational arrangements and change, external standards and expectations • The outputs from a review process – actions and improvement plans, stakeholder reports, performance targets.

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Learning outcome 6

You will be able to continually develop your own professional skills and ethics to actively influence improvements in health and safety by providing persuasive arguments to workers at all levels.

Cross reference with:

- *assessment criteria 2.2 – leadership*
- *assessment criteria 2.3 – consultation*
- *assessment criteria 3.1 – competence*
- *assessment criteria 4.2 – managing health and safety risks*
- *assessment criteria 5.2 – audits*
- *assessment criteria 7.3 – organisational change*

Assessment criteria	Topic	Ref	Content
Describe the role of the health and safety professional, the essential communication and negotiation skills needed and how to use financial justifications to aid decision making.	Professional skills	6.1	**The role of the health and safety professional** • Why a health and safety professional must understand what can affect their organisation's ability to manage its health and safety responsibilities (the context of the organisation) • The role of the health and safety professional in protecting workers, employers and third parties and the potential conflicts that this brings • The importance of a health and safety professional recognising the limits of their own competence • The need for health and safety professionals to evaluate and develop their own practice to maintain competence • The role of the health and safety professional in mentoring and supporting the development of health and safety competency in other relevant workers • The distinction between leadership and management and how this can apply to a health and safety professional • The role of a health and safety professional in encouraging positive leadership and supporting managers at all levels to exhibit committment to a safe and healthy workplace • The need to adopt different management styles (which may include problem solving) dependent on any given situation • The role of the health and safety professional in the development, implementation, maintenance and evaluation of health and safety management systems • Why workers' information needs to be handled confidentially (General Data Protection Regulation requirements) • The health and safety professional's role in enabling work activities as part of proportionate and sensible risk management • The contribution of the health and safety practitioner in achieving the objectives of an organisation • Health and safety professional's role in change management: > involved from the start rather than at the end of the process or when things go wrong > how to influence organisational change > use plan-do-check-act to help solve issues

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Assessment criteria	Topic	Ref	Content
		6.1	• The meaning of the term 'ethics' • The practical application of ethical principles (ie, honesty, respect, integrity, personal conflicts of interest) that underpin health and safety practitioner codes of conduct. **Effective communication and negotiation skills** • Why effective communication is important • The need for health and safety professionals to consult and negotiate with others when developing an organisation's health and safety objectives • Influencing ownership of health and safety at all levels of an organisation via: > participation > management accountability > consultation > feedback • The benefits of the health and safety professionals engaging with stakeholders • Ways that the health and safety professional can understand and influence different stakeholder groups • The importance of receiving and acting on feedback on health and safety performance from all stakeholders • The use of different types of communication media available to promote the health and safety message ie, verbal, electronic, printed, pictorial and social • Why an organisation's top management (Chief Executive, Managing Director etc) should be media trained eg, public attention in the event of a major incident • Procedures for resolving conflict and introducing change • Ensuring roles and responsibilities are clear, understood by all workers and implemented. **The health and safety professional's use of financial justification to aid decision making** • The significance of budgetary responsibility, including profit, loss and payback analysis • Importance of recognising who is the responsible budget holder and how they can be influenced to make appropriate health and safety decisions • Cost-benefit analysis in relation to risk control decisions (organisational, design, planning, operational) • The internal and external sources of information that should be considered when determining costs • The necessity of both short- and long-term budgetary planning when seeking approval for new initiatives, projects and campaigns.

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Learning outcome 7

You will be able to develop a health and safety policy strategy with your organisation (including proactive safety, Corporate Social Responsibility and the change management process.

Cross reference with:

- ***assessment criteria 2.2 – leadership***
- ***assessment criteria 10.2 – mental ill-health***

Assessment criteria	Topic	Ref	Content
Outline societal factors that could influence an organisation's health and safety policy and priorities.	Societal factors	7.1	• Economic climate, government policy and initiatives • Industry/business risk profile • Globalisation of business • Migrant workers • National level of sickness absence • Incapacity • Societal expectations of equality eg, adjustments for workers with disabilities.
Outline the four types of Corporate Social Responsibility (CSR) and the benefits it brings to organisations.	Corporate Social Responsibility	7.2	***Cross reference with assessment criteria 9.1 – supply chains*** • What is CSR ie, socially and environmentally friendly actions not only required by law, but going beyond compliance • The four types of CSR: > philanthropic > environmental protection > organisation diversity > volunteering commitments • The benefits for organisations from CSR.
Outline why and how organisational changes should be managed.	Organisation change	7.3	***Cross reference with:*** - ***assessment criteria 2.7 – human factors*** - ***assessment criteria 6.1 – the role of the health and safety professional*** • Why organisational change needs to be effectively managed ie, impacts on safety and health (especially mental health) of workers

Assessment criteria	Topic	Ref	Content
		7.3	• Use of the Kubler-Ross Change Curve to manage the change process: > shock/denial: share relevant information with the workforce – irrelevant details may cause panic > frustration/anger: expect this behaviour, change managers to remain calm and communicate and/or respond quickly, frequently, clearly and logically with workers > bargaining: be flexible and open to worker suggestions but keep them advised of organisational expectations following change > depression: listen to workers, positive actions to reward those with new roles and responsibilities eg, financial rewards, fun/formative training > experiment: initial engagement with the new situation; develop workers' capabilities/ competences > acceptance/decision: reinforce purpose of change, update change strategy based on lessons learned from previous stages • Key principles of managing organisational change > identify the direct and indirect effects of proposed changes on control of hazards > avoid too many simultaneous changes or unnecessary changes > planning should be thorough, systematic and realistic > risk assessment to consider risks and opportunities resulting from the change and risks from the change process > consultation with workers – before, during and after the change > identify key tasks and responsibilities and ensure they are successfully transferred > training and supervision required for workers in new roles.

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Learning outcome 8

You will be able to contribute to health and safety legal actions.

Cross reference with assessment criteria 1.1-1.8 – criminal and civil law

Assessment criteria	Topic	Ref	Content
Outline how the health and safety professional may contribute to relevant civil proceedings.	Civil proceedings - contribute to a defence against damages claims	8.1	***Cross reference with assessment criteria 1.4 – Understand the liability for damages (including foreseeability and date of knowledge of risk), the common law 'duty of care' and the duties owed by an employer to its workers.*** • Appreciate the benefit of maintaining an effective information management system • Understand the need to retain information for minimum time periods consistent with the Limitation Act 1980 • Understand the importance of objective investigation; understand the negative and positive consequences of admitting liability in an incident (accident) investigation report; the difference between an incident investigation and a civil claims investigation • Understand the concept of legal privilege; understand how legal privilege may be waived • The need for training for Directors, Managers, Health and Safety Managers etc relating to legal privilege.
Outline how the health and safety professional may contribute to a Coroner's inquest following a fatal accident at work.	Coroner's inquests	8.2	• Understand the role of the Coroner's inquest - inquiry to establish the facts/how the person died; role of the safety professional in giving evidence • Understand the implications for the organisation of the Coroner's conclusions.
Outline how the health and safety professional may contribute to a defence in criminal proceedings.	Contribute to a criminal proceedings defence	8.3	• Understand the importance of collating documentary evidence for use in the defence case • Understand the extent to which health and safety legal requirements must be met, with reference to absolute, practicable and reasonably practicable duties • Assist the employer in showing that reasonably practicable steps have been taken • Understand the need to brief management on the facts of the case, relevant legal requirements, the material breach, options available to enforcing authorities, remedial action • Brief managers on the grounds for appeal against notices • Understand the importance of giving advice as a safety professional within the limits of own expertise.

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Assessment criteria	Topic	Ref	Content
Understand the ethical issues associated with contributing to legal actions and the potential for conflicts of interest.	Ethical issues	8.4	• Recognise potential conflicts of interest - duty to employer v duty to the court/claimant/prosecution ***Cross reference assessment criteria 6.1*** • Duty not to interfere with or alter evidence.

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Learning outcome 9

You will be able to manage contractors and supply chains to ensure compliance with health and safety standards.

Assessment criteria	Topic	Ref	Content
Outline the principles of managing health and safety in supply chains and the general control of contractors.	Contractors Supply chains	9.1	***Cross reference with assessment criteria 7.2 – Corporate Social Responsibility*** • Selection of contractors: > clear definition of roles and responsibilities for the start of contract > the purpose of preferred lists and pre-qualification and safety schemes in procurement such as CHAS, Gas Safety Register etc > organisational procurement process to outline health and safety criteria for the selection of contractors > contractors' capability, consider: evidence of experience in the same type of work; checkable references from previous clients; membership of trade or professional bodies; accident/ill-health statistics; evidence of prosecutions (convictions) and notices (HSE Register); evidence of qualifications for all relevant workers; evidence of skills and ongoing training (especially health and safety training); risk assessments and method statements; evidence of how sub-contractors are selected; recognition of their limitations > demonstration that appropriate resources and equipment are adequate and available for work to proceed > additional requirements when selecting a specialist contractor eg, occupational hygienists: - evidence of relevant competency ie, qualifications, member of a trade or professional body at a relevant level that will include completion of continuing professional development - conformation to relevant code(s) of ethics and/or demonstration of independence, impartiality and integrity - ask contractor to demonstrate why they are competent to do the work - evidence that good practice/industry standards are followed

Assessment criteria	Topic	Ref	Content
		9.1	> procedures in place for ensuring co-ordination between organisation and contractor of: - information sharing eg, site rules - hazard reporting - control of access to hazardous areas - emergency procedures - safe systems of work (including permits-to-work) - assessment of exposure to hazardous substances - sign in/sign out - active monitoring - assessing number of incidents and special arrangements • Managing health and safety within supply chains: > what is a 'focal company': - rule/govern the supply chain - provide direct customer contact - design the product or service offered > the role of a 'focal company' in supply chains eg, drive better health and standards across supply chains by expectation of minimum health and safety standards, communication and training > formal health and safety management systems' role in supply chains: - standards require a minimum level of compliance - certification of systems demonstrates confidence by a third-party auditor - reduced audit/inspection costs eg, organisations do not have to be audited separately by each of their customers > management of contractors within the supply chain: - suitable communication methods between all parties in the supply chain of relevant information - co-operation between all supply chain parties - suitable training on site health and safety issues before work begins - joint control procedures eg, same procedure for issue of permit-to-work between all contractors, reporting incidents etc - contractor evaluation during and after projects (including managing projects that go wrong) • Awareness of where modern slavery may be happening in supply chains • Duty to manage modern slavery in supply chains.

Unit ND2: Do – controlling workplace health issues (UK)

Learning outcome 10

You will be able to advise the organisation on a range of common workplace health issues/hazards including how these can be assessed and controlled and the legal duties associated with these issues/hazards.

Assessment criteria	Topic	Ref	Content
Understand how to treat disability and sickness fairly in the workplace and the role of an occupational health service.	Occupational health services Equality in the workplace	10.1	**The principles and benefits of vocational rehabilitation** • The basic principles of the bio-psychosocial model and how it relates to the health of individuals • The elements of the Equality Act 2010 that relate to health and wellbeing at work: > the definition of disability > employer responsibilities > the meaning of reasonable adjustment within the Act • The role and benefits of 'pre-placement' assessment • The role of 'Fit Note' in returning an individual back to work following sickness • Managing long-term sickness absence and capability (with reference to NG146 – NICE) • The meaning of vocational rehabilitation • The benefits of vocational rehabilitation within the context of the worker and the employer • Overcoming any barriers to ensure that rehabilitation of the individual is effective • What needs to be considered in a risk assessment prior to return to work • Liaison with other disciplines in assessing and managing fitness for work with specific reference to: existing health problems, fitness to work, discrimination • The role of agencies that can support employers and workers eg, Access to Work, 'Fit for Work' service. **Occupational health services** • The roles of typical occupational health specialists: occupational health physician, occupational health nurse, occupational health adviser, occupational health technician • Typical activities offered by an occupational health service: > health promotion > health assessment > advice to management > treatment > calling on specialist help outside of the unit when issues fall outside of the teams' competence eg. ergonomists > medical and health surveillance.

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Assessment criteria	Topic	Ref	Content
Explain how organisations can manage mental ill-health within the workforce, the impacts of wellbeing strategies on mental health, how to recognise when there may be risks to the workforce from violence and the problems associated with lone working.	Mental ill-health Wellbeing Workplace violence Lone working	10.2	**Mental ill-health** ***Cross reference with:*** - ***assessment criteria 10.3 – health surveillance*** - ***assessment criteria 11.12 – workplace transport and work-related driving*** • Occupational circumstances that could lead to workplace mental ill-health issues ie, lone working, agile working (hot-desking, home working), shift working (especially night shifts), zero-hour contracts, violence, aggression, bullying, harassment and organisational change > understanding the impact on a worker's mental health if they have to work second jobs (including the reasons for this such as personal debt issues) • The impact of chronic pain on a worker's mental health (especially pain from injuries from a workplace accident/health condition) • Depression and anxiety > differences between them > characteristics > effects on an individual's health and behaviour • The effects of fatigue on mental health • The meaning of work-related stress and its relationship to mental health conditions • The causes of ***work-related*** mental ill-health relating to organisation, job and individual: > organisation of work: working hours, long hours, shift work, unpredictable hours, changes in working hours > workplace culture: communication, organisational structure, resources, support > working environment: space, noise, temperature, lighting, etc > job content: work load, time pressures, boredom, etc > job role: clarity, conflict of interests, lack of control, etc > relationships: bullying and harassment, verbal/physical abuse > home-work interface: commuting, childcare issues, relocation, etc • Recognition that common mental health problems found within the workplace are rarely entirely due to work-related factors but are a combination of a number of factors.

Assessment criteria	Topic	Ref	Content
		10.2	**Mental health controls** • Why health and safety professionals, occupational health services (where relevant) and the organisation's HR department should work together to manage workers' mental ill-health conditions • Recognition that most people with mental health problems can continue to work effectively and how this can be facilitated/supported by employers • The identification and assessment of work-related mental ill-health at individual and organisational level (eg, discussions, absence data, interviews, surveys, questionnaires) • The types of interventions for mental ill-health (reference to the World Health Organization's world health report): > prevention (primary prevention/specific protection) > treatment (secondary prevention) > rehabilitation (tertiary prevention) • How workers with mental ill-health conditions can be managed in the workplace: > speaking to workers as soon as it is recognised that there may be an issue > use routine management tools to identify and tackle issues eg, appraisals, scheduled meetings > support for workers who become emotionally distressed at work > support for workers with on-going mental health conditions eg, flexibility in work patterns to suit the worker's needs > encourage workers to develop coping strategies to help manage their condition > use of 'advance statements' > ensure that the worker knows where to get help and support for their mental ill-health condition outside of the workplace • The benefits of good nutrition, exercise and sleep on mental ill-health conditions • The HSE stress management standards and their role in assessing and managing work related stress (demand, control, support, relationships, role, change).

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Assessment criteria	Topic	Ref	Content
		10.2	**Wellbeing** • The relationship between wellbeing and mental health • How health and wellbeing workplace strategy can help to improve workers' health (mental and physical): > benefits to the organisation of wellbeing strategies ie, costs of initiatives vs costs of lost working time due to preventable ill-health conditions, absenteeism, presenteeism and worker retention; happier, healthier and more engaged workforce leading to higher productivity etc > support from top management for initiatives; appointment of board level wellbeing champions > types of wellbeing initiatives that could improve ill-health (mental or physical) eg, subsidised gym membership; free fruit; employee assistance programmes; mindfulness/meditation sessions; free access to medical support such as treatment for mental ill-health conditions, physiotherapy; medical screening; financial education > the role of education and support programmes in promoting wellbeing in the workforce > why wellbeing initiatives need to be relevant to the majority of workers > working with partners to improve health and wellbeing eg, occupational health services (internal or external to the organisation) > involving and empowering all workers eg, appointing workforce wellbeing champions to get involved in wellbeing initiatives, use of health assessments to empower workers to manage their own wellbeing > how monitoring, reviewing and communicating the health and wellbeing strategy can positively influence the workforce • The link between health and wellbeing and safety culture • Why line managers must be trained on wellbeing strategies and initiatives.

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Assessment criteria	Topic	Ref	Content
		10.2	**Work-related violence** • The definition of work-related violence (reference to HSE's *Violence at work* INDG69) • What is harassment (with reference to HSE's document *Preventing workplace harassment and violence*) • The physical and psychological effects • The factors likely to increase the risk of work-related violence: > people working with the public > the caring/teaching professions > working with people with mental ill-health conditions > working with or in the vicinity of alcohol/drug impaired people > working alone > home visiting > handling money/valuables > inspection and enforcement duties > retail and licensed trade • Four stages for effectively managing work-related violence (with reference to HSE's *Violence at work* INDG69). **Lone working** • What is a lone worker (with reference to HSE's *Protecting lone workers*, INDG73)? • How general risk assessments can be used to avoid and control risks to lone workers • The impact on risk to lone workers of: > worker issues: vulnerability, experience and training > violence > mental health issues (including stress/mental health and wellbeing) > worker's medical conditions (suitable for working alone) > workplace eg, is it isolated, other people's premises etc > high-risk work activities ie, confined space working that requires supervision > communication where English is not a worker's first language > emergency situations > specific issues relating to home working: minimal supervision, support for when things go wrong, working conditions (set up of a suitable workstation), managing mental health conditions that may arise from feeling isolated, recognition that home working will not suit all workers

Assessment criteria	Topic	Ref	Content
		10.2	• Particular problems facing lone workers: medical conditions, training, supervision, emergency procedures, lifting objects that are too heavy for one person, more than one person needed to operate essential controls or transport, mental health issues arising from isolation from the rest of the workforce • Alternatives, precautions (including emergency devices and personal communications) and safe working procedures for lone working.
Understand the requirements for health surveillance.	Health surveillance Medical surveillance	10.3	***Cross reference with:*** - ***assessment criteria 10.2 – mental ill-health*** - ***assessment criteria 10.7 – asbestos*** - ***assessment criteria 10.11 – noise*** - ***assessment criteria 10.12 – vibration*** - ***assessment criteria 10.15 – temperatures in moderate and extreme thermal environments*** - ***assessment criteria 11.12 – workplace transport and work-related driving*** • The distinction between general health assessment and health surveillance • The elements of the HSE health surveillance cycle (with reference to http://www.hse.gov.uk/health-surveillance/assets/documents/health-surveillance-cycle.pdf) • The legal requirements for *medical* surveillance with reference to Control of Substances Hazardous to Health Regulations, Control of Lead at Work Regulations, Control of Asbestos Regulations and Ionising Radiation Regulations • The legal requirement for and the circumstances when health surveillance is required when working with hazardous substances, noise and vibration (eg, where pre-existing conditions are present, type of work carried out) > the use of audiometry to measure hearing loss; method, interpretation of audiograms and how the results should be used > the advantages and disadvantages of audiometry programmes, including legal implications • Keeping health records and medical records confidential • The circumstances when biological monitoring must be carried out: > the role of biological monitoring guidance values (in EH40) > the relative advantages and disadvantages when compared to airborne monitoring

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Assessment criteria	Topic	Ref	Content
		10.3	• The duty to offer health assessments for night workers under The Working Time Regulations 1998 (Regulation 7) > how shift working can be managed with reference to HSE's HSG256 > what is fatigue (reference to HSE's *Human factors: Fatigue* website https://www.hse.gov.uk/humanfactors/topics/fatigue.htm)? > how fatigue should be managed ***Cross reference with assessment criteria 10.2 – mental ill-health*** • Forms of health surveillance that are a good idea to carry out although there is no legal requirement > workers with known mental ill-health conditions (especially work-related stress) > work at height > driving occupations eg, fork-lift truck drivers > alcohol/substance abuse at work • How to establish and maintain an alcohol/drugs policy and tie in with other relevant policies/procedures eg, disciplinary procedures • Legal implication of drugs/alcohol testing: Human Rights Act 1998 (Schedule 1, Article 8: the right to respect for private and family life); General Data Protection Regulation (EU) 2016/679 (worker's personal information is managed properly) • The benefits of pre-employment health screening for alcohol/drugs (especially for high-risk occupations) • When testing for alcohol/drugs should be carried out eg, for high-risk occupations (construction) or jobs where driving is involved • The disadvantages of alcohol/drugs testing.
Understand how hazardous substances can affect the human body.	Hazardous substances	10.4	***Cross reference with assessment criteria 10.7 – asbestos*** • The structure and function of human anatomical systems: respiratory, digestive, circulatory, nervous system and the special sensory organs (skin, eyes and nose) • The concept of target organs and target systems in relation to attack by hazardous substances; local and systemic effects • The body's defensive responses (innate and adaptive) with particular reference to the respiratory system • The distinction between inhalable and respirable dust.

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Assessment criteria	Topic	Ref	Content
Carry out and evaluate an assessment of health risks from hazardous substances, and evaluate the current, and any additional control measures, that may be required.	Health risks from hazardous substances	10.5	• The aims of REACH with reference to https://www.hse.gov.uk/reach/whatisreach.htm • The purpose of classification and the role of hazard and precautionary statements for hazardous substances with reference to the *Globally Harmonised System of Classification and Labelling of Chemicals* (GHS) and the EC Regulation No. 1272/2008 *Classification, Labelling and Packaging of Substances and Mixtures* (CLP) • Health hazard classes (meaning of terms, with reference to chapter 3 of GHS) – acute toxicity, skin corrosion, skin irritation, serious eye damage, eye irritation, respiratory sensitisation, skin sensitisation, germ cell mutagenicity, carcinogenicity, reproductive toxicity, specific target organ toxicity (single and repeated exposure), aspiration hazard • Information on substances or preparations/mixtures which have the potential to cause harm to be communicated to users: the typical content (format and types of data) of labels; Safety Data Sheets; Chemical Safety Assessments/Reports • What should be considered in the assessment of risks to health from hazardous substances (with reference to COSHH, Regulation 6) • Review of risk assessment – to take place when there is reason to suspect it is no longer valid or where significant change to the work to which the assessment relates has occurred • Evaluation of existing and consideration of additional control measures should consider the prevention and adequate control of exposure to hazardous substances (COSHH Regulation 7).
Understand the role of epidemiology and toxicological testing.	Epidemiology and toxicology	10.6	• Human epidemiological investigations: the role of case control studies and cohort studies (retrospective and prospective) • The role of toxicological testing: vertebrate animal testing, Ames test, Qualitative/Quantitative Structure Activity Relationship (QSAR), 'read across' and grouping • The meaning of dose-response relationship, NOAEL, LD50, LC50.
Summarise how organisations can comply with the Control of Asbestos Regulations 2012.	Asbestos	10.7	***Cross reference with:*** - ***assessment criteria 10.3 – health surveillance*** - ***assessment criteria 10.4 – hazardous substances*** - ***assessment criteria 11.11 – construction*** • Who is the 'dutyholder' under the Control of Asbestos Regulations 2012 (including co-operation between dutyholders in shared premises) • Dutyholders responsibilities with reference to Regulation 4 of the Control of Asbestos Regulations 2012 • When and why a 'management' and 'refurbishment and demolition' survey should be carried out

Assessment criteria	Topic	Ref	Content
		10.7	• What should be included in a written asbestos record and management plan for non-domestic premises (Regulation 4 of the Control of Asbestos Regulations 2012) • The differences between the following types of asbestos work: > non-licensed work > notifiable non-licensed work > licensed and notifiable work • What should be included in a suitable and sufficient risk assessment for the different types of asbestos work • The use of specialist competent contractors for removal and disposal of asbestos; checking competence of specialist contractors.
Describe different types, use and maintenance of ventilation systems and Personal Protective Equipment (PPE).	Ventilation and PPE	10.8	**Ventilation** • The uses and limitations of dilution ventilation • The purpose of the typical components of an LEV and their function: hood (enclosing, receiving, capturing), ducting, air cleaner/arrestor, air mover (engine/fan), discharge/exhaust • Source strength (area from which the contaminant arises) and capture zones • Thorough examinations of LEV > the need for routine checks > the legal requirements for examinations/inspections > the competence of those carrying out the testing > the frequency of testing > understanding the risks from the system > co-operation between employer and examiner > the sources of information available to the examiner > the equipment required for testing > the three stages to carrying out testing > report on LEV testing > the interpretation of results and implementing recommendations.

Assessment criteria	Topic	Ref	Content
		10.8	**PPE/RPE** • The requirements of the Personal Protective Equipment at Work Regulations 1992 in relation to hazardous substances • The types of PPE for use with hazardous substances (chemical and biological) • Respiratory protective equipment (RPE): > the types of respirators and breathing apparatus and their applications and limitations > the selection of RPE: - atmosphere/substance-related issues: consideration of likely oxygen deficiency (ie, BA vs respirator); the level of protection required (significance of assigned protection factors); the type of filter required (for respirators) - task and work area related issues: work rate, duration; extremes of temperature and/or humidity; cruciality of clear vision, communications and mobility; space constraints; tools used; presence of explosive atmospheres - wearer-related issues including face-fit testing: fit/comfort/acceptability issues caused by beards, face-marking, spectacles, compatibility with other protective equipment or head coverings; medical conditions ie, allergies to latex - quality-related issues: conformity with relevant standards • Skin and eye protection: > types of skin and eye protection and their applications and limitations > selection: - substance-related issues eg, chemical compatibility, level of protection required - task-related issues eg, duration (breakthrough time); choice between dexterity vs durability; choice of gloves vs gauntlets - wearer-related issues eg, fit/comfort, compatibility, acceptability - quality-related issues: conformity with relevant standards • The storage and maintenance of PPE • The need for training in the correct use of PPE including the duty to ensure that PPE is worn correctly when needed.
Recognise when workplace monitoring for hazardous substances is needed.	Hazardous substances monitoring	10.9	• The meaning of Workplace Exposure Limits (WELs) and where the data can be found (EH40) • The significance of short- and long-term exposure limits (STEL, LTEL) and calculation of time-weighted average (TWA) values

Assessment criteria	Topic	Ref	Content
		10.9	• Monitoring > when it is required/what should be monitored > selecting the right people to take part in personal monitoring/sampling > how the organisation can select a competent occupational hygienist > the health and safety professional's role in specifying the type of monitoring required > the role of the occupational hygienist > type of equipment for substance monitoring ie, solids vs vapours/gases > monitoring strategy (with reference to HSG173) • Interpreting a hygienist's report, ensuring the strategy and methods are suitable and that results are valid, reliable, representative and correctly evaluated relative to any exposure standards.
Outline where biological agents are likely to be encountered in the workplace and how these can be controlled.	Biological agents	10.10	• The main types of biological agent (fungi, bacteria, viruses, protozoa) and sources (human, animal, plants and environmental); with examples in each case • The special properties of biological agents (rapid mutation, incubation period, infectious, rapid multiplication) • The special properties of Zoonotic/vector-borne diseases • Additional control measures that *may* be required for *general/incidental* exposure to biological agents eg, working with animals, infectious people, handling waste material contaminated with micro-organisms, working in sewers: > avoid exposure wherever possible eg, use of remote cameras for sewer work > appropriate training for relevant workers > implement suitable disinfection procedures > arrangements for safe collection, storage, transport and disposal of contaminated waste > vaccinations for known biological agents that could cause zoonotic diseases > hygiene measures to prevent or reduce the accidental transfer of a biological agent including: - provision of appropriate and adequate washing and toilet facilities - prohibition of eating, drinking, smoking and application of cosmetics in areas where biological agents are likely to be present > use of appropriate PPE.

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Assessment criteria	Topic	Ref	Content
Recognise, assess and control noise risks in the workplace.	Noise	10.11	***Cross reference with assessment criteria 10.3 – health surveillance*** • The basic concepts of sound pressure, sound intensity, frequency, the decibel scale – dB(A) and dB(C), equivalent noise dose (LA_{eq}, $L_{EP,d}$, weekly and peak) • The physical and psychological effects on the individual; types of hearing loss with reference to their significance in the workplace, the acute and chronic physiological effects of exposure to high noise levels (ie, noise induced hearing loss, instantaneous hearing loss, temporary threshold shift, permanent threshold shift, Tinnitus) • Noise risk assessment and planning for control (with reference to HSE's L108: *Controlling noise at work*) • The use of noise calculators to determine mixed exposures (reference to the HSE's online calculator) • Legal requirements and duties to manage exposure to noise (including lower and upper exposure action values and exposure limit values) as required by Control of Noise at Work Regulations 2005 • The hierarchy of noise control: > eliminate/control at source (substitution, damping, workplace layout (eg, relocation of all noisy equipment), re-design of equipment/task, maintenance, purchasing policy) > control along transmission path: - the behaviour of sound at interfaces – transmission, reflection, absorption - sound reduction indices and absorption coefficients and their use in materials selection - techniques of damping, isolation, diffusion, barriers, acoustic enclosures, distance - active noise cancellation > control exposure at the receiver: acoustic havens, hearing protection zones, hearing protection (types and selection based on SNR and HML methods and problems of over protection), limiting exposure time, role of health surveillance (audiometry – ***cross reference with assessment criteria – 10.3***); the advantages and disadvantages of wearable technologies.
Recognise, assess and control vibration risks in the workplace.	Vibration	10.12	***Cross reference with assessment criteria 10.3 – health surveillance*** • The basic concepts of displacement, velocity, amplitude, frequency, acceleration and vibration dose A(8) • Whole-body vibration (WBV) > groups of workers at risk > physiological and ill-health effects from exposure to WBV

Assessment criteria	Topic	Ref	Content
		10.12	• Hand-arm vibration (HAV) > groups of workers at risk > physiological and ill-health effects from exposure to HAV > aggravating factors eg, low temperatures, smoking > use of the Stockholm scale to indicate severity • The use of vibration calculators to determine mixed exposures • Vibration risk assessment and planning for control (with reference to HSE's L140: Hand-arm vibration and L141: Whole body vibration) • Practical control measures to prevent or minimise exposure with reference to L140 – Part 2 (HAV) and L141 – Part 3 (WBV); the advantages and disadvantages of wearable technologies.
Recognise different radiation risks in the workplace and how they are controlled.	Radiation	10.13	***Cross reference with assessment criteria 11.11 – construction, demolition and excavation*** • The distinction between ionising and non-ionising radiation • The electromagnetic spectrum: > Gamma ray, X-ray, optical (ie, ultraviolet (UV), visible, infra-red (IR)) and radiofrequency (ie, microwaves, radio waves) with examples of origins and sources (occupational and natural) > electromagnetic (EM) wave properties – wavelength, frequency, energy • Particulate radiation properties (alpha, beta, neutrons), with examples of origins and sources (occupational and natural). **Non-ionising radiation** • Sources of non-ionising radiation: > workplace examples: leisure industry, manufacturing, healthcare, research, telecommunications systems > naturally occurring (sunlight): indoor/outdoor work > laser sources in workplaces: entertainment, retail, manufacturing, healthcare, research • The routes and effects of exposure, both acute and chronic: > damage to eyes: early onset of cataract risk, photokeratitis and photo-conjunctivitis (arc eye), photochemical damage to the retina (blue light hazard), damage to the eyes from laser beams/Intense Pulsed Light (IPL) including blindness > damage to skin from non-ionising radiation including lasers: reddening of the skin (erythema), burns, skin cancer

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Assessment criteria	Topic	Ref	Content
Recognise different radiation risks in the workplace and how they are controlled.	Radiation	10.13	• What should be considered when carrying out a general non-ionising/optical radiation risk assessment (reference to the Control of Artificial Optical Radiation at Work Regulations 2010) and EMF exposure assessment (reference to the Control of Electromagnetic Fields at Work Regulations 2016) • The control measures to prevent or minimise exposure to non-ionising radiation both generated in workplaces and naturally occurring including: > design > siting > direction control > reduction of stray fields/beams > screening > enclosures > distance > safe systems of work > instructions > training > personal protective equipment. **Ionising radiation** • Sources of ionising radiation: > workplace examples: manufacturing, healthcare, research, power generation > naturally occurring: radon • The routes and effects of exposure to each type of ionising radiation (alpha, beta, gamma, x-rays, neutrons): > somatic (early/acute, late/chronic) > genetic • What matters should be considered when carrying out an ionising radiation risk assessment for new activities (with reference to the Approved Code of Practice, L121 for the Ionising Radiation Regulations 2017)

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Assessment criteria	Topic	Ref	Content
		10.13	• Practical measures to prevent or minimise exposure to: > external ionising radiation (shielding, distance, time) > internal ionising radiation (preventing inhalation, ingestion, entry through the skin including contaminated wounds and absorption through the skin) • Legal requirements to minimise occupational exposure to ionising radiation as required by the Ionising Radiations Regulations 2017.
Explain the different types of musculoskeletal issues and what an organisation must do to assess and control risks from repetitive physical activities, manual handling and poor posture.	Musculoskeletal issues Manual handling	10.14	• Basic understanding of the human musculoskeletal system, including bones, tendons, ligaments, nerves and muscles • The types of injury and ill-health conditions resulting from repetitive physical activities, manual handling and poor posture, including: work-related upper limb disorders (WRULDs), musculoskeletal injury and discomfort, back pain, eye and eyesight effects, fatigue, stress, sprains/strains, fractures, lacerations • The types of ill-health conditions resulting from sitting for long periods and how these can be controlled/managed • The specific legal requirements to manage risks associated with repetitive physical activities, manual handling and poor posture > Manual Handling Operations Regulations 1992 > Health and Safety (Display Screen Equipment) Regulations 1992 • The principles of ergonomic design as applied to the control of musculoskeletal risks • When a manual handling risk assessment is required (with reference to HSE's L23) • How the simple filters (from L23) can be used to decide if a manual handling risk assessment is required: > lifting and lowering > carrying for up to 10m > pushing and pulling for up to 20m > handling while seated • Consideration of: task, load, force, working environment, equipment, individual capability when assessing risks associated with repetitive physical activities, manual handling and poor posture • How to decide if a more detailed assessment should be used (with reference to the Appendix of L23, paragraph 7)

Assessment criteria	Topic	Ref	Content
		10.14	• The circumstances when the following assessment tools should be used: > HSE Manual Handling Assessment Tool (MAC) > HSE Assessment tool for repetitive tasks of the upper limbs (ART) > HSE Variable Manual Handling Assessment chart (V-MAC) • How Appendix 5 of the HSE's L26 should be used to help to control the risks from repetitive DSE work (including smart phones and tablets) • Practical control measures to avoid or minimise the risk associated with repetitive physical activities, manual handling and poor posture including: > elimination > automation > alternative work methods/job design > ergonomic design of tools/equipment/workstations and workplaces > job rotation (fatigue management – ***links with assessment criteria 10.2 – mental ill-health***) > work routine > eye and eyesight testing > training and information > efficient movement principles > personal considerations > wearable technologies (provides continuous data).
Outline why and how suitable working temperatures for all types of work should be maintained and what welfare arrangements organisations need to provide for all workers.	Workplace temperature Welfare arrangements	10.15	**Temperature in moderate and extreme thermal environments** ***Cross reference with assessment criteria 10.3 – health surveillance*** • The importance of maintaining heat balance in the body • The effects of working in high and low temperatures and humidity • The meaning of thermal comfort and the legal duty to provide a 'reasonable' temperature for inside workplaces • Parameters affecting thermal comfort: environmental (air and radiant temperature, relative humidity, air velocity), metabolic rate, clothing, sweat rate, duration of exposure • The purpose of the heat stress index WBGT

Assessment criteria	Topic	Ref	Content
		10.15	• The practical control measures to minimise the risks when working in extreme thermal environments: > control heat/cold source > control other environmental parameters > separation > workplace design > job design including job rotation > providing hot/cold drinks > clothing/PPE > health surveillance > training. **Welfare** • The legal requirements for welfare facilities and arrangements in fixed and temporary workplaces • Facilities for pregnant women and nursing mothers, together with the practical arrangements.

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Unit ND3: Do – controlling workplace safety issues (UK)

Learning outcome 11

You will be able to advise the organisation on a range of common workplace safety issues/hazards including how these can be assessed and controlled and the legal duties associated with these issues/hazards.

Assessment criteria	Topic	Ref	Content
Outline the legal requirements and practical considerations for maintaining a safe working environment.	Safe working environment	11.1	• Legal requirement to manage workplaces with reference to the Workplace (Health, Safety and Welfare) Regulations 1992 • Practical considerations in providing and maintaining safe places of work and safe means of access and egress; using safety signs ie, type of safety signs and the typical areas where they would be used • How to manage the health and safety risks from lighting in the workplace (reference to HSG38) • Good practice for lighting in the workplace (reference to HSG38).
Recognise risks and design safe working practices in confined spaces.	Confined spaces	11.2	• The meaning of confined spaces with reference to the Confined Spaces Regulations 1997 • Examples of where confined space entry may occur in the workplace eg, pits in garages, trunking ducts, watercourses, trenches, tanks, silos, sewers • The factors to be considered when assessing risk: access arrangements; likely atmospheres to be encountered (including oxygen enriched, oxygen depleted, toxic and flammable); the task, materials and equipment; people at risk; reliability of safeguards (including personal protective equipment) • The factors to be considered in designing safe working practices: operating procedures and emergency policy/procedures; and training for work in confined spaces.
Describe the mechanisms for fire and explosions, how building materials behave in a fire and methods that can be used for prevention and protection from fire and explosion.	Fire and explosion	11.3	**Flammable and explosive materials and the mechanisms by which they ignite** • The relevant properties of solids, liquids and gases with respect to influence on combustion • The meaning of: flash point, fire point, auto-ignition temperature, vapour density, limits of flammability; with examples of the importance of these properties in relation to the initiation and propagation of fire and explosion • The causes and effects of: > unconfined vapour cloud explosion > boiling liquid expanding vapour explosion (BLEVE) > confined vapour cloud explosion

Assessment criteria	Topic	Ref	Content
		11.3	• Mechanisms of explosions and fire-spread including: > how an explosion/fire occurs > the stages of combustion: induction, ignition, growth, steady state and decay > mechanisms of unconfined vapour cloud explosions, confined vapour cloud explosions and boiling liquid expanding vapour explosions • The effects of atomisation/particle size and oxygen content on the likelihood and severity of fire/explosion • How failure of control measures coupled with the physicochemical properties of flammable materials can bring about an explosion • The process of oxidisation and the effects of oxidising substances on fire and explosion mechanisms • Flammable atmospheres; how they arise and where they are found • Control measures for entering flammable atmospheres, including purging, to keep flammable atmospheres below Lower Explosion Limits (LEL) • The principles of selection of electrical equipment for use in flammable/explosive atmospheres (EX marking under Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) Schedules 3 and 4) (***cross reference with assessment criteria 11.7 – work equipment***) • The prevention and mitigation of vapour phase explosions: structural protection, plant design and process control, segregation and storage of materials, hazardous places zoning (DSEAR Schedule 2), inerting, explosion relief • Control of amount of material, prevention of release, control of ignition sources, sensing of vapour between Lower Explosive Limit (LEL) and Upper Explosive Limit (UEL) • Dust explosions: > the mechanisms of dust explosions including the importance of combustible solid particle size, dispersal, explosive concentrations, ignition, energy, temperature and humidity > the dust pentagon > primary and secondary explosions > the prevention and mitigation of dust explosions including relevant hazardous places zoning (DSEAR Schedule 2). **The behaviour of structural materials, buildings and building contents in a fire** • The behaviour of building structures and materials in fire: fire properties of common building materials and structural elements (eg, steel, concrete, wood); level of fire resistance • The behaviour of common building contents in fire (eg, paper-based, fabrics, plastics).

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Assessment criteria	Topic	Ref	Content
		11.3	**Fire and explosion prevention and protection** • Structural protection (eg, openings and voids, compartmentation, fire-stopping) • The key features of plant design and process control • The segregation and storage of flammable, combustible and incompatible materials • Hazardous area zoning, exclusion of ignition sources • Inerting • Methods of explosion relief: venting, explosion panels, bursting discs, suppression.
Summarise the main legal requirements relating to fire, the considerations for fire risk assessment, methods for fire prevention and detection, types of firefighting equipment, means of escape and emergency evacuation procedures.	Fire	11.4	**Legal requirements** • The regulatory powers of a fire authority with respect to fire safety • Dual enforcement by the HSE and Fire Authority • The requirements of the Regulatory Reform (Fire Safety) Order 2005 (or alternative related local Statutory Instruments eg, Fire Safety (Scotland) Regulations 2006, Fire Safety Regulations (Northern Ireland) 2010) • The purpose of the Building Regulations 2010 Approved Document B/Building Regulations (Northern Ireland) 2012 Technical Booklet E/Building (Scotland) Regulations 2004 Building standards technical handbook 2019: non-domestic (part 2). **Fire risk assessment** • The five steps to fire risk assessment: (with reference to Home Office guidance *Fire safety risk assessment: 5-step checklist*): > identify fire hazards > identify people at risk; including vulnerable people > evaluate, remove, reduce the risk > record, plan and train > review. **Fire detection and alarm systems** • Common fire detection and alarm systems and procedures: > factors in design and application of fire detection and alarm systems > the principal components of alarm systems; detection and signalling > manual and automatic systems.

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Assessment criteria	Topic	Ref	Content
		11.4	**Fixed and portable fire-fighting equipment** • Factors in design and application of fixed fire-fighting systems and equipment: > classification of fires > portable fire-fighting equipment > extinguishing media and mode of action > siting, maintenance and training requirements > environment, including fire water runoff. **Means of escape** • The factors to be considered in the provision and maintenance of a means of escape • Maintaining fire safety in communal areas. **Emergency evacuation procedures** • Personal Emergency Evacuation Plans (PEEPs).
Describe the risks and controls inherent in industrial chemical processes and hazardous environments, including the storage, handling and transport of dangerous substances and planning for emergencies.	Dangerous substances	11.5	**Industrial chemical processes** • The effects of temperature, pressure and catalysts on rates of chemical reactions • Heat of reaction in terms of exothermic and runaway reactions • Examples of exothermic reaction (ie, combustion); example of runaway reaction (ie, Bhopal, 1984) • Methods of controlling exothermic and runaway reactions. **The storage, handling and transport of dangerous substances** • What should be considered in a risk assessment of dangerous substances (with reference to DSEAR Regulation 5) • The storage methods and quantities – bulk storage, intermediate storage, drum storage, specific locations • The storage of incompatible materials and their segregation requirements • Leakage and spillage containment – bunding, problems encountered during filling and transfer • The storage and handling of dangerous substances: > flow through pipelines > the principles of filling and emptying containers > the principles of dispensing, spraying and disposal of flammable liquids > the dangers of electricity in hazardous areas

Assessment criteria	Topic	Ref	Content
		11.5	• The transport of dangerous substances: > key safety principles in loading and unloading of tankers and tank containers > labelling of vehicles and packaging of substances > the importance of driver training programmes and the role of the Dangerous Goods Safety Adviser under the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009. **Hazardous environments** • The principles of: resistance to mechanical damage, protection against solid objects and dusts, protection against liquids and gases • Wet environments – including corrosion and degradation of installation and damage to electrical equipment • The classification of hazardous areas, zoning • The use of permits-to-work • The principles of pressurisation and purging • Intrinsically safe equipment, flameproof equipment, type 'N' equipment, type 'e' equipment (***cross reference with assessment criteria 11.7 – work equipment***). **Emergency planning** • The need for emergency preparedness within an organisation with reference to duties under the Management of Health and Safety at Work Regulations 1999 and Control of Major Accident Hazards Regulations 2015 • Consequence minimisation via emergency procedures eg, first-aid/medical, fire evacuation, spill containment • Development and maintenance of emergency plans: > content of both on-site and off-site plans, for major emergency scenarios in order to meet regulatory requirements > reduce the impact on the organisation, including post-incident recovery > the need for on-going monitoring and maintenance of emergency plans • The role of external emergency services and local authorities in emergency planning and control.

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Assessment criteria	Topic	Ref	Content
Summarise what needs to be considered during maintenance, inspection and testing of work equipment and machinery.	Work equipment and machinery maintenance	11.6	***Cross reference with:*** - ***assessment criteria 11.7 – work equipment*** - ***assessment criteria 11.8 – machinery*** - ***assessment criteria 11.10 – portable electrical equipment*** • The hazards and control measures associated with the maintenance of work equipment and machinery • The statutory duties for the maintenance of work equipment, including hired work equipment • The three maintenance management strategies of: planned preventive; condition-based; and breakdown • The factors to be considered in developing a planned maintenance programme • The factors to be considered in determining inspection regimes having consideration of the type of equipment; where it is used; and how it is used; method of inspection (including use of new technologies such as drones) • The need for functional testing of safety-related parts, including interlocks, protection devices, controls and emergency controls • The means by which machinery is safely set, cleaned and maintained including: safe systems of work; permits; isolation; procedures for working at unguarded machinery • The means by which machines are isolated from all energy sources • The typical causes of failures – excessive stress, abnormal external loading, metal fatigue, ductile failure, brittle fracture, buckling and corrosive failure • The advantages and disadvantages of non-destructive testing.
Understand why and how risks from work equipment and pressure systems should be managed.	Work equipment	11.7	**Work equipment** ***Cross reference with:*** - ***assessment criteria 11.3 – flammable and explosive materials*** - ***assessment criteria 11.6 – maintenance, inspection and testing*** - ***assessment criteria 11.10 – portable electrical equipment*** • Why risk assessments must be carried out on work equipment • The employer's duty to ensure that all work equipment is fit for purpose (Provision and Use of Work Equipment Regulations 1998) • The means by which all forms of energy used or produced, and all substances used or produced can be supplied and/or removed in a safe manner

Assessment criteria	Topic	Ref	Content
		11.7	• Ergonomic, anthropometric and human reliability considerations in use of work equipment including: the layout and operation of controls and emergency controls; and reducing the need for access (automation, remote systems) • The importance of size of openings; height of barriers; and distance from danger • The risks associated with using work equipment which arise from its initial integrity, the location where it will be used, and the purpose for which it will be used and decommissioning/end of life • The risks associated with using work equipment which arise from its: incorrect installation or re-installation; deterioration; exceptional circumstances which could affect the safe operation of work equipment; maintenance, inspection and testing • The risk control hierarchy relating to work equipment: eliminating the risks; taking 'hardware' (physical) measures (such as providing guards); taking appropriate 'software' measures (such as following safe systems of work and providing information, instruction and training – training to be based on the level of risk associated with the equipment). **Pressure systems** • Definition of a pressure system • Types of inspection, frequencies and the statutory basis for examination of pressure systems • Prevention and testing strategies: design and construction, repair and modification, information and marking, safe operating limits, written scheme of examination, maintenance and record keeping, competent people.
Explain the principles of machinery safety integration and risk assessment and outline generic hazards and controls for machinery.	Machinery	11.8	**Safety integration and machinery risk assessment** ***Cross reference with assessment criteria 11.6 – maintenance, inspection and testing*** • Definition of machinery • The principles of safety integration from The Supply of Machinery (Safety) Regulations 2008 (Schedule 2, Part 1.1.2) • The factors to be considered when assessing risk: people at risk (use of anthropometrics), severity of possible injury, probability of injury, need for access, duration of exposure, reliability of safeguards, operating procedures and workers • The purpose of CE marking and the relevance and limitation of the CE mark; selection and integration of work equipment in the workplace • Conformity assessments, the use of harmonised standards, essential health and safety requirements, the technical file and the declaration of conformity.

Assessment criteria	Topic	Ref	Content
		11.8	**Generic hazards** • Common machinery hazards in a range of general workplaces: drills (radial arm, pedestal), circular saws, guillotines, disc sanders, abrasive wheels, lathes, mechanical and hydraulic presses, portable power tools, CNC machines, robotics, 3D printing, automatic doors/gates (including high speed doors and roller shutter doors) • The hazards, advantages and disadvantages associated with artificial intelligence (including wearable technologies) in the workplace. **Machinery control systems** • The key safety characteristics of machinery control systems to include: > making allowance for the failures, faults and constraints to be expected in the planned circumstances of use; do not create any increased risk to health or safety; faults or damage to the control system or the loss of energy supply must not result in additional risk to health or safety; do not impede the operation of any stop/emergency stop controls > the control measures for starting or making a significant change in operating conditions including any change in speed, pressure or other operating condition > stop controls readily accessible and leads to a safe condition > emergency stop controls provided and to be readily accessible > the position and marking of controls to be visible and identifiable > the consideration of ergonomic principles.
Outline the hazards and controls for mobile work equipment and lifting equipment.	Mobile work equipment Lifting equipment	11.9	**Mobile work equipment** • Duties under the Provision and Use of Work Equipment Regulations 1998 (Part III Mobile Work Equipment) • The applications and types of mobile work equipment (self-propelled, towed, attached, pedestrian-controlled and remote-controlled), to include: lift trucks (counterbalance, reach, rough terrain, telescopic materials handlers, side loading trucks, pedestrian controlled trucks), agricultural tractors and works vehicles • The hazards associated with mobile work equipment: rollover, overturning, suitability for carrying passengers, unauthorised start-up, safe operating station/platform, excessive speed, failure to stop, contact with wheels and tracks, falls of objects, moving parts/drive shafts/power take-offs, over-heating, refuelling or charging (electrical, LPG, diesel)

Assessment criteria	Topic	Ref	Content
		11.9	• The control measures to be used for mobile work equipment, including safe layout of areas where mobile equipment is used, and the protection of pedestrians and use of lifting plans • Using lift trucks to move people – conditions and equipment necessary, other attachments used on lift trucks • The importance of roll-over protection, falling objects protection, speed control systems (stopping and emergency braking), guards, barriers and restraining systems, means of fire-fighting, vision aids (plane, angled and curved mirrors, Fresnel lenses, radar, CCTV). **Lifting equipment: hazards and control measures** • The duty to manage lifting operations/equipment (Lifting Operations and Lifting Equipment Regulations 1998 – Regulations 4 to 11) • The applications and types of lifting equipment including cranes (mobile cranes, tower cranes, overhead cranes, telescopic handlers) and hoists • The hazards associated with cranes and lifting operations • The main hazards associated with using hoists (gin wheel, construction site platform hoist) and lifts (passenger and goods, scissor, vehicle inspection, MEWPs) • The control measures when using: cranes (selection, siting, and stability of cranes); hoists and lifts; integrity of lifting equipment; competence of workers; maintenance and inspection; statutory examinations; emergency arrangements.

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Assessment criteria	Topic	Ref	Content
Identify the hazards and outline control measures associated with electricity (including work on high voltage systems) and risks associated with portable electrical equipment.	Electricity	11.10	**Hazards of electricity and static electricity** • Electric arcs: molten metal splash and radiation • Circumstances giving rise to the generation of static electricity • Hazards and controls for static electricity. **Control measures for the use of electrical equipment and working on electrical systems** • The selection and suitability of equipment (including the strength and capability of electrical equipment) • Reducing the risk of shock by using protective systems: fuses, reduced voltage systems, cutting of supply/isolation, residual current devices, double insulation, earth free zones • Insulation, protection and placing of conductors • Working space, access and lighting • Inspection and maintenance strategy: user checks, formal visual inspections, combined inspection and tests, records of maintenance and tests, frequency of inspection and testing, use of competent workers to carry out inspections, HSG107 • Safe systems of work on installations made dead • When permits-to-work must be used • Safe systems of work and criteria of acceptability for live working. **High voltage systems** • Common high voltage systems and the prevention of danger • Safe systems of work, permit-to-work procedures • Additional precautions needed for high voltage working (with reference to HSE's HSG85) and working near overhead lines (with reference to HSE's GS6). **Portable electrical equipment** ***Cross reference with assessment criteria 11.7 – work equipment*** • Why portable electrical equipment could be more of a risk than static equipment • Electrical risks from portable appliances eg, portable generators, arc/mig/tig welding • Issues relating to the aspects of supply to portable electrical equipment eg, height of cables, siting of RCDs.

Syllabus

Assessment criteria	Topic	Ref	Content
Describe the different types of construction activities and outline how people can be protected during construction works, safe work at height practices and the hazards and controls for demolition and excavation work.	Construction Work at height Demolition Excavation	11.11	***Cross reference with assessment criteria 6.1 – role of the health and safety professional*** **What is construction** • The health and safety professional's role in construction projects eg, promotion of a positive health and safety culture eg, by trying to prevent damages, injuries and ill-health or carrying out thorough investigations when incidents happen • Types of work: building works; renovation; alteration; maintenance of existing premises (occupied or unoccupied); civil engineering; works of engineering construction; and demolition • The range of activities including: site clearance; demolition; dismantling; excavation; loading, unloading and storage of materials; site movements; fabrication; decoration; cleaning; installation; removal and maintenance of services (electricity, water, gas); landscaping • Particular construction issues relating to the: transitory nature of workers; temporary nature of construction activities and the constantly changing workplace; fire arrangements; time pressures from clients; weather conditions; levels of numeracy and literacy of workers; non-English speaking workers. **General health and safety duties under the Construction (Design and Management Regulations 2015 (CDM)** • When do the CDM Regulations apply • Use of the CDM Regulations to make projects work well • Duty for: > cooperation and communication between all parties on site > reporting cases to the person in control of work where it is being carried out unsafely > provide comprehensible information and instruction to relevant parties when required • Use of the construction phase plan to effectively manage construction activities • Use of Part 4 of the CDM Regulations to manage construction projects.

Syllabus

Assessment criteria	Topic	Ref	Content
		11.11	**Protecting workers and others before and during construction work** • The application of design risk management at design phase and how residual risk should be handled • What needs to be considered if the site has access/egress points on a public road with a speed limit of 50mph or greater (with reference to the Safety at Street Works and Road Works Code of Practice) • Site security (perimeter fencing, signs, safe viewing points, means of securing plant/chemicals, means of controlling dangers such as mud on public highways) • Arrangements (including site rules, cooperation, shared facilities, first-aid and welfare facilities) • Arrangements for site inductions. **Work at height** • The hazards associated with working at height • The types and use of different types of access and work at height equipment including: self-propelled, trailer and truck-mounted hydraulic lifts (MEWPs), booms, scissor lifts, loaders and mobile work platforms • The hazards arising from lack of mechanical strength of the carrier or lack of loading control and control devices; hazards to people on or in the carrier (movements of the carrier, people falling from the carrier, objects falling from the carrier); exceeding safe working load/people permitted • The appropriate control measures for use of access and work at height equipment: space and strength corresponding to the maximum number of people and maximum working load; fitted with a suspension or supporting system; controlled by people in the carrier; emergency stop devices; hold-to-run controls; preventing tilting if there is a risk of the occupants falling; trapdoors open in a direction that eliminates any risk of falling; protective roof if risk of falling objects endanger people; marked with maximum number of people and maximum working load • The safe use of temporary (immobile) access equipment including ladders, trestles, scaffolds – simple independent and tower scaffolds • The requirements for the erection, use and dismantling of scaffolds and falsework and inspection of working platforms above 2 metres • Safe methods for roof work: precautions during work on fragile roofs, edge protection for flat and sloping roofs • The means of temporary access: types and safety features of cradles, boatswains' chairs, rope access and positioning systems • The use of personal and collective fall arrest devices (safety nets, airbags, belts and harnesses).

Syllabus

Assessment criteria	Topic	Ref	Content
		11.11	**Demolition work** ***Cross reference with: assessment criteria 10.7 – asbestos*** • The main hazards from demolition work including: falling materials; premature collapse of buildings; hazardous materials used in construction eg, asbestos • The main controls for demolition work including: planning, structural surveys and surveys for hazardous substances, provision of working places and means of access/egress, use of method statements and permits-to-work, security of site boundaries and protection of the public. **Excavations** • The hazards associated with excavation work including: collapse; access; falls of people, objects and vehicles; use of transport; flooding; buried services – types and consequences of damage • The main controls for excavation work including: > the need for temporary shoring (drag boxes, piling) > the methods for checking for buried services and the precautions to be observed > the use of 360 degree excavators > the requirements for statutory inspections and examinations of excavations.
Outline the duty to manage workplace transport risks and how to manage work-related driving risks using a Plan, Do, Check, Act approach.	Workplace transport Work-related driving	11.12	**Workplace transport** ***Cross reference with:*** - ***assessment criteria 10.2 – mental ill-health*** - ***assessment criteria 10.3 – health surveillance*** • The legal requirements under the Workplace (Health, Safety and Welfare) Regulations 1992 to manage workplace transport (including vehicles and pedestrians) • Application of the Road Traffic Act 1988 and 1991 to workplace transport when it is driven on public roads • What should be considered in a workplace transport risk assessment (including those associated with shared workplaces) • The reasons for providing information to all workers and visitors to site relating to workplace transport issues • Why drivers are at risk from fatigue and how fatigue can be managed (also applies to work-related driving) • Use of telematics (GPS system combined with on-board diagnostic systems) to control the risk from workplace transport activities • The requirements of the Working Time Regulations 1998.

Assessment criteria	Topic	Ref	Content
		11.12	**Work-related driving** • Managing work-related driving activities using a Plan, Do, Check, Act approach (with reference to HSE's INDG382) > Plan: how the organisation will manage work-related driving risks and plans for implementation > Do: prioritise and control risks, consult with workers and provide training and information > Check: measure how well the plans are doing > Act: review and learn from experiences.

Prior learning

Prior learning

Prior learning

The content in this section formed part of the previous National Diploma (November 2015 specification) and also formed part of the National General Certificate. The July 2020 specification will **not** include the content below.

NG – National General Certificate in Occupational Health and Safety (October 2018 specification)
NGC – National General Certificate in Occupational Health and Safety (November 2014 specification)

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and element(s)
Element number	Content		
A1.1	**Reasons for the effective management of health and safety** • Moral: > the duty of reasonable care > the unacceptability of putting the health and safety of people at risk > society's attitude to moral obligations > national accident/incident and ill-health statistics > the effect of size of organisation on accident/incident rates • Legal: > preventive > punitive > the compensatory effects of law • Economic: > the costs associated with accidents/incidents and ill-health and their impact on society and on organisations > the insured and un-insured costs > the financial benefits of effective health and safety management.	E1.1	NGC1 E1.2
A1.3	**The uses of, and the reasons for, introducing a health and safety management system** • The legal requirements to manage health and safety: > written health and safety policy > the arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures > access to competent health and safety advice • What is a management system: > application of the Plan, Do, Check, Act cycle (with reference to HSE's *Managing for health and safety*, HSG65) • The reasons for introducing health and safety management systems.	E2.1	NGC1 E2.1

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
A1.4	**Principles and content of effective health and safety management systems** • Health and safety policy: > the legal requirements relating to health and safety policies and arrangements > the role of the health and safety policy in relation to a health and safety management system and as a vehicle for communicating health and safety information > the requirements for a written health and safety policy and for recording arrangements in relevant standards > the general principles and objectives of a health and safety policy document • The key elements/components of *ISO 45001:2018 Occupational health and safety management systems* • The benefits and limitations of integration of quality, environmental, and health and safety management systems.	E2.2	NGC1 E2.2-3
A2.1	**Sources and types of law** • Sources of law: > common law: nature and development, judicial precedent > statute law: European Directives and Regulations, UK Acts of Parliament and Regulations; prescriptive and goal-setting legislation • Types of law: > criminal law: purpose, sanctions > civil law: purpose, types of remedy • Burden of proof – civil and criminal law.	E1.2	NGC1 E1.3
A2.2	**Absolute and qualified duties** • The concept of absolute and qualified duties • Meaning of the terms 'absolute', 'practicable' and 'reasonably practicable'.	E1.2	NGC1 E1.3
A3.1	**The Health and Safety at Work etc. Act 1974 and the Management of Health and Safety at Work Regulations 1999** • The requirements and application of sections 2-4 and 6-9 of the Health and Safety at Work etc. Act 1974, relationship between general and specific duties • The requirements and application of the Management of Health and Safety at Work Regulations 1999: > suitable and sufficient risk assessments > providing employees with information on significant risks > providing instruction and training for employees	E1.3	NGC1 E1.4, E1.5

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
	> effective planning, organisation, control, monitoring and review of preventative and protective measures • Implications of sections 36 and 37 of the Health and Safety at Work etc. Act and Regulation 21 of the Management of Health and Safety at Work Regulations with reference to relevant decided cases.		
A3.2	**Approved Codes of Practice and guidance** • The purpose, role, structure, application and status of approved codes of practice and HSE guidance notes.	E1.2	NGC1 E1.3
A3.3	**The enforcement of health and safety law** • The identification of authorities empowered to enforce health and safety legislation • The division of responsibilities between enforcing authorities • The powers of enforcing authorities and their inspectors (Health and Safety at Work etc. Act Section 20 and 25) • Offences and maximum penalties under the law (Health and Safety at Work etc. Act Section 33); offences for which imprisonment is, and is not, a form of sanction • The implications of amendments to Section 3 of the Health and Safety at Work etc. Act by the Deregulation Act 2015 and related Regulations • The consequences of material breach: > fee for intervention > enforcement notices: types, purpose, status, conditions for being served, grounds for appeal, appeal procedures, effects of appeal (Health and Safety at Work etc. Act Sections 21-24 and 39) • Prosecution options > simple cautions > summary offences > indictable offences (solemn procedure in Scotland) > hybrid/triable either way offences • The effect on criminal proceedings of Section 40 of the Health and Safety at Work etc. Act • The application of common law manslaughter (culpable homicide in Scotland) and the Corporate Manslaughter and Corporate Homicide Act 2007 to work-related accident/incidents. The legal criteria for prosecution, enforcement and prosecution responsibilities.	E1.2	NGC1 E1.3

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
A4.2	**Breach of statutory duty and negligence** • The principle that a breach of a statutory duty may give rise to civil liability. Criteria for a successful action • The implications of Section 47 of the Health and Safety at Work etc. Act 1974, the Enterprise and Regulatory Reform Act 2013 (Section 69) and the Health and Safety at Work etc. Act 1974 (Civil Liability) (Exceptions) Regulations 2013 in relation to breach of statutory duty including the criteria for a successful action • Basic procedures for pursuing civil actions.	E1.2	NGC1 E1.3
A5.3	**Reporting and recording of loss events (injuries, ill-health and dangerous occurrences) and near misses** • Statutory reporting requirements and procedures • The significance of internal reporting and recording systems.	E4.2	NGC1 E4.3
A5.4	**Loss and near miss investigations** • Investigation procedure with reference to *Investigating accidents and incidents - a workbook for employers, unions, safety representatives and safety professionals* (HSG245): > initial report (preserve the scene, note people and equipment involved, report event) > decide whether further investigation is required > gather information > analyse the information > identifying risk control measures > produce and implement an action plan • Sharing of information/lessons learned to prevent recurrence.	E4.2	NGC1 E4.2
A7.1	**Sources of information used in identifying hazards and assessing risk** • External information sources (eg, HSE and other relevant governmental agencies, European Safety Agency, International Labour Organisation (ILO), World Health Organisation (WHO), professional and trade bodies) • Internal information sources – collection, provision, analysis and use of damage, injury, and ill-health data, near-miss information and maintenance records • The uses and limitations of external and internal information sources.	E3.4	NGC1 E7.2

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
A7.3	**Assessment and evaluation of risk** • Key steps in a risk assessment process including: > ensuring comprehensive identification of risks > identifying hazards > identifying persons at risk > the factors affecting probability and severity > risk evaluation and required risk control standards > formulating actions > prioritising actions > requirement to record findings • Use and limitations of generic and specific assessment • Limitations of risk assessment processes • Temporary and non-routine situations • Consideration of long-term hazards to health.	E3.4	NGC1 E3.5
A8.2	**Factors to be taken into account when selecting risk controls** • The general principles of prevention in the Management of Health and Safety at Work Regulations • Determine the technical/procedural/behavioural control measures required using the general hierarchy of control (with reference to ISO 45001): > elimination (technical) > substitution (technical/procedural) > engineering controls (technical/behavioural) > signage/warnings and/or administrative controls (procedural/behavioural) > personal protective equipment (technical/behavioural) (**Note:** technical to include design, fencing, ventilation etc; procedural to include safe systems of work, permit-to-work, maintenance regime etc; behavioural to include information and training).	E3.4	NGC1 E3.5 and E3.6
A8.3	**Safe systems of work and permit-to-work system** • Safe systems of work: meaning; legal (HASWA Section 2(2)(a)) and practical requirements; components (people, equipment, materials, environment); development and implementation • Permit-to-work systems – essential features, general application, operation and monitoring.	E3.6 and E3.7	NGC1 E3.8 and E3.9

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
A9.5	**Requirements for managing third parties** • Identifying third parties: contractors, agency workers and other employers (shared premises).	E1.4	NGC1 E1.6 (CDM duties) and E1.7
A9.7	**Health and safety culture and climate** • The influence of health and safety culture on behaviour and the effect of peer group pressure and norms.	E3.1	NGC1 E3.2
B2.1	**The routes of entry and the human body's defensive responses to hazardous substances** • The main routes, (eyes, nose, mouth, skin) and methods of entry (inhalation, ingestion, skin pervasion, injection, aspiration) of hazardous substances into the human body.	E7.2	GC2 E7.2
B2.2	**The identification, classification and health effects of hazardous substances used in the workplace** • The influence of physical form (dust, fibre, fume, gas, mist, vapour, liquid) and properties (ie, solubility) on routes of entry.	E7.1	GC2 E7.2
B3.1	**The prevention and control of exposure to hazardous substances (including carcinogens and mutagens)** • The principles of good practice (COSHH, Schedule 2A), in order of priority (COSHH Regulations 2002, Regulation 7): > design and operate processes and activities to minimise emission, release and spread of substances hazardous to health > take into account all relevant routes of exposure – inhalation, skin absorption and ingestion – when developing control measures > control exposure by measures that are proportionate to the health risk > choose the most effective and reliable control options which minimise the escape and spread of substances hazardous to health > where adequate control of exposure cannot be achieved by other means, provide, in combination with other control measures, suitable personal protective equipment > check and review regularly all elements of control measures for their continuing effectiveness	E7.4	GC2 E7.4

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
	> inform and train all employees on the hazards and risks from the substances with which they work and the use of control measures developed to minimise the risks > ensure that the introduction of control measures does not increase the overall risk to health and safety.		
B3.1	**The prevention and control of exposure to hazardous substances (including carcinogens and mutagens)** • The control of hazardous substances with reference to the hierarchy quoted in *Working with substances hazardous to health (INDG136)*: > eliminate the use of a harmful product or substance and use a safer one > use a safer form of the product, ie, paste rather than powder > change the process to emit less of the substance > enclose the process so that the product does not escape > extract emissions of the substance near the source > have as few employees as possible in harm's way > provide appropriate personal protective equipment (PPE) • Adequate control of carcinogens and mutagens (as low as is reasonably practicable) (COSHH, Regulation 7) > total enclosure > prohibition of eating and drinking in contaminated areas > designation and cleaning of contaminated areas and use of suitable warning signs > closed and labelled containers.	E7.4	GC2 E7.4
B10.3	**Welfare facilities and arrangements in fixed and temporary workplaces** • The provision of toilets, washing and changing facilities • The storage of clothing • Facilities for eating, rest rooms.	E8.1	GC2 E1.1
B10.4	**The requirements and provision for first aid in the workplace** • Legal requirements for first aid in the workplace • The basis of provision including numbers of workers, workplace risks and their assessment, proximity of emergency services etc • Typical arrangements eg, people, equipment and training.	E3.8	NGC1 E3.11

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
C1.4	**Work at height** • Hierarchy of control measures with reference to the Work at Height Regulations 2005: > avoid working at height > use an existing safe place of work > provide work equipment to prevent falls (including MEWPS) > mitigate the distance and consequences of a fall > instruction and training and/or other means.	E8.2	not applicable
C1.5	**Lone working** • The main hazards and risks.	E8.4	not applicable
C2.1	**Properties of flammable and explosive materials and the mechanisms by which they ignite** • The fire triangle • Ignition sources (eg, naked flame, hot surfaces, arcing, sparking, smoking, electrostatic discharge).	E10.1	GC2 E6.1
C3.5	**Means of escape (fire)** • The general requirements for travel distances, stairs, passageways and doors, emergency lighting, exit and directional signs.	E10.4	GC2 E6.5
C3.6	**Emergency evacuation procedures (fire)** • The purposes of and essential requirements for, evacuation procedures and drills, alarm evacuation and roll call • The provision of Fire Wardens and their role.	E10.4	GC2 E6.5
C5.1	**The selection of suitable equipment** • The suitability of work equipment for the required task, process and environment • The suitability of the design, construction and adaptation of work equipment.	E9.1	GC2 E4.1

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
C6.2	**Generic hazards (workplace machinery)** • The types of generic machinery hazards: > potential consequences from mechanical hazards (ISO 12100:2010, Table B.1): being run over, being thrown, crushing, cutting/severing, drawing-in/trapping, entanglement, friction/abrasion, impact, injection, shearing, slips/trips/falls, stabbing/puncture, suffocation > non-mechanical hazards: noise, vibration, electricity, high/low temperature, radiation, hazardous substances, ergonomic, environment in which the machine is used.	E9.3	GC2 E4.3
C6.3	**Protective devices (workplace machinery)** • The main types of safeguarding devices: characteristics, key features, limitations and typical applications of fixed enclosed guards, fixed distance guards, interlocked guards, automatic guards, trip devices, adjustable/self-adjusting guards, two-hand controls, mechanical restraints, jigs and push-sticks.	E9.4	GC2 E4.4
C8.2	**Hazards of electricity and static electricity** • The effects of electric shock on the body: pain, muscular contraction, respiratory failure, heart fibrillation, cardiac arrest, burns • The factors influencing the severity of the effects of electric shock on the body: voltage, frequency, duration, impedance/resistance, current path, direct and indirect shock • Common causes of fires: overloading of conductors, overheating, ignition of flammable vapour, ignition of combustible material, breakdown of insulation.	E11.1	GC2 E5.1
C8.4	**Safe working in the vicinity of high voltage systems** • Safe working near overhead power lines, underground cables – hazards and precautions.	E11.1	GC2 E5.1
C8.5	**Portable electrical equipment** • Conditions and practices likely to lead to accidents, including unsuitable equipment, inadequate maintenance, use of defective apparatus • Control measures, including portable appliance inspection and testing.	E11.1	GC2 E5.1

Prior learning

National Diploma in Occupational Health and Safety (November 2015 specification)		NG element(s)	NGC unit and elements
Element number	Content		
C9.2	**Scope and application of the Construction (Design and Management) Regulations 2015 and associated guidance** • The scope of the Construction (Design and Management) Regulations 2015 • The particular duties under the Construction (Design and Management) Regulations 2015 and relevant guidance for clients, designers, principal designers, principal contractors, contractors, workers and domestic clients in relation to: > the appointment and competence required of relevant parties > notification of project > the preparation of pre-construction information (including the purpose and requirements) > the construction phase plan (including the purpose and typical content of the plan) > the provision of appropriate and relevant information to all parties > the preparation of the health and safety file (including the purpose and typical content of the file) > the duties of domestic clients.	E1.4	NGC1 E1.6
C10.1	**Workplace transport risk assessment and risk controls** • Controlling risks from workplace transport with reference to HSG136 (*A guide to workplace transport safety*): > safe site: - traffic route design - activity > safe vehicle > safe driver.	E8.6	GC2 E2.1