



INSTITUT KESELAMATAN DAN KESIHATAN PEKERJAAN NEGARA
NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH

KURIKULUM KURSUS
COURSE CURRICULUM

TEL: 03 - 8911 3800 FAX: 03 - 8926 3900
URL: www.niosh.com.my



COURSE TITLE	: Safety and Health Officer	COURSE CODE	: SHO
COURSE DURATION	: 22-day(s) / 165.50-hour(s)	COURSE LEVEL	: Basic
COURSE CATEGORY	: Competency		
HRD CORP SCHEME	: Claimable		
COURSE FEE	: RM3,180.00 (inclusive of 6% SST)	EXAMINATION FEE	: RM950.00

1. OBJECTIVE(S):

At the end of the course, the participant will be able to:

- i. Conduct the hazard identification, risk assessment and risk control.
- ii. Explain the OSH-MS.
- iii. Plan OSH programs.
- iv. Interpret OSH legal requirements.
- v. Be a competent SHO (upon passing the SHO examination and registration with DOSH).

2. TARGET GROUP(S):

- i. Safety Personnel / Managers.
- ii. Supervisors.
- iii. OSH Practitioners.
- iv. Safety and Health Committee Members.
- v. Unregistered Safety and Health Officers.
- vi. Engineers, Designers and Architects.
- vii. Interested Individuals.

3. ENTRY REQUIREMENT(S):

- i. Malaysian citizen; **AND**
- ii. Possess a minimum of SPM/ SPMV/ MCE or equivalent with at least a Grade Three Pass. General certificate (SAP) or lower than Grade three will not be accepted.
- iii. For SPM/SPMV after year 2000, a minimum of 6C for Bahasa Melayu, English, Mathematics AND minimum 8E for Science/ Physics/ Chemistry/ Biology AND pass other 2 subjects in 1 certificate/ examination or combination.
- iv. Applicants must attach ONE (1) certified true copy of SPM/ SPMV/ MCE Certificate/ Diploma/ Degree AND Identification Card/ Passport

Note: This entry requirement(s) is applicable for **training** purpose only. Effective 1st January 2024, participant is required to sit for the first examination within one (1) year from the date of completion of the course.



4. TOPIC(S):

Module 1

- i. Historical Perspective.
- ii. Incident Prevention.
- iii. OSH Management Systems.
- iv. Policy - Organisation & Arrangements.
- v. OSH Promotion, Training & Communication.
- vi. Documentation.
- vii. Information Technology in OSH.
- viii. Risk Assessment and Management.
- ix. Personal Protective Equipment.
- x. OSH Program.
- xi. Emergency Response Preparedness & Recovery Planning.
- xii. First Aid.
- xiii. Procurement and Contractor Management.
- xiv. Auditing.
- xv. Performance Measurement & Monitoring.
- xvi. Incident Investigation and Corrective Action.
- xvii. Management Review.

Module 2

- i. Introduction to OSH Legislation.
- ii. Occupational Safety and Health Act 1994 and Its Regulations.
- iii. Factories and Machinery Act 1967.
- iv. Regulations on Safety in the Factories and Machinery Act 1967.
- v. Regulations on Health in the Factories and Machinery Act 1967.
- vi. Fire Services Act 1988 and Its Regulations.
- vii. Employment Act 1955 and SOCSO Act 1969.
- viii. Petroleum (Safety Measures) Act 1984 and Gas Supply Act 1993.
- ix. Introduction & Overview of Other Related, Legislation & Codes of Practices.

Module 3

- i. Overview of Occupational Health.
- ii. Occupational Health Standards.
- iii. Introduction and Fundamentals of Toxicology.
- iv. Overview and Basic Principles of Industrial Hygiene.
- v. Physical and Chemical Hazards.



- vi. Classification, Labelling and Safety Data Sheet of Hazardous Chemicals.
- vii. Chemical Safety Data Sheet.
- viii. Chemical Health Risk Assessment.
- ix. Chemical Hazard Management.
- x. Chemical & Biological Monitoring & Medical Surveillance.
- xi. Ventilation & Indoor Air Quality.
- xii. Biological Hazard.
- xiii. Ergonomics & Ergonomics Risk Factors.
- xiv. Occupational and Psychological Stress.
- xv. Shift Work & Mental Workload.
- xvi. Overview of SOHELP.

Module 4

- i. Housekeeping and Physical Arrangement.
- ii. Machinery Hazard.
- iii. Safe Guarding of Machinery.
- iv. Safe Machine Operation.
- v. Safe of Hand Tools and Portable Power Tools.
- vi. Maintenance of Machine, Guards & Tools.
- vii. General Area Fencing.
- viii. Pressurised Equipment.
- ix. Welding Safety.
- x. Mechanical Handling.
- xi. Site Visit.
- xii. Transport Safety Defensive Driving (Forklift).
- xiii. Manual Handling.
- xiv. Office Safety.
- xv. Electrical Safety.
- xvi. Construction Safety.
- xvii. Fire Safety.
- xviii. Working in Confined Space.

5. LIST OF REFERENCE BOOK(S):

- i. Occupational Safety and Health Act 1994.
- ii. Factories and Machinery Act 1967.
- iii. Trainee's Note for Module I, II, III & IV.




6. LIST OF TEACHING AID(S):

- i. LCD projector.
- ii. Computer.
- iii. White board with accessories.
- iv. Flip chart with accessories.

7. LIST OF CLASSROOM ACTIVITIES:

- i. Lecture.
- ii. Discussion.
- iii. Practical.

Note: Participant is required to bring along Personal Protective Equipment (e.g. Safety Boot) during site visit session on Day 21.

	NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH		
	COURSE SCHEDULE		
	Document No. NIOSH-PDD-CS-SHO	Revision No. MAST240124	Page 5 / 15



COURSE TITLE: SAFETY AND HEALTH OFFICER

DAY ONE (MODULE 1)

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 0900	0.50	Registration	NIOSH
0900 - 1000	1.00	Course Introduction and Ice Breaking Session	NIOSH
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1045	0.50	Historical Perspective	
1045 - 1300	2.25	Incident Prevention	
1300 - 1400	1.00	LUNCH	
1400 - 1515	1.25	Continuation	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1530 - 1800	2.50	OSH Management System	
	6.50	END OF DAY ONE	

DAY TWO

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Policy - Organisation & Arrangements	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1115	1.00	Continuation	
1115 - 1300	1.75	OSH Promotion, Training & Communication	
1300 - 1400	1.00	LUNCH	
1400 - 1515	1.25	Continuation	
1515 - 1545	0.50	OSH Documentations	
1545 - 1600	0.25	AFTERNOON TEA BREAK	
1600 - 1730	1.50	Continuation	
1730 - 1830	1.00	Information Technology in OSH	
	8.50	END OF DAY TWO	

 	NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH		
	COURSE SCHEDULE		
	Document No. NIOSH-PDD-CS-SHO	Revision No. MAST240124	Page 6 / 15

DAY THREE

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Risk Assessment and Management	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1300	2.75	Continuation	
1300 - 1400	1.00	LUNCH	
1400 - 1530	1.50	Continuation	
1530 - 1545	0.25	AFTERNOON TEA BREAK	
1545 - 1630	0.75	Continuation	
1630 - 1900	2.50	Personal Protective Equipment	
	9.00	END OF DAY THREE	

DAY FOUR


TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	OSH Objective & Programme	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1145	1.50	Continuation	
1145 - 1300	1.25	Emergency Preparedness and Response	
1300 - 1400	1.00	LUNCH	
1400 - 1515	1.25	Continuation	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1530 - 1730	2.00	Continuation	
1730 - 1930	2.00	First Aid	
	9.50	END OF DAY FOUR	

DAY FIVE

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1030	2.00	Procurement and Contractor Management	
1030 - 1045	0.25	MORNING TEA BREAK	
1045 - 1230	1.75	Auditing	
1230 - 1430	2.00	LUNCH	
1430 - 1515	0.75	Continuation	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1530 - 1800	2.50	Performance Measurement & Monitoring	
	7.00	END OF DAY FIVE	

DAY SIX

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Incident Investigation and Corrective Action	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1215	2.00	Continuation	
1215 - 1315	1.00	Management Review	
1315 - 1415	1.00	LUNCH	
	4.50	END OF DAY SIX	


	NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH		
	COURSE SCHEDULE		
	Document No. NIOSH-PDD-CS-SHO	Revision No. MAST240124	Page 8 / 15

DAY SEVEN (MODULE 2)

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 0930	1.00	Introduction to OSH Legislation	
0930 - 1000	0.50	Factories and Machinery Act 1967	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1145	1.50	Continuation	
1145 - 1300	1.25	Safety Regulations under Factories and Machinery Act 1967	
1300 - 1400	1.00	LUNCH	
1400 - 1445	0.75	Continuation	
1445 - 1515	0.50	Health Regulations under Factories and Machinery Act 1967	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1530 - 1700	1.50	Continuation	
	7.00	END OF DAY SEVEN	

DAY EIGHT

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Occupational Safety and Health Act 1994	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1245	2.50	Continuation	
1245 - 1400	1.25	LUNCH	
1400 - 1500	1.00	OSH (Safety and Health Officer) Regulations 1997	
1500 - 1515	0.25	AFTERNOON TEA BREAK	
1515 - 1745	2.50	Continuation	
	7.50	END OF DAY EIGHT	

	NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH		
	COURSE SCHEDULE		
	Document No. NIOSH-PDD-CS-SHO	Revision No. MAST240124	Page 9 / 15

DAY NINE

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	OSH (Safety and Health Committee) Regulations 1996	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1215	2.00	Continuation	
1215 - 1300	0.75	OSH (Control of Industrial Major Accident Hazards) Regulations 1996	
1300 - 1400	1.00	LUNCH	
1400 - 1600	2.00	Continuation	
1600 - 1615	0.25	AFTERNOON TEA BREAK	
1615 - 1815	2.00	OSH (Notification of Accidents, Dangerous Occurrence, Occupational Poisoning and Occupational Disease) Regulations 2004	
	8.25	END OF DAY NINE	

DAY TEN



TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	OSH (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1100	0.75	Continuation	
1100 - 1300	2.00	OSH (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013	
1300 - 1400	1.00	LUNCH	
1400 - 1600	2.00	Fire Services Act 1988	
1600 - 1615	0.25	AFTERNOON TEA BREAK	
1615 - 1745	1.50	Social Security Act 1969	
	7.75	END OF DAY TEN	

DAY ELEVEN

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Employment Act 1955	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1215	2.00	Petroleum (Safety Measures) Act 1984 & Gas Supply Act 1993	
1115 - 1230	1.25	Case Study	
1230 - 1430	2.00	LUNCH	
1430 - 1515	0.75	Continuation	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1530 - 1730	2.00	Introduction & Overview of Other Related Legislation & Codes of Practices	
	7. 50	END OF DAY ELEVEN	

DAY TWELVE (MODULE 3)

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Overview of Occupational Health	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1215	1.00	Continuation	
1115 - 1245	1.50	Occupational Health Standards	
1245 - 1345	1.00	LUNCH	
1345 - 1515	1.50	Introduction and Fundamentals of Toxicology	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1530 - 1600	0.50	Continuation	
1600 - 1800	2.00	Overview and Basic Principles of Industrial Hygiene	
	8.00	END OF DAY TWELVE	

 	NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH		
	COURSE SCHEDULE		
	Document No. NIOSH-PDD-CS-SHO	Revision No. MAST240124	Page 11 / 15

DAY THIRTEEN

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Chemical Hazard	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1300	2.75	Continuation	
1300 - 1400	1.00	LUNCH	
1400 - 1445	0.75	Continuation	
1445 - 1545	1.00	Chemical Monitoring	
1545 - 1600	0.25	AFTERNOON TEA BREAK	
1600 - 1730	1.50	Continuation	
	7.50	END OF DAY THIRTEEN	

DAY FOURTEEN

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Chemical Health Risk Assessment	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1115	1.00	Chemical Safety Data Sheet	
1115 - 1300	1.75	CLASS	
1300 - 1400	1.00	LUNCH	
1400 - 1415	0.25	Continuation	
1415 - 1515	1.00	Chemical Hazard Management	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1530 - 1630	1.00	Continuation	
	6.50	END OF DAY FOURTEEN	

DAY FIFTEEN

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Ventilation	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1145	1.50	Indoor Air Quality	
1145 - 1245	1.00	Biological Monitoring and Medical Surveillance	
1245 - 1400	1.25	LUNCH	
1400 - 1530	1.50	Biological Hazard	
1530 - 1545	0.25	AFTERNOON TEA BREAK	
1545 - 1745	2.00	Report Writing	
	7.50	END OF DAY FIFTEEN	

DAY SIXTEEN

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Ergonomics	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1215	2.00	Continuation	
1215 - 1230	0.25	Ergonomic Risk Factors	
1230 - 1430	2.00	LUNCH	
1430 - 1515	0.75	Continuation	
1515 - 1545	0.50	Shift Work	
1545 - 1600	0.25	AFTERNOON TEA BREAK	
1600 - 1700	1.00	Mental Workload	
1700 - 1800	1.00	Occupational and Psychological Stress	
	7.00	END OF DAY SIXTEEN	

DAY SEVENTEEN

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Physical Hazards: Noise, Radiation, Vibration, Pressurised Environment, Thermal Stress	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1315	3.00	Continuation	
1315 - 1415	1.00	LUNCH	
1415 - 1515	1.00	Overview of SOHELP	
1515 - 1600	0.75	Examination Briefing	ECD
	5.50	END OF DAY SEVENTEEN	

DAY EIGHTEEN (MODULE 4)

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Machinery Hazard	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1215	2.00	Continuation	
1215 - 1315	1.00	Safe Machine Operation	
1315 - 1415	1.00	LUNCH	
1415 - 1545	1.50	Safe Guarding of Machinery	
1545 - 1600	0.25	AFTERNOON TEA BREAK	
1600 - 1630	0.50	Continuation	
1630 - 1730	1.00	Maintenance of Machine Guards & Tools	
1730 - 1830	1.00	Safe of Hand Tools & Portable Power Tools	
	8.50	END OF DAY EIGHTEEN	

DAY NINETEEN

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 0930	1.00	General Area Fencing	
0930 - 1000	0.50	Mechanical Handling	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1245	2.50	Continuation	
1245 - 1345	1.00	LUNCH	
1345 - 1545	2.00	Pressurised Equipment	
1545 - 1600	0.25	AFTERNOON TEA BREAK	
1600 - 1700	1.00	Welding Safety	
1700 - 1800	1.00	Housekeeping and Physical Arrangement	
	8.00	END OF DAY NINETEEN	

DAY TWENTY

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1030	2.00	Electrical Safety	
1030 - 1045	0.25	MORNING TEA BREAK	
1045 - 1245	2.00	Working in Confined Space	
1245 - 1345	1.00	LUNCH	
1345 - 1445	1.00	Continuation	
1445 - 1515	0.50	Manual Handling	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1530 - 1600	0.50	Continuation	
1600 - 1700	1.00	Transport Safety Defensive Driving (Forklift)	
1700 - 1900	2.00	Office Safety	
	9.00	END OF DAY TWENTY	

DAY TWENTY-ONE

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0800 - 0830	0.50	BREAKFAST	
0830 - 1300	4.50	Site Visit	
1300 - 1400	1.00	LUNCH	
1400 - 1530	1.50	Discussion, Report Writing (HIRARC) and Presentation	
1515 - 1530	0.25	AFTERNOON TEA BREAK	
1545 - 1745	2.00	Continuation	
	8.00	END OF DAY TWENTY-ONE	

DAY TWENTY-TWO

TIME	HOUR	TOPIC	TRAINER / FACILITATOR
0830 - 1000	1.50	Fire Safety	
1000 - 1015	0.25	MORNING TEA BREAK	
1015 - 1245	2.50	Continuation	
1245 - 1445	2.00	LUNCH	
1445 - 1615	1.50	Construction Safety	
1615 - 1630	0.25	AFTERNOON TEA BREAK	
1630 - 1800	1.50	Continuation	
1800 - 1830	0.50	Closing Ceremony	NIOSH
	7.00	END OF THE COURSE	