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**THE PROJECT OF
ENHANCING THE
QUALITY OF
IMPLEMENTATIONS IN
GAP REGION**

**(İSG-UKAP)
2nd INTERIM REPORT**

ANALYSIS AND PLANNING OF TRAINING NEEDS

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1. INTRODUCTION

Occupational Health and Safety (OHS) studies, which fundamentally involves protection of employees' right to live, is a field gaining further importance in all countries throughout the world. As a result of the impact of international organizations on national legislations, it is observed that almost all countries throughout the world have conducted legal regulations regarding OHS, though with differences in their implementations.

Furthermore, the businesses operating in developing countries experience major challenges in terms of protecting their employees' health and safety. A part of these challenges are due to the use of outdated technology and economies of businesses, whereas; an important deal of these challenges emerge as a result of the fact that safety culture is not improved in businesses and all interested parties do not receive adequate training on this subject.

Depending on the characteristics of the work conducted therein, every workplace possesses dangers in terms of health and safety. The aim of the studies carried out in the field of occupational health and safety (OHS) is to establish work environments that do not contain the health and safety dangers as well as the risks they cause.

Protecting the health and safety of employees by preventing occupational dangers is an important matter, which could significantly contribute to the socio-economic well-being of not only a business but also the whole country. If employers adopt and place OHS perception in the middle of their administration, expenses related to their employees' health problems and consequently the costs resulting from employees' incapacity to work will decrease, moreover productivity will improve.

A higher quality, productivity, and a better economic performance could be achieved by operating businesses through an effective and constant occupational health and safety training along with effective equipment and materials that are regularly maintained in accordance with the standards of a safe work environment.

The importance attached to the field of OHS and raising awareness of safety and prevention culture in the related parties have recently increased. Within this new mindset, "OHS trainings" constitute a significant step of implementation. It is possible to cause change in one's behaviours through transforming the knowledge one has learned through training into practice and thereby to enable accurate behaviours related to OHS.

2. GENERAL INFORMATION

According to the statistics of ILO, every 15 seconds 1 worker and every year 2.3 million workers die because of an occupational accident or job-related diseases. This is a tragedy experienced by humans, which also has an economic dimension. The cost of inadequacy of OHS implementations is assumed to approximately account for 4% of the annual gross domestic product.

Occupational health and safety circumstances display major differences among social groups, economic sectors, and countries. In developing countries, in which majority of the population is employed in dangerous work fields such as agriculture, mining, and fishery, deaths and injuries are more frequently experienced. Moreover, people in risk groups such as women, child and refugee labour, who are the poorest and least protected anywhere in the world, constitute the social group that is most affected by occupational accidents and occupational diseases.

ILO does not only try to raise awareness about occupational accidents, occupational diseases, and dimensions and results of deaths all throughout the world but also establish regulations related to ways of protection by means of their various conventions and implemented programs. As a requirement of preventive approach, which is accepted all throughout the world, the issue of training employees to protect them from occupational health and safety dangers and risks, has a significant place at international dimension.

Article 14 of ILO Occupational Health and Safety Convention numbered 155, stresses on "taking measures required to improve education and training at all levels in a manner to meet all training needs of employees for the solution of problems related to OHS". For that purpose, Article 5 of the Convention foresees "a training, including necessary further training, qualifications and motivations of persons involved in the achievement of adequate levels of safety and health" and Article 19 of the Convention projects "providing employees and representatives at the work place with adequate training in terms of OHS".

Similarly, safety culture and OHS trainings constitute a significant part in EU policies. Especially ever since 1980's, many regulations in the field of OHS have been acknowledged at EU level. "Framework Directive for OHS" numbered 89/391, which is one of the fundamental regulations of EU, determines overall principles and methods for detecting and eliminating risks in order to prevent accidents and diseases, informing, training and ensuring the participation of employees and their representatives. In the Article 12 of the Directive, code of practice of the training is specified under the title of "training of employees".

These aforementioned developments in international law also bring certain obligations to the countries adopting these principles of law. The fact that Turkey is a member of ILO, who is in the process of accession to the EU, makes it necessary for Turkey to include similar regulations in its OHS legislation.

Within that context, "the obligation of employer to provide training and information about OHS" has been regulated in the Article 77 of Social Security Code. The justification of this Article argues that taking OHS measures is not always enough and employers are responsible for providing training. It has been emphasized that as a sociological fact, some employees fail to comply with the measures taken, which is mainly because they are not adequately trained about OHS and their awareness in OHS is insufficient.

The content of the aforementioned provision has been written in accordance with the aforementioned general principles of fundamental regulations of both ILO and EU in the field of OHS. "By-Law on Procedures and Principles of Occupational Health and Safety Training of Employees", which specify the quality, procedure, and principle of the training to be provided within the framework of this provision, has entered into force in 2004 and has been updated in 2013. The aforementioned by-law made it obligatory for employers to provide their employees with training and information on occupational health and safety as well as to monitor and take all necessary measures in all workplaces that are in the scope of labour law. Attaching a specific importance to training and expanding the scope of training obligation demonstrate that the preventive approach, which has become prominent all throughout the world, is also adopted in our country.

2.1. Importance of Training in Occupational Health and Safety

The most significant objective of the principles and standards specified in the field of OHS is to conduct the work in a safe and healthy environment. One of the ways to achieve that objective is to pay the required importance to training with the cooperation among parties.

Training has a vital significance in terms of safe and healthy workplaces. It also constitutes an important step of the preventive approach, which is acknowledged all throughout the world with the intention of protection from health and safety dangers. Training also plays an effective role in increasing awareness and sensitivity, establishing safety culture, and catalysing the implementation of OHS policies.

Particularly ILO Conventions numbered 155 and 161 as well as EU Framework Directive for OHS numbered 89/391 and other international legislation and legislations of developed countries draw attention to the issue of training. Even though the latest strategy and action plans of EU on OHS are updated according to the changing priorities, training has been one of the most frequently focused subjects.

In 2002-2006 and 2007-2012 EU OHS Strategies, the necessity of reinforcing safety culture through education and training is accentuated. For that purpose, it is necessary to include occupational health and safety in education programs including those of vocational training and university education, to pay particular importance to young entrepreneurs' OHS training, and to address all classes of society beyond employees and workplaces.

It is stated that making risk assessments in workplaces to prevent losses resulting from unhealthy and unsafe situations, detecting risk areas and accordingly taking measures are only possible through training.

The importance attached to raising awareness of safety and prevention culture in the related parties is an approach that is unexceptionally accepted in the settlement of problems related to OHS, Training plays a prominent role in the creation of this awareness and culture. The significance of having trained employees for the measures about occupational health and safety to achieve its objectives is underlined both in discipline and the studies conducted.

One of the main reasons why occupational diseases and accidents occur is because of the lack of knowledge on the subject, in other words, lack of education. "If a person has not received adequate training necessary for the job he/she has to execute or has not obtained experience, unsafe behaviours emerges and occupational accidents occur."

According to "Safety Culture Report" prepared by ILO in 2002, all occupational diseases and 98% of occupational accidents are preventable. In addition to this, the fact that 80% of occupational accidents results from the employees' noncompliance towards workplace's safety rules and commands and their unconsciousness towards the issue as well as employer's non-supportive approach proves that the issue is due to human error and lack of training.

At this point, the vital importance and role training plays in providing ensuring occupational health and safety of employees. However, a significant obstacle here is the fact that many employers are not conscious enough about the importance of training and consider training as an expense and employees are not trained about the dangers at the workplaces or do not conduct the necessities of the training they have received. Especially in small and medium-sized enterprises, one of the reasons why occupational accidents occur is due to the lack of OHS training of employers and employees and the underdevelopment of this culture. Even though using safe tools and actualizing safe implementations is generally believed to be costly, the impact of not using them is much more serious.

At this point, there is a serious responsibility for employees and their representatives. It is important for labour unions to effectively maintain their trainings related to OHS along with their training aiming to raise union awareness. OHS training aims at creating positive attitudes with sensitivity and awareness, both of which will improve occupational health and safety, and should be paid importance to, as a tool to improve workplace environment and circumstances.

Training is a personal and organizational development tool, whereas; OHS Training is a legal obligation. The basic function of OHS trainings is to raise awareness for protecting from occupational accidents and occupational diseases, in other words, to establish OHS culture.

Since culture refers to a life philosophy and a common sharing, effective results can be obtained only when trainings provided by employers are accurately implemented by employees.

OHS training is carried out with the intention of enabling managers and employees to acquire an understanding and skills required to detect risk factors causing occupational accidents, injuries, and diseases and to be prepared to prevent these risk factors in their work environments. The issue of providing employees with training on occupational health and safety risks in their workplace and circumstances and on how to protect themselves from the risks resulting from them constitutes a significant step of the preventive approach, which is acknowledged all throughout the world.

The fact that training plays a vital and prominent role in the settlement of OHS-related problems and that enabling OHS-related measures to achieve its objectives depends on the training of employees have always been indicated in the discipline. In fact, lack of training, noncompliance towards commands, and lack of awareness in occupational safety issues are the main reasons of occupational accidents and diseases.

Therefore, when the issue of OHS training is considered, the first issue to take into account is the training of employees. Indeed, the purpose of OHS studies is to ensure that employees are protected in their workplaces. Furthermore, working safely is a matter of culture and establishing such a culture is only possible if it starts from childhood, therefore OHS training should not be limited to workplaces, it should start from elementary school education to undergraduate and graduate level education and should be integrated with all levels of education including up to the level of expertise.

2.2. Safety Culture

With globalization, the issue of safety has gained an exceptional importance, especially in industries which operate internationally or with a certain level of danger. Changes in technology create a need for complying with safety standard and new regulations. Especially dangerous chemical industries are moved from Americas and Europe to Asia and Africa, economic and industrial development levels of which are quite different from those of Americas and Europe.

Mobility of labour as well as ethnical and national factors in terms of extra hazard industries make it difficult to establish a safety culture, the impact of which is widespread on risk-taking behaviour and risk perception. ILO attaches particular importance for workplaces throughout the world to improve and maintain their protective health and safety culture levels.

Safety culture involves all implementations and behaviours that could threaten safety as well as perceptions, beliefs, attitudes, rules, and roles, which prioritizes safety and aims at minimizing the damage resulting from living creatures or tools used in communal areas or sphere of influence, along with the feeling of responsibility and competence in social, technical, and political implementations.

In the Global Strategy objectives of ILO, **Occupational Health and Safety Culture** is defined as "an approach in which the right to a safe and healthy working environment is respected at all levels, where governments, employers and workers actively participate in securing a safe and healthy working environment through a system of defined rights, responsibilities and duties, and where the principle of prevention is accorded the highest priority".

2.2.1. Safety Culture at National Level

Governments, employers, employees/unions, universities, and trade bodies play a significant role in improving OHS culture at a national level.

Role of Government:

Their most significant activity consists of regulating necessary conditions and standards through legislations as well as inspection and awareness-raising studies.

In addition, they have the following responsibilities about occupational life:

- Establishing a reliable registry system

- Preventing non-registered employment

- Eliminating child labour

- Protecting the risk groups

- Supporting social security

- Ensuring that health care services are adequate and accessible

Moreover, the fundamental activities that should be carried out by Governments, in terms of OHS are as follows:

- Popularizing and raising awareness of safety culture in society, Creating social dialogue about OHS among stakeholders,

- Providing businesses and the society with training and consultancy service on OHS, cooperating with the Ministry of National Education and universities for OHS training

- Promoting researches in the field of OHS,

- Enhancing the infrastructure of safety and health in terms of OHS services.

Role of Employers

With the intention of preventing occupational accidents and diseases, their primary responsibilities are as follows:

- Adopting the approach of humans before productivity in production processes,

- Adopting the approach of risk assessment and management

- Supporting workplace health and safety units,

- Organization of emergency and first aid services,

Training of employees,
Enabling data flow,
"Scientific analysis of occupational accidents.

Moreover, taking all necessary measures to enable employees to properly use personal protective equipment, complying with technical developments, prioritizing collective and personal protection measures, giving employees convenient instructions, informing employees and obtaining the opinion of employees are further responsibilities of employers.

If employers or their representatives execute OHS activities solely to meet their legal obligations, their chances of achieving success in this field cannot be high.

Role of Employees/Unions:

Being knowledgeable with workplace, line of work, and production process
Participation in risk assessment and risk management processes, "Scientific" analysis of occupational accidents

Activities to ensure that occupational safety is prioritized in their lives
Using personal protective equipment according to rules

In the related legal regulations, the responsibilities of employees are stated as "complying with all measures taken by employer and obeying the instructions".

Within that scope, it is important that employees accurately use machines, devices, and equipment; report any negative event related to OHS at workplace; cooperate with their employer, health and safety employee representative, and other employees regarding OHS; avoid unsafe situations; and attend OHS trainings that are organized at their workplace to ensure that they work in a healthy and safe place.

Role of Universities:

The contribution of universities to the OHS culture is summarized below:

OHS – Scientifically contributing to social policies,

Providing a scientific infrastructure for the establishment of a reliable registry system, "Scientific" analysis of occupational accidents,

Basic training of the manpower to work in the field of OHS,

Contributing to the continuing training of the manpower working in the field of OHS upon their graduation,

Popularizing researchers related to OHS,

Establishing measurement and analysis laboratories about OHS, Improving the academic setting about OHS

Role of Trade Bodies:

OHS – Contributing to social policies

Contributing to the processes of employing and raising the manpower, who will work in the field of OHS

Organization of the continuing training of the manpower working in the field of OHS upon their graduation

Contributing to the "Scientific analysis of occupational accidents.

New approaches and method suggestions for creating a safety culture are as follows:

A proactive and knowledge-based OHS approach should be popularized,

A national and international working and production culture should be created, Life-long learning should be maintained starting from early childhood, Raising-awareness and sensitivity campaigns should be enhanced,

A close cooperation with the Ministry of National Education must be ensured and OHS lessons should be included in the curricula, OHS Training programs should be supported,

Best-practice examples and experiences should be shared,

Competitions on OHS among teachers and students should be arranged, OHS employees should work in cooperation with OHS trainers, OHS risks should be realized in schools, A national information network should be established,

Special methods should be developed for OHS in SMEs,

A close cooperation between employment and education systems should be ensured, Being open towards new approaches and ideas for determining and developing OHS policies,

Cooperating with social parties (partners) in OHS implementations,

It should not be forgotten that the likelihood of single-sided decisions about OHS to succeed is low, Model employees and employers should be selected in the field of OHS,

Interactive OHS training methods should be used in schools,

Sectoral trainings should be provided.

2.2.1.1. Improving Safety Culture in Formal Education Improving OHS Culture at Elementary School and High School Level

In order to create positive behaviours in children and youth before they start to work, health and safety issues must be absolutely included in the curriculum. It should be aimed to mutually integrate OHS views in various subjects and all phases of education. The age and education levels of children must be taken into consideration in order to do so. OHS programs should be sensitive towards the circumstances and flexible enough to adapt to local circumstances of each school. For example, in pre-school, lessons related to the rules of staying safe or making friends could be given.

In secondary school, subjects such as managing conflicts, preventing violence or being physically active in life could be included.

Improving health and safety circumstances of children and youth in schools or other educational units in long term requires an approach which covers the following conditions:

Physical, mental, and social welfare,

Providing communication among individual and environmental compartments of the whole school organization,

Shaping and improving the individual health and safety perception and behaviour patterns in schools,

Forming schools as working places, which are compatible with the needs of students and teachers.

A safe and healthy learning setting will enable children and youth to obtain the skill of forming their prospective private and professional life in the most healthy and safest manner and to raise awareness of risks as early as possible. The fundamental factors of occupational health and safety training consist of schools, employers, parents, teachers, employment agencies, health care providers, and non-governmental organizations.

Improving OHS Culture at University Level

Examining the OHS training instructed in the universities in the USA & Canada, some EU countries (Germany, Finland, France, the UK, Ireland, Italy etc.), and Asia countries, it is observed that OHS lessons are provided at various levels in the faculty of medicine, faculty of engineering, and technical faculties.

OHS Training in the Faculty of Medicine

EU-OSHA emphasizes that through the integration of OHS with universities, the challenges in this field could be overcome and the obstacles in practice could be abolished.

Examining the curriculum of the faculty of medicine in the abovementioned countries, it becomes apparent that OHS trainings are provided similarly in Public Health Schools, Public Health Institutes, Occupational Health Faculties or Occupational Health Institutes. These OHS trainings are included in the curricula under the titles of "Occupational Health", "Occupational Health Policy", "Occupational Health Research", "Occupational Health Services", and "Occupational and Environmental Health".

It is detected that OHS trainings are considered a special subject in their curricula at undergraduate and graduate levels by using separate units such as OHS Research Centre, National Institute of OHS, and Faculty of Occupational Health.

In undergraduate education, OHS lessons are included as compulsory and selective courses for 15-150 hours in a theoretical and practical curriculum; in graduate education, they are included as undergraduate expertise trainings lasting for 1-2 years.

In Asia countries, OHS subjects are increasingly covered in curricula; lessons hours for OHS subjects used to be for 6-30 hours per year, whereas; they are for 100 hours per year now.

It is observed that in Australia, there is a theoretical and practical OHS curriculum at the second and fourth year of the faculty of medicine with a wide scale.

Establishment of "Occupational and Environmental Health University" in Japan in 1991 is the highest form of institutionalization in the field of OHS. In the Health Sciences Institute of the University, 6-50 hours of theoretical undergraduate lessons and graduate education lasting for 1-2 years are provided.

OHS Trainings in the Faculty of Engineering and Technical Faculties

In the OHS legislation of EU, a non-normative risk assessment is targeted. Therefore, it is stressed that those studying at the faculty of engineering and at technical schools should be acquainted with risk assessment and management. In EU countries, due to the universities' education policies, it is very important that OHS training is included in the curriculum of university education. Besides, learning objectives and outcomes of OHS training curricula may display differences based on countries. For example, the learning outcomes in Ireland are stated as accident prevention, risk assessment, and obtaining risk awareness.

Furthermore, in the engineering faculties in Finland, which is a pioneering country in the field of OHS, approximately 20 hours of OHS training is provided per semester, in addition to this training, OHS courses are also maintained.

Despite the abovementioned examples, it is still argued that they experience problems with the integration of OHS training into universities in the EU countries. The possible reasons behind this include the fact that the conception of "Risk" is not considered as an academic conception and the number of academic staff working on this field in universities is inadequate.

According to the System of Classification (SOC) in the USA, "Health and Safety Engineering" is accepted as an engineering discipline.

In the various engineering faculties in the USA, there are Occupational Safety and OHS training programs conducted at undergraduate and graduate levels.

2.2.2. Safety Culture in Businesses

This conception was brought to light for the first time in 1987 by OECD (Organization for Economic Cooperation and Development) in their Nuclear Agency Report after the Chernobyl nuclear accident occurred in 1986. In the recent years, this conception has been frequently discussed.

Safety culture can be defined as all beliefs and ideas, which are related to risk, accident, and diseases are shared by all members in a workplace.

Even though there is not a commonly accepted definition or assessment approach about this subject, the opinions on establishing, improving, and assessing a safety culture in today's businesses are the same as a result of the importance of the subject.

With a rapidly growing technology and industry and subsequently opening of new work fields, factors threatening the health and safety of employees may emerge if measures are not adequately taken.

The objective of occupational health and safety is to protect employees from occupational accidents and diseases, to minimize, if possible eliminate damaging impact, and to keep employees happy by enabling them to have their full physical, mental, and social well-being and maintaining their high quality of life.

The level of occupational health and safety in a workplace has become a significant measurement tool of performance in terms of the economic success of an enterprise. Similar to the principles of modern health care approach, what needs to be done in workplaces is to accept that prevention is always more effective, easier, and cheaper than treatment.

Therefore, considering the contribution of OHS culture, it becomes apparent that the investments in OHS will pay for itself in a short period of time; the moral or material value will be gained from the accidents prevented thanks to the investments.

In the workplaces, which try to endure the heavy competition circumstances of today's world, the contribution of the existence of "OHS culture" to standing, development, and stability of businesses is unfortunately a factor that is often ignored.

In order for businesses, which try to raise qualified personnel with the intention of competing, to make the maximum use of the skills of their employees, one of the primary conditions is to assess if the workplace is healthy and safe.

It is clear that the businesses, where these conditions are not met, may lose their prestige and competitiveness because of the possible accidents or injuries.

After establishing a safety culture, it becomes possible to enable all employees to share similar beliefs, ideas, and perceptions about health and safety and to eventually decrease accidents, injuries, and diseases.

In positive safety culture, the commitment of the administration to safety must be apparent; mutual trust must be ensured; activities must continue; training must be provided on a regular basis; employees must participate in all processes; positive feedback must be given for their efforts towards safety; duplex open communication must be provided; and safety system must be flexible.

The point where we are at settling Occupational Health and Safety problems makes is apparent that it is necessary to carry out researches on Safety Culture to maintain the importance of the subject and to contribute to the process.

2.3. OHS Culture in EU

In the recent OHS policies of EU, OHS training and safety culture have a significant place; more time and financial funds are saved for the training activities to support the development of OHS training and safety culture.

Training remains in the forefront in the objectives of EU Strategy on OHS (2002-2006):

Training and awareness in OHS must be increased starting from early ages.

Training and safety culture must be considered the most fundamental item in ensuring quality and productivity in professional life.

In all educational institutes in the EU, at least 8 hours of OHS training must be provided before 2010 for the whole youth.

In 1989, European Council Directive (89/391/EC) made it obligatory for all employers to make risk assessments for the purpose of establishing OHS culture and for the health and safety of employees at the workplace.

Rome Declaration on "Integration of Occupational Health and Safety into Education and Training" has been published. The objectives of the Declaration involve preparing children and youth for their prospective healthy and safe work lives, providing all citizens and employees with life-long learning, and developing a curriculum that will improve OHS at workplaces and ensure its continuity.

Within that context, increasing awareness in OHS and OHS trainings has been an issue, which is significantly emphasized in EU'S OHS strategy documents and programs.

There are many projects being carried out; Integration of Occupational Health and Safety into Education System (Best Practices at Schools and Vocational Training) by Occupational Safety and Health Agency of Europe (OSHA) is an outstanding study.

In order for prospective employees to safely work, OHS must be integrated into today's education system. Children and youth must be trained on health and safety at very young ages, so that they can carry these ideas into their prospective professional and private life.

The Rome Declaration, which was structured in 2003 in the OHS Conference on 'Integration of OHS with Education and Prospective Employees', appoints people, schools and other professional education institutions with the responsibility of conducting actions to provide a safer and more healthy labour force starting from childhood.

Moreover, initiating education and training system to ensure occupational health and safety and enabling participation to maintain those systems have been determined as objectives.

EU has presented a significant success in actualizing the concrete objectives stated in their 2002-2006 OHS Strategy. Finally, European Commission has created a five-year OHS Strategy between the years of 2007-2012, which concludes that their objectives about OHS training include promoting employees to change their behaviours, promoting employers to adopt health-oriented approaches, and adding OHS lessons into curricula of vocational schools and universities by promoting OHS training.

The main idea underneath the project on integration OHS into training, which was initiated by EU-OSHA in 2002, is that the earlier the children and youth get familiar with the conception of health and safety, the earlier they develop awareness towards risks, thus shape their own professional environment in a safer and more healthy manner. The integration of OHS must be for the children and youth studying at different grades in pre-schools, elementary schools, high schools, vocational schools.

According to EU-OSHA reports, the trainings provided in the member countries focus on prevention experts such as employees, employee representatives, employees working in the field of OHS, employers, trainers, safety engineers, and doctors, however, it is aimed to expand its scope and access more people. Especially risk assessment, frequent accidents, risky sectors and the youth, accidents in education institutions, fire safety and rescue, violence, stress, musculoskeletal diseases are the educational subjects that should be primarily instructed.

2.4. OHS Culture in Turkey

In carrying the measures taken in the field of OHS into effect is of great importance for raising awareness and training purposes. However, in our country, neither an adequate level of OHS training is provided in any workplace or education institutions, nor there is a concrete, long-term, and applicable plan or policy on improving the training activities in OHS.

Improving the occupational health and safety conditions has been stated as one of the fundamental goals under the heading of "Employment and Professional Life" in the Tenth Development Plan of the Ministry of Development for 2014-2018. For that purpose, there has been policies adopted to improve OHS culture, to increase the competency with the OHS standards through incentives and monitoring, and to raise qualified expert personnel in adequate number in this field.

One of the most important objectives of the 2014-2018 Strategic Plan of the Ministry of Labour and Social Security is "Improving and Popularizing Occupational Health and Safety".

In the "National OHS Policy Documentation" prepared for 2006-2008 and 2009-2013 by National OHS Council, the inadequacy of OHS training and the necessity to improve it have been discussed.

Finally, in the headline of "Popularizing OHS Culture in the Society", which is one of the goals of III. National Policy Document-III (2014-2018), it is emphasized that establishing health and safety culture in society requires more than making amendments in the OHS Culture; changing the behavioural patterns of individuals of the society is also necessary. Moreover, it stresses on the significance of increasing the number of activities that are conducted with the intention of creating "Occupational Health and Safety Culture".

Training is a dynamic process, which requires planned work and does not consist of conveying certain information to the target audience. It is expressed that in such a multidisciplinary and complex issue such as OHS, in order to achieve success, each phase must be planned and organized through systematic and scientific approaches, financial resources must be adequately allocated, and social parties must actively participate and fulfil their duties throughout the process.

With its OHS objectives that became prominent in the last decade, Turkey has aimed to create a common "Safety Culture" in the professional life and the whole society until 2010 and to make safe and health behaviours a habit, thus embrace this culture on a life-long basis.

OHS training, which is an important dimension of the preventive approach, must be popularized in all education institutions starting from elementary schools, especially in vocational schools, with the intention of creating a societal OHS awareness.

Even though there are certain studies being conducted on the issue, OHS is still not included in our fundamental curriculum at the desired level.

Moreover, there are studies carried out by the Ministry of Labour and Social Security to raise safety awareness in children and youth at both national and international level.

One of the aforementioned studies is the ENETOSH Project (European Network Education and Training in Occupational Safety and Health), which is coordinated by the Occupational Health and Safety Academy of Germany; within that context, İSGÜM, which is affiliated to the Ministry of Labour and Social Security, joined the study between the years of 2005-2007.

Within the scope of the Project, which aims at establishing the ENETOSH Information Network and achieving EU standards in OHS training, various seminars were organized with the purpose of raising awareness in teachers and students from vocational high schools and making a pilot study in elementary schools on a healthy and safe life style training through interactive methods.

Another study is the integration of OHS subjects in the elementary school sixth and seventh grade lesson books in 2006 with the cooperation of the Ministry of Labour and Social Security and the Ministry of National Education.

Besides the training works conducted in light of "Occupational Health and Safety Training in Vocational and Technical Education Institutions Cooperation Protocol" signed by the Ministry of Labour and Social Security and the Ministry of National Education in 2009; there are some other important outputs such as "Occupational Health and Safety Guide in Vocational and Technical Training Schools" prepared as an OHS management system, trial risk assessment studies carried out in the workshops in pilot schools, check lists on possible sources of danger in all school area, and forms prepared for schools to develop a registry and monitoring system about OHS.

Even though their efficiency is constantly argued, the important function of our vocational high schools, which raise qualified intermediate personnel required by the industry, is undeniable. Since vocational high school students have their lessons in workshops and workplaces in an applied manner, they have to have an adequate level of knowledge in terms of occupational safety. In that context, among the modules that are obligatory to be used in each field, OHS module, which used to be instructed as an elective lesson before, however, was turned into a compulsory lesson after MEGEP, is instructed for 40 hours starting from the tenth grade. This module includes basic conceptions about OHS; factors threatening workplace and occupational safety; occupational diseases, accidents, and injuries; fires; legal processes to implement in the event of an occupational accident; and occupational safety legislation. Moreover, it is clear that it needs to be updated and improved.

In the vocational training of upper secondary education, OHS training was nearly non-existent. OHS lesson was only present in a limited number of curricula of a few universities.

The only positive development at the upper secondary education is the fact that the number of 2-year OHS departments, first example of which was founded in 1996, increases each year. Furthermore, majority of the graduates of this faculty do not receive an adequate level of OHS training throughout their lives.

Even though OHS possesses utmost significance for the faculty of medicine and engineering, OHS lessons are not often provided in the technical departments of universities or are solely provided as an elective course. Since engineers are both the executors of the preventive OHS activities and conveyers of OHS culture at workplaces, it is of great important that they improve their knowledge in OHS. Unfortunately, in our country, the number of academicians in the field of occupational health can be counted on the fingers of one hand. Therefore, in order to increase the number of academicians in this field, "Departments" must be established in the related faculties of our universities and career opportunities must be initiated as soon as possible.

As mentioned in the "I. Interim Report" there has been many projects carried out in Turkey with the intention of increasing the awareness level and sensitivity in the society in order to develop a National OHS culture in the last decade. One of the most prominent ones among these projects is "Project of Improving Occupational Health and Safety in Turkey-ISAG I-II", which was conducted by the Ministry of Labour and Social Security and supported by the EU between 2004 and 2008.

Following this project, another project named "Project of Improving Health and Safety Conditions at Workplaces" prepared by the Ministry of Labour and Social Security and supported by the EU, which involves risk assessment in metal, mining, and construction industries; monitoring working environments as well as the health and training of employees,

There are two other substantial projects being carried out by the Ministry of Labour and Social Security with the support of the national budget: OSGB and HISIP projects, which target at service standardization in ISGIP and OSGB popularized in five sectors including food, textile, chemistry, furniture, and leather.

It is essentially aimed to enable the occupational health and safety standards in Turkey to meet the EU standards via all of the abovementioned projects. Furthermore, another objective is to develop an effective and productive system to implement the occupational health and safety rules and by-laws at workplaces by particularly focusing on SMEs and on risky sectors through similar projects.

It is aimed to establish an OHS awareness,

- To ground OHS-related regulations on a modern basis and making them competent enough to meet today's technology,

- To provide consultancy services in the field of OHS particularly for SME's,

- To organize educational, encouraging, and leading activities,

- To investigate the quality and quantity of the workplace assessment, examination, and research activities,

- To create mutual work domains and cooperation with international institutions,

To develop an advanced registry notice system with the aim of creating a database on occupational accidents and diseases,
To minimize occupational accidents and diseases.

The innovations brought by the legislative regulations conducted in our country not only to meet the requirements of EU membership but also to establish OHS culture, can be summarized as follows:

Informing employees of the risks they may face with at the workplace,
Developing an overall preventive policy at workplaces,
Constantly improving the circumstances related to occupational health and safety,
Detecting the hazards through a risk-assessing approach at all stages of work and accordingly determining what measures to take,
Enabling cooperation among different employers, who use the same workplace, on occupational health and safety,
Having health and safety personnel (occupational safety experts) at workplaces.

2.5. OHS Training throughout the World

In the article named "An Examination on Employer's Obligation to Provide Occupational Health and Safety Training" prepared by Uludağ University and published in Work Relations Journal, various studies on OHS Training conducted in various countries are summarized as follows:

2.5.1. Canada

Canada is divided into ten states and three regions, each of which has their own OHS legislation. In Canada, there is not a specific code of OHS; it is rather organized as a part of Code of Labour. According to this Code, the most prominent responsibility in field of OHS is that employers must ensure that employee's health and safety are protected throughout their employment. For that purpose, personal protective materials must be supplied and used, necessary oversight must be provided for employees to work in a safe and healthy work setting, and employees must be instructed and informed about this issue. In general, employers are obligated to take all sorts of reasonable measures so as to protect the employees.

One personnel, who is in charge in the field of health and safety, must comply with the written and spoken directives about health and safety of employees, and ensure that employees, who are in charge of oversight or administration, have received an adequate level of OHS training within their responsibilities.

Furthermore, the scope of OHS legislation covers the definitions of hazards at all workplaces, in which hazardous substances are used and which thereby produce under a special legal regulation in Canada, as well as safety of materials, education and training of employees.

In the OHS By-Law, the subject of training of employees is arranged in a more elaborated manner than it is in the Code itself, and is divided into two sections including OHS training on the use of hazardous substances and OHS training in risk prevention program.

In prospective OHS trainings to be given for the use of hazardous substances, a curriculum must be developed and implemented so as to prevent and control hazards at workplace, by enabling all employers to have meetings with their employees, occupational health and safety representatives or health and safety committee. Definition of hazard; information about hazards and hazards that are likely to happen or are realized by the employer; and information on the procedures to follow for the safe storage, transportation, usage, and disposal of hazardous substances must be included within the subjects of the curriculum.

In the regulation regarding the OHS training in the section of prevention of risks, all employers are obliged to provide all of their employees with OHS training including ergonomics. The content of this curriculum must include the risk prevention program implemented at the workplace. Moreover, issues such as risks raising from the nature of the work, the situations in which employees have to keep a report, and the overall explanation of codes and by-laws must be stated. If it is found out that a new risk may emerge because of a risk that already exists at the workplace, employer must provide employees with training before they are exposed to this risk or before assigning them a new job. Employers must evaluate the effectiveness of their risk prevention program, in which components about ergonomics are also covered, at least once every three years. While evaluating the effectiveness of the prevention program, it is important to consider employees' activities, workplace circumstances, examination and risk emergence research reports, safety oversight results, the opinions of health safety representative on the prevention program of the workplace committee and other related information.

For each training given to the employees, employer and employee must approve that they have received and provided a training in a written manner. Employer must keep a track of each training provided to each employee. In the event that employee is exposed to a hazard, records must be kept for two years.

The amendments implemented on the OHS Code in 2011 include taking all reasonable measures to ensure the health and safety of employees; organizing trainings and instructions on this subject; arranging training programs for employees, executives, and OHS committee members as stated in the by-law; and not allowing employees to use hazardous substances unless they complete their trainings.

The Code expresses that all employees have the right to participate in OHS trainings, and the trainings given to employees who are committee members, trainers, representatives, and executives, deserve a special attention.

It is necessary that curricula are prepared by interviewing OHS representatives or OHS committee and reviewed and updated at least once a year.

With the latest changes, it became employer's responsibility to develop anti-violence and anti-harassment policies at the workplace within the subject of OHS, and to regularly revise them.

2.5.2. Spain

Even though the field of OHS has developed to a substantial level in the last decade in Spain, has re-defined the safety culture; and significant changes in industrial safety, hygiene, and psychosocial factors have created a positive panorama, the statistics do not demonstrate the expected picture.

OHS legislation has a very extensive content including fundamental provisions in general laws, by-laws specific to the line of work, sectoral and vocational regulations, and many provisions stated in the collective labour agreements and by-laws published by autonomous communities or regions.

As a requirement of achieving harmony among the OHS legislations of member countries within the framework of 89/391/EU Directive; "Code of Prevention of Occupational Risks" dated 1995 constitutes the umbrella of OHS Legislation of Spain. The Code presumes that providing OHS training at all levels will improve the preventive culture, thereby safety culture will become widespread in the whole society.

The general principle of this new approach towards OHS legislation involves working towards detecting occupational risks about the protection of health and safety and ensuring that all instructions related to safety are directed to employees.

Employers are obliged to provide employees with a workplace, which is purified from known hazards that could make serious harm or result in death. This preventive general principle is based on fundamental principles such as decreasing or eliminating occupational risks, informing employees, exchanging opinions, enabling participation, and providing training about preventive situations.

In the regulation named "Training of Employees", it is stated that employers are obliged to provide all employees with effective, adequate, theoretical, and practical trainings. It is emphasized that this training should not be only applied as a preventive measure based on the type and duration of a contract and when an employee first starts to work but also when a change of duty occurs or when new technologies and different production tools are used. Trainings must be particularly focused on the job and workplace of employees.

Moreover, according to the emergence or development of a new risk, trainings must be renewed and improved, if necessary.

The employees, who are assigned to be in charge of emergencies, first-aid, firefighting, evacuation of employees, should receive the necessary training.

If possible, training should be provided during work hours. Otherwise, the time spent on their training must be deducted from their work hours. Trainings may be provided by the business itself or outsourced service providers. In either case, training cost should not be reflected on employees.

What is targeted in the OHS legislation of Spain is establishing a real safety culture, which can be only actualized through the commitment of executives, employees, and other social groups. It is believed that success can be achieved only when an idea is encouraged and when OHS is considered a common value at the workplace rather than only fulfilment of a legal responsibility. Despite this belief, the statistics suggest that there are serious problems in the risk management in terms of prevention and control.

Even though the Code for Prevention of Occupational Risks went into effect in 1995, a constant increase was observed in occupational accidents in general and certain sectors between 1991 and 2000; moreover, the risk of occupational diseases is always high. One of the reasons behind this is the fact that small enterprises do not own protective materials and their employees lack safety training.

It is expressed that in Spain the number of occupational accidents and diseases have decreased in time thanks to adopting and reinforcing the preventive culture in Spain.

2.5.3. Australia

In Australia, which is a Federal State, each state and each region has its own legislation. However, they wanted to create a national OHS Code in order to ensure uniformity in implementation and harmony with the laws throughout the country.

The Model Occupational Health and Safety Law, which entered into force on 1st of January, 2012, is not much different from the current OHS legislation, however, many of its articles are based on the common policies of each state. The national codes and standards, which are consistent with one another and have been studied for over twenty years, have been united under this law.

There are some differences among OHS trainings of states.

In the 2004 Labour Law of State of Victoria, the obligation of employers to provide their employees with knowledge, instructions, and training as well as monitoring them are clearly stated.

In the 2011 OHS Law of the State of Queensland, all employees are granted the right to demand knowledge, training, and education required to protect their health and safety. The obligation of providing and inspecting the infrastructure that will make it a behavioural pattern of individuals belongs to the employer.

In the Occupational Health, Safety and Welfare Law of the State of South Australia, it is stated that employer is obliged to provide all employees with knowledge, training and education necessary to prepare for events such as being exposed to occupational accidents or risks as well as to inspect these trainings.

Clearly, there are similar expressions on employer's obligation to provide training in various OHS Laws of many States in Australia. Comparing the obligations of state legislations and government legislations in terms of their nature, it is emphasized that the obligations in state legislations are stricter.

Through the Model Occupational Health and Safety Law, which has been prepared due to these differences among regulatory legislations, the Government has aimed to create a homogenous implementation by harmonizing the state and federal OHS legislations.

In addition to this, there is also a Government incentive for employee training. Australian Government also provides an additional financing support for the trainings given to interns and apprentices by the states and regions through employment incentives.

In that sense, regulations related to training are elaborately designed in a manner that is specific to certain lines of work. As a result of the cooperation between Australia Safety and Compensation Council (ASCC) and National Occupational Health and Safety Commission (NOHSC), 7 different training packages were designed.

OHS 100 Working Safely: It is only implemented for the training of employees, who have just started working in the construction sector, in industrial lines of work.

OHS 200 Participation to OHS Processes: It contains knowledge about workplace risks, hazards, and safety implementations, which have the intention to enable the employees who have just started working to achieve a fundamental knowledge level.

OHS 300 Contribution to OHS Processes: It aims to teach employees with only little experience or completely unqualified employees the knowledge and skills about the job, occupational risks and the safety policies applied at the workplace.

OHS 400 Protection of the Current State of OHS Processes: It is a training designed for executives and team leaders with the duty to inspect.

OHS 456 Control, Definition, and Evaluation of OHS Risks: It contains information about protecting the safety of OHS-technical personnel and safety of the employees working in interaction with them.

OHS 500 Management of OHS Processes: It involves a training based on the assumption that there are advisory committees established on OHS at workplaces for the executives of small work groups to benefit.

OHS 600 Improving OHS Processes: It is focused on creating and improving OHS processes in an enterprise.

2.5.4. Asia-Pacific Countries

Many Asia-Pacific countries have developed their own OHS profiles according to the recommendation No. 197 and Convention No. 187 of ILO. These profiles usually contain information about the overall legislation, authority who is responsible for OHS, the relationship among employees, unions, and employers, knowledge and consultancy services, occupational health services, training and research, information on occupational injuries and diseases. Developing and analysing a national profile is beneficial in terms of formulating the national OHS program and foreseeing the priorities of the country in the field of OHS. For example, Vietnam has introduced a law in order to improve national OHS. On the other hand, Cambodia implements an approach of participatory training by developing a practical OHS support system, which is expanded according to the workplaces in the sector and small enterprises. This implementation has created a positive impact on the improvement of the national profile and prioritized this sector in Cambodia's first national OHS program.

Trilateral solidarity and cooperation with NGOs constitute the basis for establishing the national profile in each country. Especially labour organizations possess practical information on the real needs of employees in order to prevent occupational diseases and accidents at workplace. Similarly, the cooperation between the Ministry of Health and the Ministry of Labour has enabled the improvement of reporting system for the defining and preventing the occupational diseases and detecting the current state, thereby has taken important steps towards developing OHS.

2.5.4.1. China

The rapid growth in urbanization and industrialization along with globalization have caused serious difficulties in China in terms of controlling and preventing occupational diseases. The scope and equality of occupational health services is quite insufficient. Its scope is assumed to be less than 10%. Within the direction of WHO and ILO policies, in 2006 Basic occupational health and safety service system (BOHS) was established in pilot regions in China.

In the pilot regions, inspection of health and technology used in occupational health centres have been enhanced. The number of expert technical personnel and occupational health inspection personnel has increased. Occupational health personnel and technical and administrative personnel have been provided with occupational health trainings as well as consultancy and guidance services. The content of the training includes subjects such as the legislation on controlling and preventing occupational diseases, diagnosis of occupational diseases, and health supervision. In order to enhance the knowledge level of employees, they were provided with a training on the legal system concerning occupational health.

Moreover, in a study, which evaluates the effectiveness of OHSAS 18001 in the construction sector, 60% of employers have uttered that OHS measures in the sector are inadequate and there has been an increase in the number of occupational accidents in the past three years. The fact that employees in the construction sector usually lack quality, experience, and training, and that there is not an effective mechanism to protect them in the event of an accident are two prominent reasons behind the previous statement. Moreover, only 6% of employees have stated that they did not provide their employees with OHS training and stressed on the necessity for employers to provide OHS training and the difficulty of providing such a training due to temporary labour force. Besides, according to national statistics, only 3% of employees working in the construction sector receive a comprehensive training, 7% of them receive short-term training, whereas; 90% of them do not receive any training whatsoever. Apparently, the necessity to provide OHS training particularly in the construction sector is a highly-emphasized subject.

2.5.4.2. Singapore

In Singapore, the OHS Law, which entered into force in 2006, brings about a performance-oriented regime. It stresses on the importance of managing the reasonable measures that could be taken to provide OHS through a preventive approach with all stakeholders.

Within the context of 2018 OHS strategy of Singapore, four key strategies and initiatives were specified. These include developing skills to manage OHS at workplaces in a better manner; implementing an effective legislation; being aware of best practices and promoting the benefits of OHS; and establishing strong partnerships at local and international level.

The basis of the first strategy involves the efforts to create an institutional capacity, in other words, training. There are two ways to train the labour force.

The first one is "System for Occupational Health and Safety Professionals at Workplaces", which aims to train professionals in this domain. That involves providing professionals working in this field with trainings, which aim to improve their skills in terms of detecting and managing risks and hazards. This group consists of the training of OHS representatives, coordinators, personnel, and inspectors.

The second one is "Certified (Authorized) Training Providers System". It involves providing employees, inspectors, and executives with training on OHS, through authorized special training institutions in an outsourced manner. In that case, trainers are appointed based on the needs of the sector. The second option is often preferred in high-risk fields such as construction, or ship production.

2.5.4.3. Korea

The number of fatal injuries in Korea is much less than that of many European countries. According to local government reports, the ratio of fatal injuries is less than 1% of total cases. In the last decade, the accident ratio has been stable and fatal injury ratio has decreased down to 40%.

Korea has achieved this success through two methods, first of which is adopting different injury indexes such as total loss of work days, and fatal and non-fatal injury ratios, so as to focus on preventing serious injuries. The second one is obtaining more accurate injury rates by using a survey system or through inspection. Since most injured people tend to go to ER, it is quite easy and reliable to find out whether these injuries are occupational injuries or not.

In Korea, the responsibility of OHS belongs to "Bureau of Compensation and Prevention of Occupational Accidents and Diseases". Furthermore, the duties of OHS Institute (KOSHA), which is responsible for preventing occupational accidents and diseases, include investigating accidents, supporting risk analysis programs, certification of OHS management system, providing employees and OHS experts with training upon their request, and increasing awareness of OHS and safety culture. In general, it focuses on small enterprises, which are immunized from employing OHS experts by OHS Law and has less than fifty employees.

In recent years, the activities carried out in Korea to prevent occupational diseases and injuries have been successful. Preventive activities have been enhanced especially construction, and service sector, in both of which the ratio of occupational diseases and accidents is more than 40%. Mutual activities carried out many professional associations, local governments, and trade bodies in Korea in the field of OHS are very outstanding.

2.6. OHS Training in Turkey

In our country, there are only legal regulations about the training of employees and OHS professionals. There is not a standardization at national level; even though there are various programs concerning OHS training executed at elementary school, high school, and higher education level.

Evaluating the regulations conducted for both OHS professionals and employees, it is observed that the target audience of trainings usually only consists of adults. Due to the fact that adults' physical, societal, and social characteristics are different from those of children and youth, their characteristics in terms of training should also be different. In many parts of the world, adults have to face many challenging factors or obstacles resulting from internal or external circumstances, which make it difficult for them to participate in trainings or education after they complete their formal training process.

That's why, regulating the trainings to be given to OHS professionals and employees according to scientific principles, plays a vital role in actualizing the preventive approach, which is our final objective.

2.6.1. Training of Employees

2.6.1.1. General evaluation

Employees can only do so much to protect themselves on their own. Employees may know how to conduct their job, however, when they first start to work at an enterprise they are usually not trained in terms of protecting their health or working safely. Moreover, each individual has their own personal behaviours and habits. Hence, the more the employees know about health, safety, and hazards; the more they can protect themselves from hazards and the more they improve their health.

The necessity for employers to inform their employees and sub-employers of the work they will conduct is apparent, however, their duty is not limited to this; it is also their responsibility to tell employees and sub-employers about the risks and hazards they may face with and to protect them from such risks and hazards. Employees must be trained on the risks which may threaten their health and safety; preventive measures that should be taken against such risks; necessary first-aid measures; and emergency action plan procedures which must be followed in the event of such serious and sudden hazards.

Such a training will do much more than only conducting work in a safe manner and complying with the law, it also contributes to a successful work performance.

Establishing a communication network at workplace and enabling employees to receive necessary trainings are key components in the management systems of successful enterprises. Trained employees work in a much more productive manner and feel more valued by employers.

A training must be given when an employee is firstly employed or if there is a change in employee's mode of operation or work itself, or when new technologies are used and must be periodically repeated if necessary. These trainings and information provided therein must be based on the results of risk assessment.

In trainings, the following factors must be taken into consideration:

The authority to conduct certain assignments or enter certain areas, which are seriously hazardous, should be only granted to employees, who are experienced/trained on the assignment or risk in question and have received accurate instructions.

The information, instructions, and trainings provided to employees must be understandable and suitable for the subject/level. For example, if there are any people with disabilities among employees, the information to be conveyed must be presented in a different format/manner, which meets the needs of people with disabilities.

Another issue to be considered is the fact that employees in certain categories face a greater risk of accidents compared to other employees; and this fact must be taken into account while planning what measures to take. Employees from different nationalities, who speak a different language thus cannot read safety instructions, or temporary workers with no experience on the job may be given as an example to these categories. Furthermore, young employees or employees, who have just started to work, pose a vague and unexpected danger due to their lack of experience; hence, they require supervision.

On the other hand, employees over a certain age may not be able to present the expected physical performance. Health and safety measures must aim to protect employees by adjusting the work conducted according to the occupational safety and health needs of employees.

An effective health supervision must be provided in order to control the risks employees face with while working at their workplace. Primarily, employees must be provided with knowledge on health supervision and informed that they will be examined by the workplace doctor on a regular basis.

Employees and representatives have the right to actively participate in health and safety works. The studies carried out with the best practice examples in risk prevention indicate that seeking the opinion of employees and enabling the active participation of the labour force by using their own knowledge and experiences are some of the most significant factors for achieving success.

Regarding health and safety, employers must:

Seek the opinion of employees and/or their representatives in order to include them in the process, Provide employees and/or their representatives with information on the results of risk assessment,

Include employees and/or their representatives in the process of creating preventive measures,

Respect the right of employees and/or their representatives to ask their employers to take necessary measures and to make recommendations on the subject.

Preventive measures, emergency procedures, and health and safety training are some of the subjects, regarding which employers must seek the opinions of employees. All details are stated in the national legislation, and accordingly, it may be an obligation to establish a safety committee depending on the number of employees of the company.

Within that context, employees are ideal groups for adult health and safety trainings. Having employees, who work at the same place, all together in one place increases productivity and catalyses monitoring the results of trainings as well as evaluating the effectiveness of trainings. Each training given to employees may be on a different subject or have different content.

2.6.1.2. Current State of our Country

In our country, there are regulations on OHS training of employees within the scope of OHS Law No. 6331. Employers are obliged to inspect whether OHS measures are complied with at the workplace; to inform employees of the occupational risks they are faced with, measures that should be taken, and their rights and obligations; and to provide the necessary OHS training.

The By-Law on the Procedures and Principles of OHS Training of Employees No. 28648, which was published in the Official Gazette on 15.05.2013, consists of subjects such as "Preparation of Trainings", "Training Periods and Subjects", "Basic Principles of Training", "People and Institutions who can Provide Training", "Qualities of the Place of Training", "Certification of Training".

Employers are obliged to take necessary measures to provide a healthy and safe workplace. For that purpose, employers are responsible for informing employees of the risks they are faced with and their legal rights and obligations; organizing and providing OHS trainings on what measures to take against risks at the workplace; enabling employees to participate in these trainings; and supplying a place, tools, and equipment required to conduct those trainings.

In workplaces where there is an employer-sub-employer relationship, the employer and the sub-employer are both responsible for training the employees of the sub-employer. The temporary employer is obliged to provide the employees with necessary training on the temporary work. Employers are obliged to provide their employees with the necessary training, regardless of the type of contract of employment.

On the other hand, for a healthy and safe workplace, employees are obliged to attend the OHS trainings provided at their workplaces and to comply with the related instructions and procedures. The trainings shall be organized in such a way that they do not cause any financial burden on employees and the time spent on trainings is counted as work hours. The By-Law also includes issues such as the training of employees with specialties; preparation of annual training programs; planning, determining, and organizing training programs; content, method, assessment, evaluation, and documentation of training; people and institutions who can provide training.

The subjects of training consist of general OHS rules, reasons behind occupational accidents and diseases, principles of protection from accidents, injuries, diseases, and risks at workplace, application of protection techniques, safe use of occupational equipment, legal rights and obligations of employees, information on the legislation, establishing a safe setting and system at the workplace, using personal protective tools, working with equipment with screens, warning signs, risks emerging from chemical, physical, and biological substances, cleaning and order, fire and protection from fire, thermal comfort conditions, ergonomics, electricity and its risks, hazards, and measures, first-aid, and rescue.

According to the provisions of the By-Law on OHS Councils No 28339, which was published in the Official Gazette on 30.06.2012, employers provide member of OHS council and their alternates with a training on OHS subjects.

The training of the members of councils and their alternatives must include the following:

Duties and authorities of the council,

National legislation and standards on OHS, Common occupational accidents and reasons behind dangerous cases,

Basic principles of industrial hygiene, effective communication techniques, Emergency measures

Occupational diseases,

Issues related to workplace-specific risks.

The duties and authorities of the council consist of planning OHS training and education at the workplace, preparing the curriculum concerning these rules and subject and presenting them for the approval of the employer or representative of the employer, and monitoring the implementation of the training program.

In the TS 12280 "Health Employee Training" of Turkish Standards Institute, there are also regulations on OHS training of employees. "Health employees" can be defined as employees, who are in charge of health and safety services of their workplaces, and have received training on fundamental health issues, primarily first-aid as well as OHS issues. Health employees work in a first-aid organization through a certain planning at a workplace and implement first-aid when necessary, comply with health and safety measures, and enable their co-workers to also comply with them. According the aforementioned standard, the content of the training of health employees shall be composed of 50 hours in total, which equals to 10 hours of employee health, 10 hours of occupational safety, and 20 hours of first-aid.

2.6.1.3. Evaluation of the By-Law on the OHS Training of Employees

2.6.1.3.1. Employer's Obligation to Provide Training

According to the Article 5 of the mentioned By-Law, "employers are obliged to take necessary measures to provide a healthy and safe workplace". The scope of this obligation consists of informing employees of their legal rights and obligations; preparing training programs on the current risks of the workplace and measures to take against these risks; organizing trainings; enabling employees to attend these trainings; and supplying a place, tools, and equipment required for the training.

The content and method of the training shall be determined based on variable factors such as characteristics of work, the work conducted by the employee, existence of employees with specialties, type of training, and culture and awareness level of the workplace.

Employer's liability to provide training is primarily for the employees working for the employer himself/herself through a contract of employment. The type of the contract of employment of employees does not matter. Moreover, the employer is also obliged to provide permanent employees with training.

Considering the fact that interns and apprentices are also as exposed to occupational accidents and diseases as other employees, employer's obligation to provide education shall also include interns and apprentices.

In the event of having an employer-sub-employer relationship, the sub-employer is also obliged to provide their own employees with trainings on taking OHS measures, since the sub-employer is also an independent employer. The By-Law does not mention employer's liability to directly provide sub-employer's employees with training, however, it still presumes that both employer and the sub-employer are responsible for training of sub-employer's employees.

2.6.1.3.2. Employees' Obligation to Attend Trainings

The Article 9 of the By-Law states that employees are obliged to attend these trainings and comply with the instruction and procedures.

The fact that parties are not sensitive enough about the importance of training, their lack of attention to meeting the requirements of the training, and opinions and believes stating that trainings can be only effective when they are implemented accurately have caused almost all by-laws on OHS to specifically emphasize the obligations of employer and employees in terms of training.

2.6.1.3.3. Cost of Training and Time Spent for Training

The Article 8 of the aforementioned By-Law states that OHS trainings must be organized in such a way that they shall not cause any financial burden on employees. Obviously, the venue for training, trainers, and duration of trainings cost employers a certain amount. However, the expenses for OHS trainings cannot be reflected on employees in a direct or indirect manner.

The same provision emphasizes that the time spent on OHS trainings shall be counted as work hours and these trainings shall be organized at a time outside employees' leisure.

Counting training hours as work hours may increase the cost of employer, however, it will positively impact the productivity of trainings. It is an acknowledged fact that participants will be more willing and volunteering in a training program that is counted within work hours.

2.6.1.3.4. Trainings Requiring Special Policies and Trainings of Employees with Special Duties

The Article 7 of the By-Law states that trainings of certain employees require special attention considering their different needs, and some employees need to be specially trained.

These employees can be listed as:

- Young, old, and disabled employees who are considered in the risk group, as well as pregnant and nursing female employees,
- Support personnel and OHS personnel representatives.

The employees in the risk group have the risk of being fired, uncertainty of employment, working for low salaries, and their own differences.

This group must be informed of the risks they may face with and measures to take against these risks through trainings and provided with additional trainings besides the regular trainings provided to all employees.

The By-Law stresses on the necessity of providing employees with special duties and their representatives with a special training on health and safety. These employees are those, who play an active role in and are responsible for preventing occupational risks, accidents, diseases, and injuries, in other words for providing a healthy and safe work environment. Therefore, provisions state that besides their overall OHS training, they should also be specially trained in their area of expertise such as risk assessment, first-aid, fire and fire protection, industrial and personal hygiene, use of ergonomics and personal protective tools, effective communication techniques.

2.6.1.3.5. Preparation and Regulation of Training Programs

While preparing the training programs, it is important to consider characteristics of the line of work, qualities of the work conducted, and qualifications of employees to be trained, so that the objectives of the By-Law can be achieved. Furthermore, learning characteristics that are prominent in adult training must be taken into account, since employees are adults and each age group has different perception levels.

During the course of determining the requirements of training, it is important to consider forms indicating the trainings an employee has completed; to conduct surveys to find out the need of training at workplace on a regular basis; take into account of individual differences of trainees, performance evaluation results, and most highly requested training subjects. Especially including employees into this process increases their confidence in their workplace, makes them embrace the training and benefit from the training in an effective manner, hence OHS measures can be implemented even more effectively.

While determining the type of training to be provided, it should be considered whether employees possess any knowledge about the work they conduct or will conduct, and their level of knowledge must be tested if they have any, to find out if their knowledge is adequate or not.

New Training: New trainings are programs organized in order to provide new information about the work or workplace for new employees, employees who are appointed to another job in the same workplace, or when new processes, procedures or equipment are used; so, that employees can adapt to these new circumstances. This program can be implemented for employees, whose work performance is inadequate.

The new training program involves adaptation training and on-the-job training.

Adaptation Training: It introduces new employees to the enterprise's vision and mission, rules of workplace, reasons behind each OHS rule, the use of personal protective materials, and workplace risks including their own work space's risks.

On-the-job Training: After completing the adaptation training, on-the-job training is provided by the executives of the related unit.

Possible risks which may rise from the characteristics of work, protection methods, and key points in the work process are instructed in these trainings. These trainings practically demonstrate how and in what way the work is conducted and what to pay attention to while conducting the work from start to the end.

Additional Training: It instructs reasons behind occupational accidents and diseases and how to protect from them and safe working methods for employees, who has experienced an occupational accident or disease.

Revision Training: It is an important training that is especially applied for employees, who have been out of work for more than 6 months. It updates the previous OHS knowledge of employees.

After determining the subject and type of training, a training program indicating the training activities that will be conducted for a year shall be prepared. This program shall include training's mission, subject, duration, objectives, date; names, surnames, and titles of trainers; and number of trainees.

It is beneficial to implement the training according to a program, so as to indicate the importance of training, to ensure the continuity of training, and to keep a track of what training have been given and what training should be given in future.

2.6.1.3.6. Duration and Subject of Training Programs

It is significant to consider the subjects listed in the Annex of the By-Law while determining the training subjects. Besides, a training program, which is organized solely to meet legal obligations, will not be serving the purpose of OHS trainings. The activities conducted at the workplace are taken as basis while distributing the training subjects, as stated in the related article of the By-Law.

In order to ensure the safety and health of employees, risks related to each work conducted at the workplace and reasons behind these risks must be detected and defined; the best way to prevent these risks must be discovered; and this information must be shared with employees.

Training programs must include both general health and safety rules and training subjects that are job-specific. Thereby, employees will learn what kind of risks or hazards they are faced with at their workplaces and what measures they have to take to avoid these risks.

It is important that the method selected complies with the content and objective of knowledge. Some trainings are provided at the workplace or on the job, and employees can learn and obtain experience thereby, whereas; some trainings can be given in training centres with special equipment. Explicating method, case study method, role playing method and sensitivity training method are most frequently used methods in OHS training.

In a study examining the effectiveness of OHS trainings of different types, it is asserted that methods of OHS training can be enhanced to knowledge-oriented, computer-oriented, instruction and student-centred, performance-oriented training methods.

The knowledge that is aimed to be conveyed is standardized. The methods that are more effective are those, which enable accumulation of knowledge and place a certain pattern of behaviour. It is acknowledged that active training, which requires active participation of participants, enables interactive communication among parties, and increases the quality of thinking and reacting, results in a more positive impact.

This indicates that even though employees work in the same workplace, the training provided to all of them cannot be given at the same level. Their competencies and differences of their jobs determine what type of education they should receive.

A provision in the By-Law states that training must be selected according to the educational needs of employees, so that it can be productive; and trainings must be provided both theoretically and practically.

2.6.1.3.7. Trainers and Institutions

It has been stated in the by-law that the OHS training can be provided by occupational safety experts and physicians in the workplace and it is possible to out-source this service. If this service is outsourced, it can benefit from the institutions of employee, employers and state employees or training centres established as jointly or training foundations established by these institutions; universities; training units of public enterprises; professional organizations as a public enterprise and training institutions authorized by Ministry and OSGBs in accordance with the type of training to be provided.

The outside service does not eliminate the obligation of employer in this sense. In other words, it is the responsibility of employer to ensure that the provided training is accurate, complete, sufficient and understandable and suitable for the legislation.

2.6.1.3.8. Evaluation and Certification of Training

The assessment and evaluation should be carried out at the end of the training provided in accordance with the legislation and in accordance with the evaluation result it should be decided whether the training is effective or new training is required or not.

According to the by-law, the training provided in the workplace will be certified and these documents will be stored in employee's personal files. It has been underlined in the same article that name, surname, position title of the participant; subject, duration of the training; name, surname, signature, position title of the trainer and training date should be involved in the certificate to be prepared after the training.

2.6.1.4. Evaluation of Vocational Training of Employees

Vocational Training is absolutely necessary for employees to learn how to do their works as safely and correctly. One-time vocational training is not sufficient and training should be repeated with the different application examples. Employee should know how to do things safely as well as how to do things.

The main purpose of vocational training is to ensure that employees should be aware of the possible dangers while doing their works. The second purpose is to ensure them to understand that the work can be done in safety. Training brings employees knowledge and skills which will provide them to do their works with the lowest risk of their health and safety.

Vocational training program should include the basic information about professional qualifications and should support employees in identifying and controlling hazards in the workplace. Employees should also be trained about the rights and responsibilities, fighting emergencies, safe use of tools, use of personal protective equipment, safe use, transport and storage of hazardous materials, the most ideal is the renewal of the information about the dangers at regular intervals after both work training and starting to work.

A provision, which explains that those who cannot certify that they have vocational training related to the work to be in the dangerous and highly dangerous class which has the obligation to receive vocational training will not be employed, is stated in Article 17 of Law No. 6331 on Occupational Health and Safety Law. In this context, the by-law on Vocational Training of the Employees to be employed in the Dangerous and Highly Dangerous Class Works has been published in the Official Gazette dated 13.07.2013 and numbered 28706.

The vocational training has been defined in the by-law as “the training which provides performing the development process of physical, social, cultural and economic abilities of individuals in a planned way and developing the required knowledge, skill, attitudes and values in order to ensure adaptation of those having a profession to the new profession and development of those in their profession and to prepare the individuals to profession through the formal or common training”.

Total 109 jobs have been defined under different titles in the annex of the by-law. The aim is to ensure that those, who will be employed in these kinds of jobs, should be trained with sufficient information and instructions before to be employed about the health and safety risks to be encountered while doing their jobs.

2.6.2. Training of OHS Professionals

Occupational health and safety (OHS) law will promote the preventive and protective occupational health and safety (OHS) approach at the national level by making studies like emergency plan and risk assessment charging the OHS professionals in each workplace.

In this context, it is required to ensure that OHS professionals should have the necessary competence, the curriculum should be updated according to changing conditions and the quality of training should be at the highest level. In addition, the OHS level of workplaces can be further improved through the establishment of an auto-control mechanism at workplaces and auditing of OHS authorization and certification.

Training of OHS Professionals in Turkey has been arranged in detail in the by-laws related to occupational physician, occupational safety experts, and other health personnel.

The relevant legal acts have been consisting of the by-laws about the Duties, Authorities, Responsibilities and Training of Occupational Physician and Other Health Personnel published in the Official Gazette dated 20.07.2013 and numbered 28713, and Duties, Authorities, Responsibilities and Training of OHS Experts published in the Official Gazette dated 29.12.2012 and numbered 28512.

The related information about the criteria of the institutions to provide training, duration of the training and exam are included in the relevant by-laws. The content of the training programs and the qualities of the trainers are determined by the Directorate General of Occupational Health and Safety affiliated to Ministry of Labour and Social Security (MoLSS).

In relevant by-laws,

the duration of training programs of occupational physicians and occupational safety experts is determined as 180 hours theoretical, 40 hours practical in total 220 hours. The duration of training programs of other health personnel is determined as total 90 hours theoretical, the practical training is not included.

Those who have completed the courses at aforementioned hours are entitled to get their certificates by being successful in the examinations made by the Assessment Selection and Placement Centre (ÖSYM) at the end of the training and taking at least 70 points out of 100 points.

Except for the certificate programs whose duration specified in the above, the renewal training of OHS professionals to be made at regular intervals which have been included in the legislation before have been abolished as a result of the last amendments in the By-law.

Therefore, OHS experts, who have only been trained in basic OHS, are starting to work without adequate knowledge about assessment of risks which is specific to the sector and workplace where they will be working, observance of working environment and health surveillance of employees.

Finally, within the scope of 'to provide OHS awareness training for OHS experts' which is in the action plan of 'dissemination of the occupational health and safety culture in the society' goal specified in the 3rd National Policy Document (2014-2018), it is aimed to raise the awareness of OHS by providing training for OHS experts who have actively working on the field and have an important role

in the formation of safety culture in the society.

Furthermore, under the heading of "Increasing the qualifications and competencies of the training of OHS experts" in the aforementioned Policy Document, it is predicted that "The identification and monitoring the implementation of OHS measures to be taken at workplaces, prevention of occupational accidents and occupational diseases, carrying out the preventive health and safety services with first aid and emergency treatment for employees are require special knowledge and training. OHS is a constantly changing and developing multidisciplinary science. For this reason, OHS experts will be provided with renewal of information constantly and adaptation to changing environment and technology."

Thus; OHS experts need the advanced training and guidance especially at sector level in order to be able to both increase their own capacities and contribute to the dissemination of OHS culture by leading the society in the field of OHS, and therefore to improve OHS activities.

3. Result and Recommendations

3.1. RESULT

The fact that our country takes the first place in Europe in terms of occupational accidents,

the significance given to OHS training and the benefits provided by these training direct to questioning. The fact that 98% of the accidents that are happening consists of insecure environments and behaviours also attracts attention to the quality of the training given to them.

The tendency of training which is fulfilled by perceiving as only legal obligation, providing the adaptation training, transposition of the internal by-laws related to the OHS to the employees as booklets or brochures, or slurring over these training by providing training documents directed by e-mails over the internet because that employee is doing his work without sufficient knowledge and consciousness.

Although OHS training given at workplaces differ in their business lines, they also contain similarities. The most important similarity is to provide the training in crowded groups that bring the legal obligation.

Another similarity is that while fulfilling the training obligation which is not believed to be important, it is observed that 'adaptation training', which is the most important training at the beginning of the job, cannot go beyond one or two-hour business trips in many workplaces.

Training is the first work to be made and the most important measure to be taken in OHS field. The only way to protect against to the occupational accidents and occupational diseases is to recognize the risks that the work brings, to know the precautions taken and to avoid them by implementing them and this can only be achieved through training. Researches show that the greatest deficiency in workplaces is lack of consciousness resulting from inadequate training of employees and employers in this field.

When examining the by-laws and practices of different countries, it is seen that OHS training are among the fundamental obligations of employers and basic rights of employees in the legislation of almost every country. While this obligation is regulated at the point of necessity in some countries, it is regarded as an obligation that must be met at a reasonable level in other countries.

The process of OHS has been regulated by a special law in almost all the countries examined and in some countries detailing have been made with by-law, but as it is in our country separate by-law has not been found to regulate the training obligation.

In almost every country, it has been identified that employees in the OHS area are subject to special training due to their responsibility and

that even in most countries, these training are organized as postgraduate specializations at universities. In our country, the training is still going on that cannot go beyond being a certificate education, and the specialization in the field of OHS should be urgently opened.

It is emphasized in all countries that OHS training should be prepared by interviewing the persons in charge of health and safety and that they should be audited for certain periods depending on their opinions.

It remarks that the training of those at high risk, especially those working with dangerous goods, has been arranged in a more detailed way and the responsibilities of employer within this area have been broadened.

The provision, which OHS training are considered as working hours and if possible, the training should be provided within the working hours, and the expenditures to be made in this regard cannot be reflected to the employees, is included in all countries including our country.

Although the training obligation is included in all national legislation, studies and statistical data made on this field show that the desired level of achievement is not reached in the prevention of occupational accidents and occupational diseases.

The monetary resources of country, the approach of the employer to the issue, the structure of the determinant sectors in the country, the level of safety awareness which employees have, the presence of qualified manpower, the cooperation between the control, management, employees and representatives are directly effective on ensuring the continuity and applicability of regulations made in the OHS field.

It should not be expected that even the most advanced occupational health and safety legislation will not give successful results in a country, which the safety culture is not developed in terms of occupational health and safety, is not have the sufficient human resources and the physical infrastructure is not developed.

Even though the legislation related to OHS in our country is more advanced than the regulations in many countries, there are problems in implementation. Especially in SMEs, there are problems that the employer must fulfil his training obligation effectively. It should not be forgotten that the basis of the problem is multidimensional along with the lack of consciousness and awareness on the sides.

The approach that is accepted without exception in solving the problems of OHS is the importance given to the establishment of safety awareness and prevention culture in the parties. Training plays a primary role in the formation of this consciousness and culture.

The goals to be achieved in the area of occupational health and safety and the actions to be taken in the direction of reaching these goals are included in the National Occupational Health and Safety Policy Document - III and 2014-2018 Action Plan 2014-2018 prepared by the Ministry of Labour and Social Security with the contributions of the stakeholders.

In this report;

“Goal 1: Increasing and making as standardized the quality of activities carried out in the field of occupational health and safety. It has been determined as a final goal to provide the employees to be worked in the healthier and safer workplaces and to improve the life standard and quality. It has been stated that the studies, which will be carried out in order to increase and/or standardize the quality of various activities carried out on the occupational health and safety field in line with this goal (occupational health and safety inspections, occupational health and safety services, audit and supervision of the personal protective equipment, occupational health and safety training, occupational health and safety legislation works etc.), shall be a significant step to reach the ultimate goal.

The National Occupational Health and Safety Council members have been shown as a related institutions and organizations and MoLSS and ÇASGEM have been shown as a responsible organization in the actions towards these goals.

In the TRCI region, the sectors that stand out both in terms of the importance of OHS and in terms of number of establishments and employment, have been determined as Construction, Textile, Food, Metal, Chemical (Rubber and Plastic Products Manufacture) and Mining (Marble and Quarry).

The Project for the Improvement of Occupational Health and Safety Conditions in the Workplaces of the Ministry of Labour and Social Security (ISGIP) in Turkey covers construction, mining and metal sectors and the Project for the Improvement of Occupational Health and Safety (ISGIP-second stage) covers textile, food, chemical, furniture and leather sectors. The implementation of these projects and their outputs (especially training and published guides given within the scope of the project) are of great importance for the zone due to the conformity of sectors at hand within the scope of ISGIP projects and the priority sectors determined in the TRC1 Zone. The use of such documents and best practice examples in the training to be carried out will also support the actions under the National Occupational Health and Safety Policy Document 2014-2018 in order to disseminate these projects, which aim to establish OHS Management System for specific sectors covered, to the relevant sectors in the TRC1 Zone.

It is required to create an OHS culture and disseminate the OHS awareness by giving information to employees and employers about the obligations and responsibilities imposed by OHS law with the activities such as training, seminars, local TV programs, etc.in the TRC1 Zone.

It should be given priority to carry out the activities which are appropriate to the need with the participation of parties by evaluating the suggestions, opinions and requests taken from the related parties in the studies to be carried out for this purpose.

In order to encourage employers about the OHS implementations, researches about the benefit - cost analyses of OHS implementations in the workplaces and effects on productivity of should be supported and the data obtained should be shared with the employers. It is expected that the investments made by the enterprises will contribute to reducing the production losses and indirectly reducing the loss of working days and increasing the motivation of the employees to make the positive results of their work reflected in the operating expenditures.

It may be possible to provide the OHS training to be organized especially for small business owners with an organization to be arranged by the Organized Industrial Zone Directorates, Occupational Chambers or Employer Associations. Software like "Online Interactive Risk Assessment" implemented by EU-OSHA can be developed in accordance with the needs of the zone

Training to be provided for the employer should include not only the general OHS rules but also the risks of the related work, the precautions to be taken and compensation, imprisonment and penalties to be encountered in the situation of the failure to comply with the measures and the employer's failure to fulfil other obligations under OHS.

Developmental training should also be included in the program in order to make them a role models for the employees as well as being included in the workshop report.

In cooperation with organizations such as chambers of industry and chambers of commerce, a message regarding OHS can be announced to member company managers via e-mail by determining in every month. Monthly messages can be designed and printed as banners with appropriate visuals to spread announcements for businesses that do not have an e-mail address.

As the training is a lifelong process involving the acquisition of knowledge, skills and behaviour at its core, rapid developments in technology and changes in legislation require the updating of information in the field of OHS and the continuity of training become a necessity.

It is also clear that this is not possible with the training given at once by taking into account of aim of the health and safety training in order to provide appropriate behaviour.

As a matter of fact, the provision, which is about providing training with a different contents in a different periods, renewing it to changing and emerging risks conveniently and repeating them periodically, is also included in the by-law. The main risks that result in deaths and injured occupational accidents in 5 sectors selected for occupational health and safety are summarized below. It is required particularly to focus on these issues in the training.

Since the clear majority of deadly accidents in construction sites are resulted from the high falls, it is imperative to emphasize this issue in studies. In addition, documentation work should be accelerated by taking into consideration published professional standards.

Approximately 15% of the accidents that occur in the food sector could be described as major accidents and are type accidents that require treatment at the hospital (bone breaks, falling, etc.). Other accidents that require more than 3 days rest consist of accidents which occur during the removal and transport of material and are caused by the hand tools and the crashing of the falling objects

There are predominantly over ground mining / quarries in the region. Risks to be caused by the crushing of heavy blocks, electric shocks, use of explosives, transport and storage of heavy blocks in surface mines are important in terms of occupational health and safety. Workshops should be made and training should be organized to prevent accidents occurred for these reasons. It will be possible to carry out activities aimed at preventing and researching the root causes of accidents.

When the statistics on the causes of work accidents in the metal sector are examined, the reasons such as crushing and hand-arm injuries become prominent. Efforts to remove these causes will also reduce accidents in the sector.

Machines used in all parts of the textile industry have hazards arising from moving parts, and work accidents often occur in the form of crushing, breakage, fracture etc. of the arms, hands, fingers or other parts of the body of the employees by being crushed between moving parts. For this reason, the most important problem of textile sector is to not take sufficient and appropriate protective measures against the moving parts in terms of occupational health and safety.

The employees in the region are at different level of literacy and have cultural differences. Employees must be competent in matters that may affect their occupational health and safety. Qualification should be defined with appropriate education, training and experience terms. Competency-based training should be taught to employees with practical implementations beyond the theoretical.

The data obtained from activities in the region show that; OS Experts are inadequate especially in high-risk sectors (such as construction, mining, chemistry) and that they have difficulty in providing training opportunity and training publications which they could develop in the professional direction in certain subjects (such as risk assessment, explosive environments).

These needs are compatible with the following actions included in the National Occupational Health and Safety Policy Documents-III and 2014-2018 Action Plan; *“1.5. Prioritizing sectoral arrangements for employing occupational safety experts: It is a need to make the OHS implementations in the workplace more efficient and effective manner by making arrangements for occupational safety experts to be*

assigned to the branches of them. It is expected that the knowledgeable and competent people of the sector should provide OHS service and the quality of service and thus OHS standards will be increased with this arrangement.

“1.7. Increasing the qualifications and competences of the training of OHS experts. The identification and monitoring the implementation of OHS measures to be taken at workplaces, prevention of occupational accidents and occupational diseases, carrying out the preventive health and safety services with first aid and emergency treatment for employees are require special knowledge and training. OHS is a constantly changing and developing multidisciplinary science. For this reason, OHS experts will be provided with renewal of information constantly and adaptation to changing environment and technology.”

It is clear that the training programs for the sectoral or special issues needed for the OHS Experts serving the Region in the current situation are required to be organized. It will be useful to determine the priorities in this issue and to organize training within a specific program (TMMOB, TTB can take an active role in this issue).

3.2. Remarks and Recommendations

In order to make OHS trainings more effective for creating healthy and safe working environments, some legal and practical recommendations can be listed as follows:

- Firstly, the employer should believe in the importance of education in the provision of OHS. This should be seen as an investment in the workplace and its operation, not as a cost element.
- In order to be able to set the OHS awareness, it is important that employers in the legislation also receive a comprehensive OHS training and repeat their trainings over certain periods. Education should also include general OHS rules as well as the risks to which it is exposed, the precautions to be taken, the punishment that the employer may face if it fails to comply with the measures and other obligations.
- It is known that especially SME employers are compelled to fulfil certain obligations due to their OHS activities requiring significant costs. It is important for employers in this group to develop policies to support the financing of training costs.
- In case that OHS training obligation is not fulfilled, there is no penalty provision in the legislation. However, the determination of deterrent penalties for any OHS training that is not or incompletely given, will affect employers' approach to the issue.
- OHS training programs should be repeated at regular intervals rather than just at the beginning of the work, provided that the information provided in the training is applied as a form of behaviour and that the consequences of the parties will be striking if not implemented.
- While the training program is being developed, it is the most important steps to take into consideration the knowledge and skill levels of the employees, to determine the education subject as needed, to select the appropriate training method for the subject and purpose, to identify the possible risk factors for the operation and to evaluate the theoretical and practical dimension of education according to the risk types.
- After the training program has been completed, reminders should be used to keep this information fresh and to adopt the concept of "work safety first", such as using magazines or newspapers in the workplace, using picture posters or creating safety panes at various locations.
- Care should be taken to ensure that occupational health and safety trainings are taken from the right person or organization who is professional in their field, knows the risks of work and workplace.

- Considering that the employees are adult individuals and that the level of perception is different in different age groups, the education methods that stand out in adult education should be considered; The importance of applications in the acquisition of interactive trainings, visual communication tools and habits should not be ignored.
- The success of the training depends on the effective control of the employer in the implementation of the given information and in the practice of the application. For this reason, the employer should not be satisfied with the training, follow the practices and take the necessary precautions for the disrupted aspects.
- The employer is always a good example in the eyes of employees with the attitudes and behaviours at the workplace, as well as the focus on the placement of the OHS culture in the workplace. The rewarding of employers, who believe in the importance of education for placing this culture in the workplace, and who are successful in spending labour and money for it, can be tried as an incentive for other employers.
- OHS professionals need to be specifically tailored to different levels of employees to communicate with employees in this sense. For this it is necessary to prepare a booklet brochure indicating the OHS rules in accordance with the training of OHS professionals and regional characteristics and the trainings can be supported by the OHS film.
- Monthly or periodic "OHS Bulletins" can be prepared and all members can be shared with the stakeholders via e-mail. "OHS bulletins" may include developments and examples from around the world or from Turkey, as well as information about the OHS studies that companies have undertaken.
- OHS professionals can open a web portal about OHS for educational purposes involving regional issues and practices for employees and employers.
- Examples of good practice that have already been covered by the İSGİP project in order to increase the expertise capacities of OHS Specialists, Occupational Physicians and Health Care Workers, OSGB employees, who have a very important role in OHS applications, will benefit from having technical visits to their workplaces. In this scope, it is considered that Tekirdağ will be in the textile sector, Eskişehir in the food sector, Zonguldak in the mining sector, Ankara in the construction sector, and Kocaeli in the metal sector. This technique will improve the efficiency of navigation through seminars that will be straightened during the trips.
- Identification and implementation of OHS measures to be taken at workplaces, prevention of occupational accidents and occupational diseases, first aid and emergency treatment for employees, and implementation of preventive health and safety services require special knowledge and training. OHS is a multidisciplinary

science that is constantly evolving and changing. For this reason, it is necessary for OHS professionals to refresh the changing environment and technological harmony and continuous information. OHS professionals should make regular training programs on the topics that will be determined by the current issues and OHS professionals.

- OHS professionals should be trained in adult education and communication techniques (Training of Trainers). In the voluntary workplaces where volunteers are to be pre-selected in the region, it will be beneficial for the training profession of the OHS professionals to participate as observers in these training sessions with practical applications for employers and employees as well as training specialists.
- As another alternative; As well as laboratory and practice workshops for employers, employees and OHS professionals, as well as a good practice example, can be organized and / or participated in the training program of the trainers provided by the Institute for BGAG Occupational Health and Safety in the city of Dresden, Germany.
- Studies on the costing of the proposals have been initiated and will be included in the conclusions report on the concrete costing after the proposals specified in this interim report are evaluated on the basis of being returned to the extent to which the proposals can be realized.

1. Field Studies

4.1. Organisation of the Workshop

4.1.1. Commencement of the Workshop Visits and Survey Implementations

The Project Team has visited the following institutions and organizations between the dates of 26.09.2016 and 07.10.2016. Being invited to the Workshop to be held on 08.10.2016, the importance of their contribution is explained.

GAZİANTEP (26.09.2016-07.10.2016)	ADIYAMAN (30.09.2016)
<ul style="list-style-type: none">• Provincial Directorate of Labour and Employment• Metropolitan Municipality, Department of Environmental Protection and Control• Provincial Directorate of National Education, Vocational and Technical Education OHS Unit• Gaziantep Chamber of Industry• Gaziantep Chamber of Commerce• Gaziantep City Council• Regional Manager of Gaziantep Organized Industrial Zone (OIZ)• Gaziantep Provincial Public Health Directorate• Gaziantep Provincial Public Health Directorate, Directorate of Employee Health• TMMOB - Chamber of Civil Engineers• TTB – Chambers of Medicine of Gaziantep and Kilis• Gaziantep Construction Contractors Association• Common Health and Safety Units	<ul style="list-style-type: none">• Adiyaman Provincial Public Health Directorate• Turkish Medical Association, Adiyaman Chamber of Medicine• Adiyaman Chamber of Industry and Commerce• Common Health and Safety Units

Table 1 TRC1 Region Workshop announcement and invitation list

The Gaziantep City Council Management has notified the members of the Industry and Trade Working Group via e-mail both on the workshop announcement and on the filling of the questionnaires in the electronic environment.

The Gaziantep Chamber of Industry and Gaziantep Chamber of Commerce web pages were aimed to provide wider participation by inviting workshop announcements and invitations.

Gaziantep-Kilis Medical Room and Adiyaman Medical Chamber made a workshop announcement for all its members.

Participation was made to the OHS Working Group meetings held during the City Council between the dates mentioned and the members were informed about the project and exchanged views on cooperation possibilities.

Also in Ankara, the General Directorate of Occupational Health and Safety of the Ministry of Labour and Social Security and the Ministry of Health Turkish Public Health Agency Employee Health and Safety Department were visited and informed about the Project and the Workshop organized in this context.

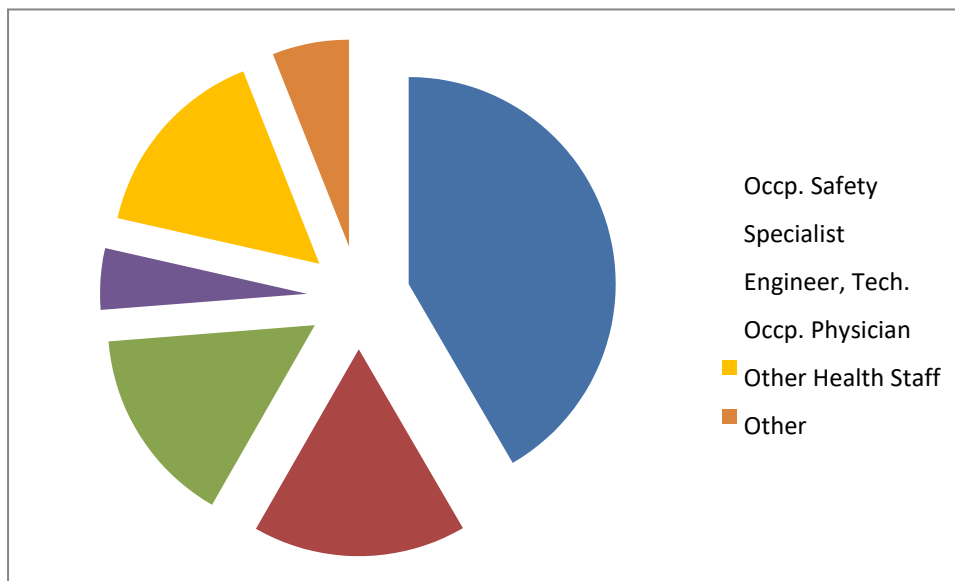
Announcements of the workshop have been made on the project web page (www.isg-ukap.org). The awareness of the workshop has been provided with poster and brochure studies.

4.1.2. Implementation of Workshop Program

"Workshop on Enhancing the Quality of Occupational Health and Safety Applications" in the GAP TRC1 Region was held on 08.10.2016 in Gaziantep City Council.

84 people attended the workshop (Appendix-5: Participant List).

Participants; 41.7% were occupational safety experts, 16.7% were engineers and technical staff, 15.5% occupational physicians, 6% Municipal City Council (BKK) OHS Working Group, 5% other health personnel and 15.5% were other groups (OSGB employers, researchers, etc.)



Graph 1) Percentage of workshop participants

Following the inaugural speeches and informing about the Project;

- Regulation
- Risk Assessment
- Professionals of Occupational Health and Safety
- Education

issues were appointed a workgroup each. (ANNEX-6: Working Groups Participant List).

Each group discussed the problems and solution proposals related to the title they belonged to in the separate meeting halls, and after the group work was completed, all the groups came together and the group presentations and the results were shared with the participants.

4.2. WORKSHOP REPORT

REGULATION WORK GROUP	
Issues	Solution Recommendations
<p><i>Legislative Preparations</i></p> <p>Issuance of the OHS legislation without considering the country conditions, preparation only based on international expectations and norms, preparation of infrastructures and planning of transit without planning is a cause of distress in practice. For this reason, obligations related to the OHS services of public institutions and workplaces with fewer employees and less dangerous classifications, and the provisions that allow those with class C and B certificates to be assigned to dangerous and dangerous classes, are constantly being delayed. This locally affects OSG perception negatively. The general expectation of the participants is that the public should be a trainer, a teacher, an example and a pioneer, and the OHS Law is no longer postponed.</p>	<p>Before any legislation is published, the realities of the country should be taken into consideration without compromising minimum standards, and accurate analysis and evaluation of the legislative feasibility of the legislation should be made. Legislative preparations should include broad-based representatives from practitioners (e.g. sector representatives, experts with field experience on the subject).</p>
<p><i>OHS Service Providers and OHS Professionals</i></p> <p>There is no service standardization in OSGB.</p> <p>The same is true for OHS professionals.</p>	<p>OSGBs should be considered in terms of quality and quantity and subjected to serious planning. Their activities should be transferred to the Ministry through a program and thus their traceability should be ensured.</p> <p>Especially for occupational safety specialists, specialization must be specific to high-risk sectors (MoLSS has already prepared a draft with sectoral regulations, but it has not been put into practice). If this is not possible, the theoretical and practical training periods should be extended and subjects including OHS practices should be included in high-risk curriculum sectors.</p>

<p>Classification of occupational safety experts in the legislation as A-B-C does not serve the main purpose.</p> <p>Occupational physicians are not in the field.</p>	<p>The classification of A-B-C should be abolished and the workplace hazard classification should be reduced to two to provide a definition as a job safety expert and a job safety expert assistant.</p> <p>Workplace physicians should be provided with the preventative role of the primary duty, rather than the therapeutic task.</p>
<p><i>Unregistered Employees</i></p> <p>The region is seriously opposed to the foreign (Syrian) workers' problem. A significant number of these workers are not registered with the system. This situation causes both the error and the actual situation and the legal situation not to overlap in the OHS statistics of the Region.</p>	<p>There should be effective struggle against informality, and these people integration should be ensured.</p>
<p><i>Audit</i></p> <p>Audits are inadequate. OHS legislation is generally based on punishment, but where there is a penalty, it must be a prize. However, there is no provision / practice for employers to encourage the implementation of legislation.</p>	<p>Inspections should be done not only in terms of physical conditions but also through process and system. Except for accident and case inspections, no physical denial is required. It should include practices that encourage other businesses to meet the requirements of the legislation and to reward businesses that provide significant improvements in terms of work accidents and occupational diseases.</p>
<p><i>Safety Culture</i></p> <p>There is a lack of safety culture in our country and in connection with our region. This shortcoming is clearly visible at every stage of our lives and naturally in the implementation of legislation.</p>	<p>Trainings aimed at increasing the sensitivity of employers and employees to OHS, which are the most important aspects of the issue, should be organized and education should be extended and sustained in a broad perspective under the title of "life-long safety" in school, at home, at work and in social life.</p>

RISK ASSESSMENT WORKING GROUP	
Problem Areas	Solutions and Recommendations
<p><i>Risk Assessment Team</i></p> <p>The most important step for the healthy evaluation of risk assessment process is to start the work with a good team. Nevertheless, teams cannot be created, risk assessment studies are seen as the job of the job safety expert. In this case, occupational safety experts are forced to make hazard-risk assessments, estimates of probability and severity on their own, and can make a mistake (for example, to avoid a situation that could lead to occupational illness).</p> <p>The employer / employee representative is usually not conscious about OHS. Workplace physicians are reluctant to be involved in the process. In very few workplaces that only implement the OHS-Management System, a team can be created in part.</p>	<p>The OSI perception in the workplace is parallel to the employer's point of view. For this reason, employers need to be educated to raise their participation in OHS applications, including the risk appraisal process. Employee representatives are generally knowledgeable about the workplace as they are people in the foreman position and they make a significant contribution to getting information. Teaching with effective methods will increase their active participation in the process.</p> <p>Encouragement of employers for voluntary practices such as the OHS-Management System Model will increase participation in all work to be done on OHS, not only on the formation of a team work spirit.</p>
<p><i>Risk Assessment Process</i></p> <p>Occupational safety experts who do not make any special efforts to train themselves are not dominant in risk analysis, as the training and internship periods determined by the legislation of OHS professionals are not sufficient. The selection of the right method, in particular quantitative and semi-quantitative risk analysis methods, are insufficient in some special issues (protection from explosion, OHS plan, safety report etc.) that are included in OHS legislation. In order to improve themselves, the training is very expensive and the region is having difficulties due to lack of experts to provide such trainings. In addition, Turkish documents about risk assessment methods and practice examples are insufficient.</p>	<p>In order to ensure the development of OHS professionals' risk assessment, free or low-cost practical trainings should be organized in the region, good practice examples must be provided and Turkish information sources should be established.</p>

<p>There are errors or omissions in the detection of potential sources of danger as there is no sector-specific branching. There is a need for sectoral training and documentation.</p>	<p>There are errors or omissions in the detection of potential sources of danger as there is no sector-specific branching. There is a need for sectoral training and documentation.</p> <p>Sectoral work safety training programs should be opened in order to ensure that the risk assessment stages are correctly implemented, especially in high-risk sectors.</p>
<p><i>Risk Assessment Reports</i></p> <p>Keeping the information of some companies that are serviced prevents the risk assessment process from running properly and this situation is also reflected in the reports. Prepared risk assessment reports are not included in the living process and remain in the files.</p> <p>Risk assessment reports of workplaces cannot be entered into the OHS-Secretary. Therefore, even if a large number of firms do not perform risk assessment, the MoLSS cannot follow it. Since there is not enough control, there is no difference between the workplaces that do not make the requirements of the legislation and those who do not even see themselves as advantageous.</p> <p>The feedback on events is too low to be tested and it is not possible to follow up if the IGU is not working for the full time.</p>	<p>It should be ensured that the risk assessment reports are uploaded to the OHS-Secretary program and thus monitored by the Ministry. Being monitored will also ensure that the prepared reports become more dynamic.</p> <p>Both employers and employees should be trained in the prevention of occupational accidents and occupational diseases by recording ramp-up events.</p>

Control Measures and General Issues

Due to the costs (particularly in SMEs), the personal protective equipment is preferred to the collective protection measures / technical measures in the service establishments.

Measures such as fire extinguishing, ventilation and submitting electric cables are not preferred because of the high cost (one participant stated that in the textile sector they are doing a price search for the establishment of a fire prevention system, a cost of 500 thousand TL has been deducted for the workplace for 9000 m² closed area).

In many workplaces, thermal comfort conditions are inadequate and there is a need for systems that provide optimum temperature or coolness depending on seasonal conditions.

The number of laboratories performing the measurement-analysis is low (there are two authorized laboratories) and the prices are very high.

There are shortcomings in the training of officers who come in for any accident (such as firefighters coming to the fire with a water system).

Employees are not sensitive enough to comply with precautions and this is directly related to your employer's OHS perception. If the employer is getting serious about this situation, the employees are more closely following the instructions.

Vocational training affects whether the measures taken by skilled people are successful or not.

Employers should be supported to use fire prevention, ventilation, air conditioning, high safety machinery and equipment.

Employers should be encouraged to revise the safety equipment of older machines.

Supports or facilities to be provided at high cost precautions should be made on the basis of the projects prepared by the workplaces and the application phases of these projects should be monitored and supervised.

Increase in the number of companies performing measurement-analysis in the region or organize industrial zones should be encouraged to establish such laboratories.

Effective methods should be trained for off-site teams for accidental intervention such as fire, explosion, chemical spill.

Effective training methods should be used (such as simulation, hands-on training) and continuity should be ensured for internalizing employees' safe behaviour models, ensuring active participation in OHS activities and complying with the instructions.

Vocational training should be encouraged, problems related to certification of vocational qualification should be eliminated and a vital moment should be passed.

<p>It is very difficult for adults to provide safe working habits. Trainings made in accordance with the legislation are not sufficient.</p> <p>There are problems importing machinery with the reason that CE conformity control is not qualified. For example, Chinese origin machines are preferred because they are cheap. However, these products encounter problems such as lack of protectors on the machine, lack of safety switches, and it is more difficult to eliminate these defects after the machine is</p>	<p>Activities should be initiated and disseminated in order to establish safety culture and increase social sensitivity by providing cooperation and coordination of related ministries on OHS.</p> <p>Audits (when entering the country) related to imported machines should be activated.</p> <p>Domestic machinery production (high safety) must be supported.</p>
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WORKING GROUP FOR OCCUPATIONAL HEALTH AND SAFETY

Problem Areas

Solution proposals

Coordination of OHS Professionals

There is a lack of coordination between practitioners, occupational safety specialists and other health personnel, defined as OHS Professions, in almost every aspect. From the risk appraisal, it is difficult to cooperate even in the basic issues from the training of employees to the evaluation of occupational diseases and occupational diseases. From time to time, occupational safety specialists undertake the duties of the occupational physician.

Employers have no attempt to overcome this lack of coordination, and even often are not even aware of such a problem.

It is also necessary for employers to take an active role in raising awareness and ensuring the coordination of OHS professionals. The employer's ownership will facilitate the compliance of all employees, including OHS professionals, with the rules required by the legislation.

OHS Training

Both OHS professionals and staff training are problem areas. OHS professionals' expertise training in the scope of the legislation is inadequate in terms of OHS practices in some sectors (construction, mining, chemistry), especially if the branches are not compatible with the sector they are working with.

Although the trainings of the employees are regulated by the Regulation, there are no details except for the topics covered in the training, the period of training and the period of training which should be separated according to the hazard classes. Training content is entirely at the discretion of the trainer. Trainer skills of trainee OSG professionals are positively or negatively affecting the effectiveness / quality of education.

The quality of basic trainings of OHS professionals should be improved, practical trainings should be given more place and sector trainings should be implemented. OHS professionals as well as training programs for employees should be developed at sectoral level in addition to basic OHS trainings. These trainings should be supported by sectoral and practical guidelines. It is imperative that the OHS professionals, who have important roles in the training of the employees, have to pass the "train the trainer" course so that they can effectively deliver the trainings.

<p>Another important issue is employer training. Although there are legal regulations on the training of OHS professionals and employees, there are no regulations for employers.</p>	<p>Training programs should be organized to increase employers' awareness and awareness of OHS. Such training activities will also cause an increase in OSI perception among employees.</p> <p>Other measures that will be effective and lasting; Lifelong learning is very important in the creation of OHS culture and in this context regional activities / projects should be passed on in cooperation with the Ministry of Labour and Social Security - Ministry of National Education. In some engineering faculties, OHS training is given as a compulsory or elective course. HSE courses should be made compulsory in all faculties by taking initiatives at HEC level. Vocational training should be developed and audited in terms of quality and quantity.</p>
<p>Standardization of OHS professionals</p> <p>There is no system or criterion for the measurement and evaluation of service quality of OHS professionals.</p> <p>Problems with wage standardization of OHS professionals continue.</p>	<p>The OHS-clerk system should be developed and the scope of the existing data system should be expanded so that the documents prepared within the scope of the legislation in the workplace by OSG professionals should be made visible in the system. In this way, it will be possible for the Ministry to effectively monitor the services performed by OHS professionals.</p> <p>Regarding wages, a minimum adjustment should be made by making an arrangement and arrangements should be made for OHS professionals to collect their wages from a common pool instead of getting them from the employer.</p>

<p><i>Workplace surveillance - health surveillance of employees</i></p> <p>There are two labour hygiene laboratories established to conduct workplace measurements in the region. Since the pricing of these laboratories is very high, employers are reluctant to make measurements.</p> <p>Furthermore, since there are no biological monitoring laboratories in the area, some toxicological tests that must be carried out in body fluids cannot be performed, and samples collected from the workers are sent to others.</p>	<p>Both qualitative and quantitative improvement of laboratories should be promoted so that toxicological tests can be performed to determine workplace measures or employee exposure. In this context, the suggestion of establishing a laboratory should be re-evaluated in OIZs brought to public by Public Health Directorates.</p>
<p><i>Occupational diseases diagnosis process</i></p> <p>Occupational diseases are not well known by the OHS professionals, including the diagnostic process, occupational physicians, even if known, they do not effectively process the referral system. A recommendation has been made to establish a standard form necessary for the referral.</p> <p>Occupational physicians do not have knowledge about the Occupational Diseases Boards in the hospitals authorized by the SSI for the investigation and preliminary diagnosis of Occupational Diseases. Communication between the occupational physicians and the physicians in charge at the Board is very weak.</p>	<p>In order to prevent occupational diseases, the coordination between the Ministry of Labour and the Ministry of Health and Social Security Administration is urgently required to ensure effective enforcement of hospital visits and intermittent control examinations, which are the most important medical procedures to be carried out at the workplace physician, and hospital referral transactions which are of great importance in the early diagnosis of occupational diseases. Cooperation should be developed.</p> <p>In addition, it is also an important issue to establish a system that provides workplace physician-family physician coordination during entry inspection examinations or intermittent check examinations.</p>

Developing and sustaining OHS services by coordinating with various researches on OHS

Despite the fact that many activities and projects are carried out in the field of OHS throughout the country, the continuity or widespread of such studies is not ensured.

Coordination with OHSIP Project

Coordination with OSGB-HISP Project

Evaluation of OHS Project results in agriculture

In the field of OHS, many projects and activities are carried out throughout the country, both nationally and internationally. However, the lack of coordination between these studies needs to be eliminated immediately.

The "OHSIP Project" carried out by the MoLSS is still going on, and the food, textile and chemical sectors included in the project are also priority sectors in the GAP TRC1 Region. Regarding the food sector within the scope of the project, Gaziantep was selected as the target province. Cooperation opportunities with the Ministry should be improved.

Another project undertaken by the MoLSS is the "OSGB-HISPI Project" for the standardization of OSGBs and is being completed. The project aims to improve the qualifications of OSGBs. Implementation of the criteria to be determined as the project output will increase the quality of the OHS service.

It is considered that the results of the "Occupational Health and Safety in Agriculture" study, which was completed some time ago and was carried out with the participation of all relevant parties in cooperation with the GAP-Harran University, especially for agricultural workers and their families at the regional level, is expected to contribute to the development of OHS services in general.

TRAINING WORK GROUP	
Problem Areas	Solution Suggestions
<p><i>Training of OHS Professionals</i></p> <p>Occupational physicians, occupational safety specialists and other health personnel, defined as OHS Professions, are partly sufficient in the theoretical part of the training process, but the practice / internship is not sufficient.</p> <p>OHS professionals are only trained to pass the exam. It is a matter of forgotten learners in education and loss of update. It is entirely personal to do this when they need to keep their information up to date throughout their professional lives.</p> <p>In terms of physicians in particular, absenteeism is a matter of education. This situation causes many of the occupational physicians to be inadequate in the field or not to participate actively in their work. Occupational safety experts are trying to fill this gap.</p>	<p>By changing the relevant legislation, the duration of the internship should be extended or the "intern expert" concept should be introduced instead of being directly assigned to the field by the class C specialist so that they can gain experience on the field for a while.</p> <p>The implementation of the MoLSS, such as informative seminars aimed at professionals, and the organization of these trainings on sectoral basis will affect professional development and service quality positively.</p> <p>The methodology for the training of OHS professionals should be updated and different and realistic training programs such as simulation centres and on-site training should be implemented. Workplace medicine should not be perceived as an additional job and education training for workplace medicine should become mandatory.</p>
<p><i>Employee OHS Training</i></p> <p>The lack of standardization of training tools such as presentations, documents, registration forms, plans used in the training process of the employees affects the quality of the service negatively. Experts often have to prepare site presentations and tell employees what they have determined based on their knowledge and competencies.</p> <p>Occupational safety specialists usually take part in training of employees, preparing training plans, realizing trainings, preservation of records, documentation and so on.</p>	<p>The MoLSS-General Directorate for Occupational Health and Safety should set the standard for educational content and records. Compliance with this standard should also be considered in audits.</p> <p>Traceability should be provided from the OHS-Clerk portal through software that allows the training records to be kept by each professional.</p>

<p>Employer, workplace physician and other health personnel contribute to this process and participation is extremely low and they do not take responsibility.</p>	
<p><i>Durations of training</i></p> <p>Employers do not provide the professionals with the time needed for training, and therefore training cannot be carried out during the required training period. Generally, a temporary solution is created by taking the half of the employee's leave for the duration of the employee's leave and the other half for the duration of the work.</p> <p>Employees are often unrelated to training.</p>	<p>The root cause of the problem is the cost of training for the employer. Funding the amount of time spent for training from insurance will positively affect the employer's approach to education.</p> <p>Methods and materials should be developed and implemented that promote employee involvement and enhance involvement in training. For those who succeed as a result of the trainings, the employee will be motivated to ensure that this result influences performance evaluations.</p>
<p><i>Training of Employers</i></p> <p>A significant number of employers are not well informed about their obligations under OHS legislation and need to be sensitive to this issue. Participation in events (seminars, conferences, meetings etc.) in the area of OHS is very low. In this context, the organization of training programs for employers and their attendance is an important need.</p>	<p>In the training to be applied to the employers, different methods (appropriate to target audience profile) should be determined which will increase their interest and participation. In addition to OHS issues, topics such as leadership, communication techniques, and motivation should be included in the curriculum.</p> <p>It is very important for MoLSS to have a life-long dream by carrying out private and sectoral works only for employers and developing new applications / projects that encourage this issue.</p>

4.2.1. Overall Assessment of Workshop

When all group workshops assessed together, education and education in connection with establishing safety awareness are observed to be outstanding and most advised issues in order to resolve great number of crucial problems

In this context, assessed basic requirements are summarized below:

- To improve and commence trainings within the scope of regulations related to H&S professionals and employees,
- To organize and run trainings for career development of H&S professionals, and to increase the number of information sources available in Turkish considering regional needs,
- Activities to raise awareness by H&S Professionals in order to increase coordination and cooperation in between employers and employees,
- To conduct training and awareness programmes for employers,
- To popularize and to maintain sustainability of H&S trainings at all levels of education,
- To provide effective training which corresponds targeted group profile,
- To improve the capacity of trainer,
- To improve the quality and quantity of occupational trainings,
- Activities to form a safety culture within the community in daily life.

The following list includes other important needs and expectations arising from the evaluation of each group in itself;

- Supporting employers in regards to execution of H&S management system programmes that requires relatively higher investment, such as execution of collective protection measures (technical precautions), use of highly reliable equipment, and revision of old machinery and equipment,
- Improving activities in order to increase motivation in H&S-conscious companies and to encourage companies that are lacking such,
- Incentives intended to increase capacity of existing evaluation-analysis and toxicology laboratories in order to provide higher quality and cost-efficient services,
- Ensuring standardization and observability (by officials) of documents which are required by the regulations including training records (H&S Clerk portal),
- Battling against informalities which could cause serious problems especially regarding H&S.

TRAINING NEEDS ANALYSIS AND IMPLEMENTATION PLAN

4.2.2. Occupations at Risk and Training Subjects

The number of occupational accidents and illnesses according to Social Security Institution (SGK), were taken into consideration while composing of below charts:

BREAKDOWN OF OCCUPATIONAL ACCIDENTS AND OCCUPATION RELATED DEATHS OF EMPLOYEES INSURED BY 4-1 /a (SGK, Chart 3.27)		
OCCUPATIONS	NUMBER of ACCIDENTS	NUMBER of DEATHS
7-Craftsmans, artisans and other related areas		
71-Construction and related areas (excludes electricians)	3737	77
72-Machinery, metalwork and related areas	1018	37
73-Handicrafts and printing related areas	632	12
74-Electric and electronic related areas	2378	17
75-Food processing, woodworks, textile and other artisans, and related areas	4432	10
8-Facility and machine operators and assemblers		
81-Permanent facility and machine operators	3184	42
82-Assemblers	1206	47
83-Drivers and mobile facility operators	6614	176
9-Elementary Occupations		
91-Cleaners and helpers	8760	31
92-Elementary occupations within agriculture, forestry and fishing industries	1985	15
93- Elementary occupations within mining, construction, manufacturing and transportation industries	60678	768
94-Food preparation helpers	6756	11
95-Street sales and service jobs	690	3
96-Refuse collectors and other elementary occupations	37908	159

BREAKDOWN OF OCCUPATIONAL ILLNESSES AND OCCUPATIONAL ILLNESS RELATED DEATHS OF EMPLOYEES INSURED BY 4-1 /a (SGK, Chart 3.28)		
OCCUPATIONS	NUMBER of ILLNESSES	NUMBER of DEATHS
7-Craftsmans, artisans and other related areas		
71-Construction and related areas (excludes electricians)	2	-
72-Machinery, metalwork and related areas	19	-
73-Handicrafts and printing related areas	15	-
74-Electric and electronic related areas	-	-
75-Food processing, woodworks, textile and other artisans, and related areas	4	-
8-Facility and machine operators and assemblers		
81-Permanent facility and machine operators	39	-
82-Assemblers	16	-
83-Drivers and mobile facility operators	4	-
9-Elementary Occupations		
91-Cleaners and helpers	6	-
92-Elementary occupations within agriculture, forestry and fishing industries	1	-
93- Elementary occupations within mining, construction, manufacturing and transportation industries	78	-
94-Food preparation helpers	1	-
95-Street sales and service jobs	2	-
96-Refuse collectors and other elementary occupations	29	-

As it can be seen on the charts, a general occupational distribution exists on national level and there is not any province-specific chart prepared for occupational distribution. Besides, some other occupations are on the list and they are not compatible with primary sectors of TRC1 region.

In conclusion, training programmes that includes H&S training should be prepared for occupational training of construction, mining, textiles, food and metal industry workers.

2. Training Curriculum and Modules

5.1. H&S Professionals Training Curriculum

5.1.1. Basic Training Programme for Workplace Doctors

Qualities of Basic Training Programme Trainers for Workplace Doctors

Trainer Code	Quality of Trainers
H-1	Workplace doctors
H-2	Doctors who hold occupational health and safety post-graduation
H-3	Doctors who lectured minimum of 4 semesters on the areas of study that are announced by the ministry.
H-4	Specialists in occupational illnesses or occupational workplace doctors and public health specialists with minimum of 150 hours of theoretical and applied training related to health and safety during their career education.
H-5	Class (A) occupational safety specialists
H-6	Engineers, architects or tech personnel who hold occupational health and safety postgraduate degree
H-7	Occupational health and safety specialists from the ministry
H-8	Labour inspectors from the ministry
H-9	Labour and social security training specialists from the ministry
H-10	Engineers, architects, physicists, chemists and technical teachers who lectured minimum of 4 semesters on the areas of study that are announced by the ministry.
H-11	Those who are authorized workplace doctors and certified occupational safety specialists

Topics, Objectives, Training Targets, Durations and Distribution of Trainers of Basic Training Programme for Workplace Doctors

Item No / Subject	1 / Opening, Introduction, presentation of the programme and pre-test run
Main objective of the subject	To form a positive educational environment by introducing attendees, trainers and presenting the programme during the opening of face to face training programme, and to run a pre-test in order to obtain information on attendee's expectations before the test and to determine their knowledge level on the subject
Face to face / total number of lessons	1/1
Trainer	H-11

Item No / Subject	2 / Development of Health and Safety Notion and Rules
Main objective of the subject	To inform attendees about historical development of health and safety in world and in our country, and about modern health and safety code of practices
Training Targets	At the end of this training, attendees will be able to; <ul style="list-style-type: none"> • Describe health and safety notion, • Summarize historical development of health and safety in Turkey and in the world, • Describe a modern approach to health and safety, and • Specify health and safety code of practices.
Subtopics of the Subject	<ul style="list-style-type: none"> • Developmental stages of health and safety and the notion of health and safety, • Health and safety in Turkey and in the World, • Historical development of health and safety in Turkey and in the World, • Modern health and safety <ul style="list-style-type: none"> ○ Concept ○ Stages of development ○ Scope ○ Work and safety relations • Modern health and safety code of practice <ul style="list-style-type: none"> ○ Proper job placement ○ Evaluation of workplace environment and factors ○ Evaluation and control of health and safety risks ○ Control examination at intervals • Providing health and safety services at workplace.

Face to face / total number of lessons	1/1
Trainer	H-11

Item No / Subject	3 / Health and Safety Culture
Main objective of the subject	Helping attendees to understand risk prevention culture in health and safety and importance of integrated approach.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Describe risk prevention culture in health and safety. Find advantages of integrated approach in health and safety, Conclude the necessity to form and sustain a health and safety culture.
Subtopics of the Subject	<ul style="list-style-type: none"> Integrated approach to health and safety Risk prevention culture at workplaces Living safe and healthy <ul style="list-style-type: none"> Safety at home <ul style="list-style-type: none"> Safety in the kitchen Safety in the bathroom Safety of children and seniors Safety in the office Safety at school Life-long education in the field of health and safety.
Face to face / total number of lessons	1/3
Trainer	H-11

Item No / Subject	4 / Health and Safety in Turkey and in World
Main objective of the subject	Helping attendees to gain information on health and safety in Turkey and in the World along with comparison and statistical data.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Specify the situation of existing health and safety by using data regarding health and safety from ILO, data regarding occupational illnesses from WHO, data regarding EU countries health and safety from OSHA and data from SGK regarding Turkey's health and safety, Specify and compare relations between health and safety and socio-economic development.
Subtopics of the Subject	<ul style="list-style-type: none"> World H&S statistics ILO, WHO, OSHA-EU Existing health and safety situation in Turkey with data from SGK Comparison of Turkey with developed and developing countries
Face to face / total number of lessons	1/1
Trainer	H-11

Item No / Subject	5 / Law Basics
Main objective of the subject	Helping attendees to receive information on the nature of legal norms and basic topics of law.
Training Targets	At the end of this lesson, attendee will be able to describe the nature of legal norms, as well as concepts of constitution, law, regulation, legislation, declaration, circular and public mandate.
Subtopics of the Subject	<ul style="list-style-type: none"> Nature of legal norms Concepts of constitution, law, regulation, legislation, declaration, circular and public mandate
Face to face / total number of lessons	1/2
Trainer	H-11* *Legal expert

Item No / Subject	6 / Business Law
Main objective of the subject	To provide attendees with information regarding basic principles and purposes of business law, responsibilities and rights regarding health and safety.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe basic principles and purposes of business law. • Describe national legislation regarding occupational health and safety. • Analyse the organization of occupational health and safety services. • Clarify occupational health and safety roles of officials. • Explain the employers' health and safety responsibilities and list the items regarding arrangement of work. • Specify the responsibilities of workplace doctor and all parties, as well as employees' social security rights (being covered by insurance, off days due to health issues, health benefits, disablement, retirement and other aids.) • Show legal methods for application.
Subtopics of the Subject	<ul style="list-style-type: none"> • The importance of employee, employer, sub-employer and employer's representative concepts with regards to occupational health and safety • Rights, responsibilities and liabilities of the employer • Legal foundation of employer's responsibilities <ul style="list-style-type: none"> ○ Scope of employers' responsibilities and the role of fault in such responsibilities ○ Compensations to be paid by the employer ○ Monetary-immaterial compensation ○ Compensation for loss of support ○ Recourse claim ○ Executive obligation of the employer ○ Criminal liability of the employer • Making and terminating contracts with employer • Provisions regarding working hours (full-part time) • Penal Sanctions regarding occupational health and safety • Responsibility of employer's representative • Regulations concerning compensations and anticipated job safety due to dismissal of workplace doctor and regulations regarding compensation systems for employees • Rights and liabilities of employees • Rights and liabilities of occupational health and safety specialists • Occupational safety basics • Responsibilities of unions <ul style="list-style-type: none"> ○ Educational responsibilities ○ Utilization of labour agreements regarding occupational health and safety • Legal structure of occupational accidents and illnesses • Occupational accidents and illnesses with regards to individual labour law <ul style="list-style-type: none"> ○ Lien of causality ○ Regulations on Occupational Illnesses (the law no.5510, Regulations on work strength and loss of occupational work strength, regulations by Supreme Committee of Health) • Concluded judicial decisions
Face to face / total number of lessons	3/5
Trainer	H-7, H-8, H-10* *Legal Expert

Item No / Subject	7 / Occupational Health and Safety
Main objective of the subject	Providing attendees with information in regards to existing occupational health and safety laws in our country.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe existing laws regarding occupational health and safety laws in our country. • List basic principles of regulations regarding occupational health and safety in our country.
Subtopics of the Subject	<ul style="list-style-type: none"> • Constitution, Public Health Law, Code of Obligations, Business Law • Basic principles of occupational health and safety code and regulations.
Face to face / total number of lessons	-/2
Trainer	H-11

Item No / Subject	8 / National and International Institutions
Main objective of the subject	Providing attendees with information regarding the importance and role of government, employers and employees in terms of occupational health and safety, as well as about the national and international institutions and their activities.
Training Targets	At the end of this lesson attendees will be able to; <ul style="list-style-type: none"> • State the role and importance of government, employers and employees in terms of occupational health and safety • Describe the international institutions and organizations that are running occupational health and safety activities such as ILO, WHO and OSHA, and institutions and organization that are responsible with occupational health and safety in our country.
Subtopics of the Subject	<ul style="list-style-type: none"> • The role and importance of government, employers and employees in terms of occupational health and safety <ul style="list-style-type: none"> ○ National Council of Occupational Health and Safety ○ Ministry of Labour and Social Security <ul style="list-style-type: none"> ◇ İSGGM, İSGÜM ◇ Department of Work Inspection Board (İş Teftiş Kurulu Başkanlığı) ◇ ÇASGEM ◇ SGK ○ Ministry of Health ○ Organizations for Employees and Employers ○ Professional organizations with public institution status • International Labour Organization (ILO) • World Health Organization (WHO)
Face to face / total number of lessons	1/3
Trainer	H-11

Item No / Subject	9 / International Agreements of Occupational Health and Safety
Main objective of the subject	Providing attendees with information about international agreements that are approved by Turkey.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe occupational health and safety agreements and advisory jurisdictions (ILO agreement and other occupational health and safety related agreements). • List 89/391 EEC numbered occupational health and safety frame directives and sub directives regarding issued by EU.
Subtopics of the Subject	<ul style="list-style-type: none"> • ILO agreements (No. 155 and 161) • AB 89/391 EEC Numbered Directive
Face to face / total number of lessons	¼
Trainer	H-11

Item No / Subject	10 / Occupational Health and Safety Services
Main objective of the subject	Providing attendees with information regarding occupational health and safety services and the importance of teamwork in such services.
Training Target	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • List duties, responsibilities and authority of workplace doctor. • State duties, responsibilities and authority of occupational health and safety specialist. • State presentation of workplace doctor's services through Community Health Centres (TSM). • Describe establishment and activities of Common Health and Safety Unit (OSGB) • List duties of workplace doctor in regards with application of other occupational health and safety regulations. • Describe importance of teamwork in occupational health and safety services.
Subtopics of the Subject	<ul style="list-style-type: none"> • Duties, responsibilities and authority of workplace doctor. • Duties, responsibilities and authority of occupational health and safety specialist • Establishment and activities of TSM and OSGB. • Duties of workplace doctor in regards with application of other occupational health and safety regulations • Importance of teamwork in occupational health and safety services <p>LIST OF REGULATIONS:</p> <ul style="list-style-type: none"> ○ Occupational Health and Safety Services Regulation ○ Work Methods and Principles of Workplace Doctors Regulation ○ Duties, Responsibilities and Authority of Occupational Health and Safety Specialists Regulation

	<ul style="list-style-type: none"> ○ Preparation, Implementation and Cleaning Works Regulation ○ Work Methods and Principles of Child Labour Regulation ○ Regulation about Female Postal Workers' Night Shifts ○ Regulation about Special Methods and Principles Regarding Workers to be Employed in Groups ○ Regulation about Methods and Principals regarding Employers' Occupational Health and Safety training ○ Safety and Health Signs Regulation (92/58/EEC) ○ Regulation about Health and Safety Precautions while Working with Monitors 90/270/EEC) ○ Noise Regulation (2003/10/EC-(86/188/EEC) ○ Vibration Regulation (2002/44/EC) ○ Health and Safety in Construction Works Regulation (92/57/EEC) ○ Regulation on Health and safety Precautions while Working with Chemical Substances (98/24/EC-2000/39/EC Limit Value) ○ Regulation on Protecting Workers from Explosives at Workplaces (99/92/EC) ○ Regulation on Health and Safety Precautions while working with Carcinogenic and Mutagenic Substances (90/394/EEC-97/42/EEC-99/38/EC) ○ Regulation on Health and Safety Precautions while working with Asbestos (83/477/EEC) ○ Regulation on Occupational Health and Safety Measures at Workplace Buildings and its additions (89/654/EEC) ○ Regulation on Occupational Health and Safety Conditions on Using Work Equipment (89/655/EEC) ○ Regulation on Manual Handling (90/269/EEC) ○ Regulation on Use of Personal Protective Equipment at Workplaces (89/656/EEC) ○ Regulation on Occupational Health and Safety Conditions of Underground and Aboveground Mining Companies (92/104/EEC) ○ Regulation about the Occupational Health and Safety Conditions of Mining Companies Using Drilling Method (92/91/EEC) ○ Regulation about Health and Safety of Temporary or Periodical Jobs (91/383/EEC) ○ Regulation on Risk Prevention in Exposition to Biological Agents (2000/54/EC- 93/88/EEC-97/59/EC-97/65/EC) ○ Regulation on Occupational Health and Safety Precautions at Fishing Vessels (93/103/EEC) ○ Regulation on Obtaining Permission to Establish and Run a Company ○ Regulation on Stopping Operations and Terminating the Companies ○ Regulation Heavy and Dangerous Labours ○ Regulation on Work Conditions of Pregnant and Nursing Woman and Nursing Rooms, as well as Child Care Centres (92/85/EEC) ○ Regulation on Jobs considered a part of Industry, Trade, Agriculture and Forestry. ○ Regulation on Work Conditions of Jobs Considered a part of Agriculture and Forestry.
Face to face / total number of lessons	4/12
Trainer	H-1, H-5, H-7, H-8

Item No / Subject	11 / Occupational Health and Safety Boards
Main objective of the subject	Providing attendees with information regarding establishment of occupational health and safety boards, duties and importance.
Training Targets	At the end of this lesson, attendees will be able specify legal foundation and importance of occupational health and safety boards, and to describe operations and member regulations.
Subtopics of the Subject	<ul style="list-style-type: none"> • Legal foundation • Formation of the board, members and workplaces to be established • Board activities, duties, responsibilities and liabilities • Relevant legislation
Face to face / total number of lessons	1/2
Trainer	H-11

Item No / Subject	12 / Occupational Health and Safety Management Systems
Main objective of the subject	Providing attendees with information regarding occupational health and safety management systems certification standards that is being commonly used in the field of occupational health and safety.
Training Targets	At the end of this lesson, attendees will be able to explain establishment, implementation and continuation of occupational health and safety management systems.
Subtopics of the Subject	<ul style="list-style-type: none"> • ILO OHS 2001, TS OHSAS 18001, BS 8800 • TS ISO EN 9000, TS ISO EN 14001 • Policy determination and planning • Controlling, corrective and preventive activities • Record and survey
Face to face / total number of lessons	1/3
Trainer	H-5, H-6, H-7, H-8* *Technical

Item No / Subject	13 / Risk Management and Evaluation
Main objective of the subject	Providing attendees with information regarding basic concepts of risk evaluation and risk evaluation methods.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe the necessity and foundation of risk evaluation. • List methods of risk evaluation. • Evaluate risks at workplace.
Subtopics of the Subject	<ul style="list-style-type: none"> • Concepts of risk and danger • Risk evaluation as a part of risk management • Risk evaluation crew and attendance of employees • Comparison of risks • Risk control and protection • Risk management • Relevant legislation
Face to face / total number of lessons	6/6
Trainer	H-5, H-6, H-7, H-8*, H-10** *Technical **Engineer, architect or technical personnel

Item No / Subject	14 / Health Surveillance and Biological Monitoring at Workplace
Main objective of the subject	Helping attendees to learn and apply basic principles regarding health surveillance and biological monitoring at workplace
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Specify health surveillance and application steps. State the right to claim health surveillance for employees. Execute recruitment examinations considering the principle of “cut out for the job” and execute control examinations at intervals. Execute biological monitoring at workplace. Distinctively observe employees with chronic and systemic illnesses. List the responsibilities of doctor during health surveillance. Explain the effects of health surveillance on protective health practices with examples.
Subtopics of the Subject	<ul style="list-style-type: none"> Description of health surveillance and application steps Recruitment examinations considering the principle of “cut out for the job” Control examinations at intervals Biological monitoring at workplace Distinctively observing employees with chronic and systemic illnesses Responsibilities of doctor during health surveillance Explaining the effects of health surveillance on protective health practices with examples Concept and standards of vocational rehabilitation Relevant legislation
Face to face / total number of lessons	3/6
Trainer	H-11* *Doctor

Item No / Subject	15 / Surveillance of Workplace Environment
Main objective of the subject	Helping attendees to understand description of surveillance of workplace environment, scope as well as place and importance of occupational health and safety activities at workplace.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Describe the surveillance of workplace environment and its' scope. Explain the relation between biological monitoring and evaluation of environment for observation purposes. List the records of observation of workplace environment.
Subtopics of the Subject	<ul style="list-style-type: none"> Description and scope of workplace environment monitoring Biological monitoring and evaluation of environment for observation purposes. Records and statistics from the observation of workplace environment. Relevant legislation. Explaining the effects of health surveillance on protective health practices with examples.
Face to face / total number of lessons	3/4
Trainer	H-1, H-2, H-4, H-7, H-8* *Technical

Item No / Subject	16 / Workplace Hygiene
Main objective of the subject	Providing attendees with information regarding basic information on workplace hygiene description, measurement methods and responsibilities.
Training Targets	At the end of this lesson, trainees will be able to; <ul style="list-style-type: none"> Describe workplace hygiene and explain its scope and extent, List responsibilities and relations (workplace doctor, workplace hygienist, job safety specialist etc.) about the workplace. List methods of control and measurement.
Subtopics of the Subject	<ul style="list-style-type: none"> Description of workplace hygiene, Responsibilities of workplace doctor, Relevant legislation, Methods of control and measurement.
Face to face / total number of lessons	1/3
Trainer	H-7, H-8*, H-11** *Technical **Chemical engineer, chemist, pharmacist, biologist, public health specialist or occupational health medicinal doctor.

Item No / Subject	17 / Physical Risk Factors
Main objective of the subject	Helping attendees to learn about physical risk factors that negatively affect workplace health and safety as well as necessary precautions to be taken against such factors.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe physical risk factors that negatively affects employee’s health and safety at workplace. • List methods of physical risk factor measurements directed to environment and individuals. • Specify permitted values among national and international standards. • Compare field of businesses that are highly exposed to physical risk factors in our country and in world. • Explain the control of physical risk factor duties of workplace doctors in such.
Subtopics of the Subject	Physical risk factors that can negatively affect health in the workplace: <ul style="list-style-type: none"> ○ Noise-Vibration ○ Thermal Comfort (humidity, working in hot or cold, heating and ventilation) ○ Lighting ○ Ionized and non-ionized rays ○ Low and high pressure • Relevant legislation
Face to face / total number of lessons	4/8
Trainer	H-11* * Physics graduates and industrial, physics, mechanical and mining engineers

Item No / Subject	18 / Chemical Risk Factors
Main objective of the subject	Helping attendees to learn about chemical risk factors that negatively affect workplace health and safety as well as necessary precautions to be taken against such factors
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe chemical risk factors that negatively affects employee’s health and safety at workplace. • List methods of chemical risk factor measurements directed to environment and individuals. • Specify permitted values among national and international standards. • Compare field of businesses that are highly exposed to chemical risk factors in our country and in world. • Explain the control of chemical risk factor and duties of workplace doctors in such.
Subtopics of the Subject	Chemical risk factors that can negatively affect health in the workplace: <ul style="list-style-type: none"> • Dust: <ul style="list-style-type: none"> ○ Classification (organic-inorganic dust) ○ Occupational exposure fields ○ Effects on employee health ○ Environment and biological measurement methods ○ Methods of early diagnosis ○ Methods of prevention, • Gas, Vapour and Smoke <ul style="list-style-type: none"> ○ Types of Welding and gases ○ Solvents, acid and base, metals and salts ○ Pesticides ○ Effects on employee health ○ Description of Risk (R) and Safety (S) on Material Safety Data Forms (MSDS), • Methods of prevention and protection • Production, transportation and storage of chemicals • Cancerogenic, mutagenic and toxic substances • Inflammable, explosive, dangerous and hazardous chemical substances • Explosion protection document and machinery and equipment to be used such workplaces.
Face to face / total number of lessons	3/6
Trainer	H-11* * Chemical engineer, chemistry graduate

Item No / Subject	19 / Biological Risk Factors
Main objective of the subject	Helping attendees to learn about biological risk factors that negatively affect workplace health and safety as well as necessary precautions to be taken against such factors
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Specify bacteria, viruses, fungi and parasites that could be encountered as risk factors at workplace. • Describe characteristics of microorganisms that could be encountered as risk factors at workplace. • List basic laboratory methods and basic microbiological parameters that can be used to recognize illness factors. • List protection methods to avoid biological risk factors.
Subtopics of the Subject	<ul style="list-style-type: none"> • Risks that can be caused by biological factors • Workplace environments that is it more likely to encounter biological risk factor • Risks that health sector employees likely to be exposed. • Relevant legislations
Face to face / total number of lessons	1/2
Trainer	H-11* *Doctor, pharmacist, biologist

Item No / Subject	20 / Psycho-social Risk Factors
Main objective of the subject	Helping attendees to learn about psycho-social risk factors that negatively affect workplace health and safety as well as necessary precautions to be taken against such factors
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Describe psycho-social risk factors that negatively affects employee's health and safety at workplace. List methods of psycho-social risk factor measurements directed to individuals. Compare field of businesses that are highly exposed to psycho-social risk factors in our country and in world. Explain the control of chemical risk factor and duties of workplace doctors in such.
Subtopics of the Subject	<ul style="list-style-type: none"> Psycho-social risk factors that can negatively affect health in the workplace: <ul style="list-style-type: none"> Workplace environment Work duration Salary Factors related to management and employees Unionisation Day care centres Pregnant and nursing employees Young employees Harassment Stress Discrimination, oppression and abuse Field of businesses that are highly exposed to psycho-social risk factors Importance of workplace psychologist and teamwork for protection of physical and mental health of employees Relevant legislation
Face to face / total number of lessons	2/4
Trainer	H-2*, H-11** *Doctorate **Public health specialist, psychiatrist, psychologist or industrial engineers

Item No / Subject	21 / Ergonomics
Main objective of the subject	Providing attendees with information on basic concepts of ergonomics and work physiology and ergonomical arrangements at workplace as well as workplace designs.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Describe ergonomics and basic concepts. Specify effects of ergonomical risks. Explain activities in order to prevent the effects of ergonomical risks.
Subtopics of the Subject	<ul style="list-style-type: none"> Working life and ergonomics Work physiology and biomechanics Anthropometry and workplace design Ergonomical arrangements based on information technologies Ergonomical arrangements based on safety technique. Office ergonomics Relevant legislation
Face to face / total number of lessons	3/6
Trainer	H-2*, H-3**, H-7, H-8***, H-10**** *Doctorate **Physical therapy and rehabilitation specialist or public health specialist ***Technical ****Industrial Engineer

Item No / Subject	22 / Protection Policies
Main objective of the subject	Helping attendees to learn the description of presentation and protection in the field of health and safety, as well as methods and importance.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe prevention and protection. • Specify state of hazards and behaviours. • State basic characteristics of practices such as protection at source, protection based on environment and protection of individuals.
Subtopics of the Subject	<ul style="list-style-type: none"> • Descriptions, • Levels of protection (Basic, primary, secondary, tertiary), • Protection practices at source, • Protection based on environment (machinery protection, ventilation and principles of climatization), • Personal Protective Equipment(PPE).
Face to face / total number of lessons	4/6
Trainer	H-1, H-2, H-4, H-5, H-6, H-7, H-8*, H-10** *Technical **Engineer, architect or technical personnel

Item No / Subject	23 / Occupational Health and Safety in Electric Works
Main objective of the subject	Helping attendees to learn about risks arising from electric works and necessary preventive health and safety actions against such risks at workplace.
Training Targets	At the end of this lesson, attendee will be able to; <ul style="list-style-type: none"> • Specify electric related risk factors. • Characterize necessary controls for health and safety, and describe precautions when working with electric.
Subtopics of the Subject	<ul style="list-style-type: none"> • Electrical energy and descriptions • Effects of electric on health • Methods of prevention and protection • Relevant legislation
Face to face / total number of lessons	1/2
Trainer	H-5, H-6*, H-7, H-8**, H-10* *Electrical engineers or electrical-electronic engineers and technical teachers **Technical

Item No / Subject	24 / Inflammable, Combustive and Explosive Environments
Main objective of the subject	Providing attendees with information regarding inflammable, combustive and explosive environments.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe combustion and list types. • List inflammable liquid vapour and gas. • Point out explosive substances and environments. • List prevention, protection and fighting methods.
Subtopics of the Subject	<ul style="list-style-type: none"> • Description and types of combustion • Inflammable liquid vapour and gas • Explosive substances and environments • Prevention, protection and fighting methods
Face to face / total number of lessons	1/3
Trainer	H-5*, H-6*, H-7, H-8**, H-10* *Chemical, Mining, petroleum and natural gas engineers **Technical

Item No / Subject	25 / Major Industrial Accidents
Main objective of the subject	Providing attendees with information regarding environmental health problems arising from industrial activities and prevention of such.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe environmental risk factors at workplace. • List concepts of environmental pollution and primary/secondary sources. • Specify the role of the doctor and emergency plan. • Present examples regarding prevention of industrial accidents.
Subtopics of the Subject	<ul style="list-style-type: none"> • Effects of physical, chemical and biological risk factors on environments, and measurement methods of such, • Major environmental pollutants (asbestos, lead, dioxin, pesticides, ionized/non-ionized radiation etc.), • Industrial accidents and concept of accidental release, • Industrial emissions, • Industrial waste, • Emergency plan and role of the doctor, • Prevention of accidents, • Accident prevention.
Face to face / total number of lessons	1/3
Trainer	H-5, H-6*, H-7, H-8**, H-10* *Environmental or Chemical Engineers **Technical

Item No / Subject	26 / Work Accidents
Main objective of the subject	Providing attendees with necessary information in order to prevent possible cases of work accidents at the workplace.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe work accident, • Analyse statistics of work accidents in the World and in Turkey, as well as contributory factors to work accidents, • Specify prevention methods, • Form work accident records and notices, • Run examinations and compile reports, • List basic, primary and secondary prevention methods for work accidents.
Subtopics of the Subject	<ul style="list-style-type: none"> • Description and causes of work accidents • Records, notices and statistics of work accidents • Examination of work accidents and compiling reports • Work accident protection • Epidemiology of work accidents • Evaluation of necessary precautions to be taken and accident reports.
Face to face / total number of lessons	3/6
Trainer	H-5, H-7, H-8* *Technical

Item No / Subject	27 / First-Aid Organization at Workplace
Main objective of the subject	Providing attendees with information regarding first-aid organization at workplace and relevant legislation.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe first-aid, • List occasions that require first-aid at workplace, • Explain first-aid organization at workplace.
Subtopics of the Subject	<ul style="list-style-type: none"> • Description of first-aid, • Occasions that require first-aid at workplace, • Relevant legislation.
Face to face / total number of lessons	-/1
Trainer	H-11* *Doctor

Item No / Subject	28 / Introduction to Occupational Illnesses
Main objective of the subject	Helping attendees to learn and understand cause and effect relationship on occupational illnesses that are caused by conditions at workplace.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe occupational illness, • List classification of occupational illnesses, • Show the process of medical and legal diagnosis of occupational illnesses, • Explain protection from occupational illnesses. • Compare occupational illness statistics of Turkey and World.
Subtopics of the Subject	<ul style="list-style-type: none"> • Description of occupational illness • Classification of occupational illnesses • Process of medical and legal diagnosis of occupational illnesses • Protection from occupational illnesses • Occupational illness statistics of Turkey and World • Relevant legislation <ul style="list-style-type: none"> ○ Occupational Illnesses Determination Process Circular (2008-113)
Face to face / total number of lessons	3/6
Trainer	H-1, H-2, H-3*, H-4 *Pulmonologist or internal medicine specialist

Item No / Subject	29 / Work Related Illnesses
Main objective of the subject	Providing attendees with information regarding importance of work related illnesses in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe work related illnesses and show differences from occupational illnesses, • Evaluate cause and effect relationship on work related illnesses, • Describe the duties of doctor while health monitoring regarding work related illnesses.
Subtopics of the Subject	<ul style="list-style-type: none"> • Description of work related illnesses, • Types of work related illnesses, • Methods of protection, • Duties of doctor while health monitoring regarding work related illnesses.
Face to face / total number of lessons	1/2
Trainer	H-1, H-2, H-3*, H-4 *Pulmonologist or internal medicine specialist

Item No / Subject	30 / Occupational Respiratory System Diseases
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of occupational respiratory system diseases in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe occupational respiratory system diseases (recruitment and periodical examination methods, determination of risk factors and sources at workplace, functional evaluation of respiratory system, other diagnostic methods, disablement due to occupational lung diseases), • List types of pneumoconiosis (pneumoconiosis of coal miners, silicosis, lung diseases caused by asbestos), • List occupational respiratory tract illnesses (occupational asthma, occupational chronic obstructive lung diseases), • State occupational lung diseases caused by organic dust, • Describe the relation between occupational lung diseases and vapour, smoke and solvents (acute inhalation injury), • Describe occupational lung cancer, • List work related lung infections, • State the importance of relationship between respiratory diseases and occupational environment, • List health monitoring, protection and early diagnosis methods of occupational respiratory system diseases.
Subtopics of the Subject	<ul style="list-style-type: none"> • Introduction to occupational respiratory system diseases • Pneumoconiosis (pneumoconiosis of coal miners, silicosis, lung diseases caused by asbestos), • Occupational respiratory tract illnesses (occupational asthma, occupational chronic obstructive lung diseases)

	<ul style="list-style-type: none"> Occupational lung diseases caused by organic dust Occupational lung diseases and vapour, smoke and solvents (acute inhalation injury) Work related lung infections Importance of relationship between respiratory diseases and occupational environment Health monitoring, protection and early diagnosis methods of occupational respiratory system diseases Sample case studies
Face to face / total number of lessons	4/8
Trainer	H-2*, H-3**, H-4 *Doctorate ** Pulmonologist or internal medicine specialist

Item No / Subject	31 / Occupational Cardiovascular Diseases
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of occupational cardiovascular diseases in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Describe occupational cardiovascular diseases, List methods of protection, Specify methods of early diagnosis.
Subtopics of the Subject	<ul style="list-style-type: none"> Occupational cardiovascular diseases, Factors that might cause occupational cardiovascular diseases, Methods of protection, Methods of early diagnosis, Sample case study.
Face to face / total number of lessons	1/1
Trainer	H-2*, H-3**, H-4 *Doctorate **Cardiologist, cardiovascular surgent or internal medicine specialist

Item No / Subject	32 / Occupational Dermatological Diseases
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of occupational dermatological diseases in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Describe occupational dermatological diseases, List factor that might cause occupational dermatological diseases, List methods of protection, Specify methods of early diagnosis.
Subtopics of the Subject	<ul style="list-style-type: none"> Occupational dermatological diseases, Factors that might cause occupational dermatological diseases, Methods of protection, Methods of early diagnosis, Sample case study.
Face to face / total number of lessons	1/3
Trainer	H-2*, H-3**, H-4 *Doctorate **Dermatologist

Item No / Subject	33 / Occupational Nervous System Diseases
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of occupational nervous system diseases in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe occupational nervous system diseases, • List factor that might cause occupational nervous system diseases, • List methods of protection, • Specify methods of early diagnosis.
Subtopics of the Subject	<ul style="list-style-type: none"> • Occupational nervous system diseases, • Factor that might cause occupational nervous system diseases, • Methods of protection, • Methods of early diagnosis, • Sample case study.
Face to face / total number of lessons	1/2
Trainer	H-2*, H-3**, H-4 *Doctorate **Neurologist

Item No / Subject	34 / Occupational Genito-urinary System Diseases
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of occupational genito-urinary system diseases in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe occupational genito-urinary system diseases, • List factor that might cause occupational genito-urinary system diseases, • List methods of protection, • Specify methods of early diagnosis.
Subtopics of the Subject	<ul style="list-style-type: none"> • Occupational genito-urinary system diseases, • Factor that might cause occupational genito-urinary system diseases, • Methods of protection, • Methods of early diagnosis, • Sample case study.
Face to face / total number of lessons	1/1
Trainer	H-2*, H-3**, H-4 *Doctorate **Urologist or gynaecology

Item No / Subject	35 / Occupational Contagious Diseases
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of occupational contagious diseases in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe occupational contagious diseases, • List factor that might cause occupational contagious diseases, • List methods of protection, • Specify methods of early diagnosis.
Subtopics of the Subject	<ul style="list-style-type: none"> • Occupational contagious diseases, • Factor that might cause occupational contagious diseases, • Methods of protection, • Methods of early diagnosis, • Relevant legislation, • Sample case study.
Face to face / total number of lessons	1/2
Trainer	H-2*, H-3**, H-4 *Doctorate ** Pulmonology, infectious diseases and clinical microbiology specialist.

Item No / Subject	36 / Occupational Cancers
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of occupational cancer in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe occupational cancer, • List factor that might cause occupational cancer, • List methods of protection, • Specify methods of early diagnosis.
Subtopics of the Subject	<ul style="list-style-type: none"> • Occupational cancers and list of carcinogens (IARC), • Factor that might cause occupational cancer • Methods of protection, • Methods of early diagnosis, • Relevant legislation, • Sample case study.
Face to face / total number of lessons	1/2
Trainer	H-2*, H-3**, H-4 *Doctorate ** Pulmonology, internal medicine or medical oncology.

Item No / Subject	37 / Musculoskeletal Diseases
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of musculoskeletal diseases in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe musculoskeletal diseases, • List factor that might cause musculoskeletal diseases, • List methods of protection, • Explain effects of health development programmes, • Specify methods of early diagnosis.
Subtopics of the Subject	<ul style="list-style-type: none"> • Musculoskeletal diseases • Factor that might cause musculoskeletal diseases • Methods of protection, • Methods of early diagnosis, • Relevant legislation, • Sample case study.
Face to face / total number of lessons	1/4
Trainer	H-2*, H-3**, H-4 *Doctorate **Physical therapy and rehabilitation, orthopaedics and traumatology or rheumatology.

Item No / Subject	38 / Occupational Hearing Loss
Main objective of the subject	Providing attendees with information regarding types, diagnosis, protection methods and importance of occupational hearing loss in working life.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe occupational hearing loss, • List factor that might cause occupational hearing loss, • State noise measurement, • List methods of protection, • Specify methods of early diagnosis, • State duties of doctor at health monitoring.
Subtopics of the Subject	<ul style="list-style-type: none"> • Occupational hearing loss • Factors that might cause occupational hearing loss • Methods of protection • Methods of early diagnosis • Relevant legislation and standards • Duties of doctor at health monitoring • Sample case study
Face to face / total number of lessons	1/2
Trainer	H-2*, H-3**, H-4 *Doctorate **Otorhinolaryngology

Item No / Subject	39 / Toxicology
Main objective of the subject	Providing attendees with information regarding basic concepts and importance of toxicology in regards to occupational health and safety and workplace doctor.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe toxicology, • Point out exposure indicators, • Describe ecotoxicity, • Finds health effects of commonly used substances in industry, • List methods of early diagnosis in occupational diseases due to chemical factors, • State the subjects to be considered when monitoring health of employees that are exposed to chemical factors, as well as duties of the doctor.
Subtopics of the Subject	<ul style="list-style-type: none"> • Introduction to Toxicology and descriptions, • Occupational exposure indicators (MAC, TLV, TWA, NOAEL, PEL, OEL, STEL, etc.), • Ecotoxicity, • Health effects of commonly used substances in industry; <ul style="list-style-type: none"> ○ Heavy metal poisoning ○ Hexane poisoning ○ Benzene poisoning • Early diagnosis in occupational diseases due to chemical factors, • subjects to be considered when monitoring health of employees that are exposed to chemical factors, as well as duties of the doctor.
Face to face / total number of lessons	1/2
Trainer	H-2*, H-3**, H-4, H-11** *Doctorate ** Masters in Toxicology

Item No / Subject	40 / Current Issues on Occupational Health
Main objective of the subject	Providing attendees with information regarding rapidly changing and developing new factors emerging in work life, occupational illnesses and new method approaches.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Finds emerging new factors at workplace, • State emerging diseases that are described as occupational illnesses or work related illnesses, • Specify recent expansions in occupational health and safety approach.
Subtopics of the Subject	<ul style="list-style-type: none"> • Recently emerging factors at workplaces (dioxins etc.), • Emerging diseases that are described as occupational illness or work related disease (Sick building syndrome etc.),

	<ul style="list-style-type: none"> Recent expansions in occupational health and safety approach.
Face to face / total number of lessons	1/2
Trainer	H-11* *Doctor

Item No / Subject	41 /Special Risk Groups in Work Life
Main objective of the subject	Participants are to ensure that they have information about the groups that have different risks in terms of health and safety in their working life and that need special
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Explain importance of risk groups in occupational health and safety, Specify requirements of special health monitoring direct at risk groups, Specify special protection methods for health development of risk groups.
Subtopics of the Subject	<ul style="list-style-type: none"> Risk groups in occupational health and safety area; <ul style="list-style-type: none"> Women Disabled Young Seniors, Immigrants Health Monitoring of Risk Groups Special protection methods for risk groups Relevant legislation
Face to face / total number of lessons	-/3
Trainer	H-11* *Doctor

Item No / Subject	42 / Development of Health in Work Life
Main objective of the subject	Helping attendees to gain information in order to prepare programmes to develop health at workplace and execute such programmes.
Training Targets	Attendees, <ul style="list-style-type: none"> Describe the concept of development of health at workplaces, Set up programmes regarding development of health at workplaces. State aspects to be considered while running and monitoring prepared programmes.
Subtopics of the Subject	<ul style="list-style-type: none"> Concept of “Development of Health at Workplaces “ Samples of health development programmes at workplace Smoking and substance abuse Healthy living <ul style="list-style-type: none"> Right diet Lifelong exercise Smoking and substance abuse Overcoming the stress Preparing a sample programme Application of the programme and aspects to be considered while monitoring.
Face to face / total number of lessons	2/4
Trainer	H-1, H-2, H-3, H-4, H-8* *Doctor

Item No / Subject	43 / Work Life and Diet
Main objective of the subject	Helping attendees to comprehend the importance of adequate and balanced diet in terms of occupational health and safety.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> List aspects of adequate and balance diet as well as food groups, Explain importance and effects of diet in employees' life, Find collective nutrition and its standards, Explain the relationship between nutrition and health risks workers of heavy and hazardous jobs.
Subtopics of the Subject	<ul style="list-style-type: none"> Adequate and balance diet Relationship between diet and occupational health and safety Collective Nutrition
Face to face / total number of lessons	-/2
Trainer	H-1, H-2, H-3*, H-4, H-11* * Nutrition and dietetic

Item No / Subject	44 / Adult Training, Health and Safety Training at Workplace and Communication
Main objective of the subject	Helping attendees to learn about adult training, health and safety training at workplace, and necessary communication skills at workplace.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Describe properties and methods of adult training. Specify how, by who and at which intervals workplace trainings will be given. Explain requirements for effective communication process at workplace.
Subtopics of the Subject	<ul style="list-style-type: none"> Properties and methods of adult training Qualities of educational establishment and educators Quality and duration of training Occupation health and safety and education of employees Basics of effective communication process at workplace Communication at employer-employee relations Relevant legislation
Face to face / total number of lessons	2/4
Trainer	H-11* *Doctor

Item No / Subject	45 / I Epidemiologic Approach at Occupational Health
Main objective of the subject	Helping attendees to learn about the methods of epidemiology, record-statistics and research, and basics of these such methods.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> Describe epidemiology and list methods in use. State basics of epidemiology. State ethical responsibilities of doctor regarding research at workplace.
Subtopics of the Subject	<ul style="list-style-type: none"> Description of epidemiology Basics of epidemiology Epidemiologic data sources Purposes of use of epidemiology in occupational health Ethical responsibilities of doctor regarding research at workplace Methods of epidemiologic research that are being used in work life: <ul style="list-style-type: none"> Cross-sectional researches Case-control researches Cohort researches Presentation of workplace research samples
Face to face / total number of lessons	3/6
Trainer	H-2*, H-4 *Doctorate

Item No / Subject	46 / Evaluation of Workplace Health Records
Main objective of the subject	Providing attendees with information regarding evaluation of measurement and monitoring records that are mandatory in order to monitor health and safety measures at workplace, determination of failing aspects, continuation of effective and continuous work life, as well as helping them to learn their responsibilities.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Perform duties of workplace doctor regarding the subject, • Show obligatory health record forms and state the duration of filling forms.
Subtopics of the Subject	<ul style="list-style-type: none"> • Sample studies of workplace records • Relevant legislation
Face to face / total number of lessons	2/5
Trainer	H-1, H-2, H-8* *Doctor

Item No / Subject	47 / Occupational Health Ethics
Main objective of the subject	Providing attendees with information regarding the concept of occupational health and safety ethics and international ethics.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Describe ethics in work life, • Specify legal/non-legal national and international regulations in terms of code of conduct, • Explain basic morals of medicinal practise, and ethical titles that effect workplace doctor and work life, • Specify possible options of action in order to solve ethical problems in workplace medicinal practice area.
Subtopics of the Subject	<ul style="list-style-type: none"> • Ethical topics that effect work life • Descriptions • “International Code of Conduct Manual for Occupational Health and Safety Professionals” and practices • Possible facts in conflict with ethical values at workplace <ul style="list-style-type: none"> ○ The causes of the cases and the ethical problems in these cases • Secrecy liabilities regarding information and record of employees’ health • Solution of ethical problems in workplace medicinal practice area
Face to face / total number of lessons	2/5
Trainer	H-2, H-4, H-11* *History of Medicine and Ethics

Item No / Subject	48 / Case Study Based on Small Group Dynamics
Main objective of the subject	Helping attendees to improve methods of occupational health problem solving with pre-prepared sample cases and to gain team-work skills.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • Use problem solving methods of occupational health with pre- prepared sample cases • Work with a team and utilize presentation skills. • Use methods of adult training.
Subtopics of the Subject	<ul style="list-style-type: none"> • Creating a case pool that provides 1 case for 5 attendees • Forming groups of maximum five persons • Giving enough material and time (half-day) for preparations • Group presentations • Evaluation of presentations by groups
Face to face / total number of lessons	8/8
Trainer	H-11* *Doctor

Item No / Subject	49 / Final Test and General Evaluation
Main objective of the subject	General evaluation of programme at the end of the training. Receiving feedback from the attendees after the training and applying a final test at the establishment in order to specify the level of acquisition.
Face to face / total number of lessons	1/1
Trainer	H-11

Item No / Subject	50 / Practical Applications at Workplace
Main objective of the subject	Allowing attendees to use their theoretical knowledge that they learned during this training programme at their workplace and helping them to improve their skill in application of such knowledge.
Training Targets	At the end of this application, attendees will be able to; <ul style="list-style-type: none"> • Carry out their theoretical knowledge, • Specify problems at fields and advice solutions, • Monitor health and work environment at workplace, • Conduct health training, • Prepare work reports.
Duration	40 hours of practical application at workplace
Trainer	Workplace doctor

5.1.2. Workplace Doctor Renewal Training Program

Sequence No/Subject	1 / Opening, Introduction, Presentation of the Program and Pre-Test Application
General purpose of the subject	At the inauguration of the renewal training program, preliminary testing is carried out within the institution in order to introduce the program and provide a positive education environment by ensuring the participants and trainers to meet, to learn the pre-course expectations of participants and to determine their level of knowledge, to identify issues for participant presentations about problems experienced at the field in workplace doctor implementations
Face-to-face / total course	1/1
Trainer	H-11

Sequence No/Subject	2 / Adult Training, Workplace Health and Safety Training and Communication
General purpose of the subject	To help the participants obtain information on adult training, workplace health and safety training and the necessary communication skills at workplace.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> Describe the characteristics and techniques of adult education. Identify how and how often the trainings will be provided at work and by whom. Specify the requirements for an effective communication process in the workplace.
Sub headings of the subject	<ul style="list-style-type: none"> Characteristics and techniques of adult education. Qualifications of training institutions and trainers Quality and period of training Training of employees on occupational health and safety and on the occupation basic concepts about effective communication process in the workplace communication in employer-employee relations relevant legislation
Face-to-face / total course	1/1
Trainer	H-11* (*Doctor)

Sequence No/Subject	3/ Occupational Health and Safety in Turkey and in the World
General purpose of the subject	Participants are given statistical data and provided with basic information about the occupational health and safety in Turkey and in the world.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> use ILO occupational health and safety data, WHO occupational disease data, OSHA EU countries occupational health and safety data, and SSI Turkey occupational health and safety data in order to determine the current status of occupational health and safety. Identify and compare the relationship between socioeconomic development and
Sub headings of the subject	<ul style="list-style-type: none"> Status of OHS in the world with statistical information ILO, WHO, OSHA-EU Status of occupational health and safety in Turkey with SSI data
Face-to-face / total course	1/1
Trainer	H-11

Sequence No/Subject	4/ International Agreements on OHS and Novelties in National Legislation
General purpose of the subject	To ensure that the participants have knowledge of international agreements approved by Turkey and novelties in national legislation.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> Explains international occupational health and safety agreements and recommendations (ILO agreements no. 155 and 161 and other occupational health and safety agreements). Framework Directive 891391 EEC and other sub-directives that the EU has published in the field of occupational health and safety.
Sub headings of the subject	<ul style="list-style-type: none"> ILO Agreements (No. 155 and 161) EU 891391 EEC Directive Novelties in national legislation
Face-to-face / total course	1/1
Trainer	H-11

Sequence No/Subject	5 / Duties and Responsibilities of the Workplace Doctor
General purpose of the subject	To ensure that the participants have knowledge of the duties, powers and responsibilities of workplace doctors according to the legislation of Turkey.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Explains the duties of the workplace doctors. • Lists the authorities and responsibilities of workplace doctors.
Sub headings of the subject	<ul style="list-style-type: none"> • Regulation on the Duties, Authorities, Responsibilities and Trainings of Workplace Doctors • Regulation on the Duties, Authorities, Responsibilities and Trainings of Occupational Safety Specialists
Face-to-face / total course	2/2
Trainer	H-11

Sequence No/Subject	6 / Risk Management and Assessment
General purpose of the subject	To ensure that participants have knowledge about basic concepts of risk assessment and risk assessment methods
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Defines the basis and necessity of risk assessment. • Lists the risk assessment methods. • Evaluates the risks in the workplace.
Sub headings of the subject	<ul style="list-style-type: none"> • Concept of danger and risk • Risk assessment as part of risk management • Risk assessment team and employee participation • Comparison of risks • Risk control and protection • Risk Management • relevant legislation
Face-to-face / total course	6/6
Trainer	H-1, H-2, H-3, H-4, H-5, H-6, H-7, H-8*, H-10, ** (*Technical **Engineer, architect or technical personnel)

Sequence No/Subject	7 / Health supervision and Work Environment supervision at Workplace
General purpose of the subject	To ensure that the participants have knowledge of the principles and practices of health supervision and working environment supervision at workplaces.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • List health supervision guidelines and implementation stages in the workplace. • Determines the working environment supervision principles at workplace.
Sub headings of the subject	<ul style="list-style-type: none"> • Regulation on the Duties, Authorities, Responsibilities and Trainings of Workplace Doctors • Regulation on the Duties, Authorities, Responsibilities and Trainings of Occupational Safety Specialists • Occupational Health and Safety Services Regulation
Face-to-face / total course	2/2
Trainer	H-1, H-2, H-4

Sequence No/Subject	8/ Physical Risk Factors
General purpose of the subject	To ensure that participants are informed about the physical risk factors that adversely affect health and safety at work, and that they learn the health and safety measures that should be met against such factors.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Describe the physical risk factors that adversely affect the health of employees at workplaces. • List environment and person-based measurement methods of physical risk factors. • Specify the permissible values in national and international standards. • Compare the sectors with high level of exposure to physical risk factors in Turkey and world. • Explain the control of physical risk factors in workplace and duties of
Sub headings of the subject	<ul style="list-style-type: none"> • Physical risk factors that may adversely affect health in the workplace: • Noise- Vibration • Thermal Comfort (working under humidity, heat or cold, Heating and ventilation) • Lighting • Ionized and non-ionized beams • Low and high pressure • relevant legislation
Face-to-face / total course	2/2
Trainer	H-1, H-2, H-4, H-11* (*bachelor's degree in physics, industry, physics, mining and mechanical

Sequence No/Subject	9/ Chemical Risk Factors
General purpose of the subject	To ensure that participants are informed about the chemical risk factors that adversely affect health and safety at work, and that they learn the health and safety measures that should be met against such factors.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Describe the chemical risk factors that adversely affect the health of employees at workplaces. • List environment and person-based measurement methods of chemical risk factors. • Specify the permissible values in national and international standards. • Compare the sectors with high level of exposure to chemical risk factors in Turkey and world. • Explain the control of chemical risk factors in workplace and duties of workplace doctor on this subject.
Sub headings of the subject	Chemical risk factors that may adversely affect health in the workplace: <ul style="list-style-type: none"> • Dusts: <ul style="list-style-type: none"> ○ Classification (organic dusts, inorganic dusts) ○ Occupational exposure areas ○ Impacts on employee health ○ Ambient and biological measurement methods ○ Early diagnosis methods ○ Protection methods • Gas, steam and fumes <ul style="list-style-type: none"> ○ Types of welding and gases ○ Solvents, acids and bases, metals and salts ○ Pesticides ○ Impacts on employee health ○ Risk (R) and Safety (S) definitions in Material Safety Data Sheets (MSDS), • Prevention and protection methods • Manufacture, transport, storage and control of chemicals • Carcinogenic, mutagen and toxic substances • Inflammable, explosive, hazardous and harmful chemical substances • Documents for protection from explosion and machinery and equipment to be used in explosive atmospheres
Face-to-face / total course	2/2
Trainer	H-1, H-2, H-4, H11* (*Chemical engineer, bachelor of chemistry degree)

Sequence No/Subject	10/ Biological Risk Factors
General purpose of the subject	To ensure that participants are informed about the biological risk factors that adversely affect health and safety at work, and that they learn the health and safety measures that should be met against such factors.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Describe bacteria, viruses, fungi and parasites that may be encountered as risk factors in the workplace. • Explain the characteristics of microorganisms that can be encountered as risk factors in the work environment. • List simple microbiological parameters and simple laboratory methods that can be used in recognition of the listed factors of illness. • List the methods of protection against biological risk factors.
Sub headings of the subject	<ul style="list-style-type: none"> • Risks that may arise from biological factors • Work environments where biological risk factors may be encountered • Risks which health sector employees may be exposed • Relevant legislation
Face-to-face / total course	1/1
Trainer	H-11* (*Doctor, pharmacist, biologist)

Sequence No/Subject	11/ Psycho-social Risk Factors
General purpose of the subject	To ensure that participants are informed about the psycho-social risk factors that adversely affect health and safety at work, and that they learn the health and safety measures that should be met against such factors.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Describe the psychosocial risk factors that negatively affect employees in the workplace and the health impacts. • List person-specific measurement methods related to psychosocial risks. • Compare the sectors with high level of exposure to psycho-social risk factors in Turkey and world. • Explain the control of psycho-social risk factors in workplace and duties of workplace doctor on this subject.
Sub headings of the subject	<ul style="list-style-type: none"> • Psych-social risk factors that may adversely affect health in the workplace: <ul style="list-style-type: none"> ○ Working Environment ○ Working time ○ Wage ○ Administrative and employee-related factors ○ Syndication ○ Nurseries, day nurseries etc. ○ Pregnant and nursing employees ○ Young employees ○ Harassments ○ Stress ○ Discrimination, oppression and harassment • Branches of work with high level of exposure to psycho-social risk factors • Importance of team work and occupational psychologist for the protection of spiritual and physical health of employees • Relevant legislation
Face-to-face / total course	1/1
Trainer	H-2*, H-11** (*Ph.D.**Public health specialist, psychiatrist, psychologist or industrial engineer)

Sequence No/Subject	12/ Occupational Diseases
General purpose of the subject	To help participants understand and comprehend the cause-and-effect relationships in occupational diseases, which is a special group of diseases caused by the working environment.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Define the occupational disease, • List the classification of occupational diseases, • Show the medical and legal diagnosis process for occupational diseases, • Explain protection from occupational diseases, • Compare the occupational disease statistics in Turkey and world.
Sub headings of the subject	<ul style="list-style-type: none"> • Definition of occupational disease • Classification of occupational diseases • Medical and legal diagnosis process for occupational diseases • Protection from occupational diseases • Occupational disease statistics in Turkey and world • Relevant legislation <ul style="list-style-type: none"> ○ Circular on Determination of Occupational Diseases (2008-113)
Face-to-face / total	2/2
Trainer	H-1, H-2, H-3*, H-4 (*Chest diseases or internal diseases)

Sequence No/Subject	13/ Work Related Diseases
General purpose of the subject	To ensure that participants have knowledge of the prevalence of work-related diseases in their working life.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Define work related diseases and show their differences from occupational diseases. • Assess the cause-and-effect relationship in work-related diseases. • Define the duties of doctor in health supervision for work-related diseases.
Sub headings of the subject	<ul style="list-style-type: none"> • Definition of work related disease • Types of work-related diseases • Protection methods • Duties of doctor in health supervision
Face-to-face / total	1/1
Trainer	H-1, H-2, H-3*, H-4 (*Chest diseases or internal diseases)

Sequence No/Subject	14/ Participant Presentations on Problems Experienced in the Field of Workplace Doctor Applications and Suggestions for Solution
General purpose of the subject	To create an environment where the problems workplace doctors face in the field with the related suggestion of solutions and to improve the presentation skills of workplace doctors.
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Discuss and determine the problems of workplace doctors at workplaces. • Develop suggestions of solution for the problems workplace doctors face at workplaces.
Sub headings of the subject	<ul style="list-style-type: none"> • Current regulations on workplace doctors • Problems in diagnosis, identification and determination of occupational diseases • Workplace doctor and employer relations • Personnel affairs related problems of workplace doctor • Trainings of Workplace Doctor • Occupational health in medical training • Documentation of Workplace doctor • Prescription of workplace doctor • Case presentation
Face-to-face / total	5/5
Trainer	H-11* (*Doctor)

Sequence No/Subject	15/ Final Test and Evaluation
General purpose of the subject	To make a general evaluation of the program at the end of the training program. To implement a final test within the institution in order to get participants' feedback and to determine their levels of learning outcome.
Face-to-face / total course	1/1
Trainer	H-11

5.1.3. Occupational Safety Specialist Training

Qualifications of Trainers to be Assigned in the Occupational Safety Specialization Basic Training Program

Trainer	Trainer Qualification
U-1	Having a training document of workplace doctor and Occupational Safety Specialists; (A) class Occupational Safety Specialists
U-2	Engineers, architects or technical staff with training in occupational health and safety and occupational health or occupational safety scientific expertise
U-3	Occupational health and safety experts assigned by Ministry
U-4	Labour inspectors of Ministry
U-5	Occupational health and safety experts of Ministry
U-6	Engineers, architects, physicists, chemists, technical teachers and law faculty graduates who have taught at least 4 semesters in accordance with the educational programs
U-7	Workplace doctors
U-8	Physicians with occupational health and safety training or occupational health and safety
U-9	Physicians who have taught at least 4 semesters in the fields appropriate to the education programs declared to the Ministry
U-10	Occupational diseases and workplace doctor specialists and public health specialists who have received at least 150 hours of theoretical and practical training on occupational health and safety during their specialist training
U-11	All of the trainers
U-12	Engineers, architects or technical staff who have served in the General Directorate and its affiliated units for a minimum of eight years
U-13	Engineers, architects or technical staff with a doctorate in occupational health and safety program

Subjects, Goals, Learning Targets, Durations of Occupational Safety Specialists Basic Training Program and Distribution of Trainers

Sequence No/Subject	1 / Opening, Introduction, Presentation of the Program and Pre-Test Application		
General purpose of the subject	At the inauguration of face-to-face training program, preliminary testing is carried out within the institution in order to introduce the program and provide a positive education environment by ensuring the participants and trainers to meet, to learn the pre-course expectations of participants.		
Face-to-face / total course hours	Class A	Class B	Class C
	1/1	1/1	1/1
Trainer	U-11		

Sequence No/Subject	2 / Development of Concepts and Rules of Occupational Health and Safety		
General purpose of the subject	To inform the participants about the historical development of occupational health and safety in the world and in Turkey; and the principles of contemporary occupational health		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> • Define the concept of occupational health and safety. • Summarize the historical development of occupational health and safety in Turkey and in the world. • Define the contemporary approach of occupational health and safety. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Concept of occupational health and safety and the development stages of occupational health and safety • Occupational Health and Safety in Turkey and in the World • Historical development of occupational health and safety in Turkey and in the world. • Contemporary Occupational Health and Safety <ul style="list-style-type: none"> ○ Concept ○ Development stages ○ Scope ○ Relations between work and health • Contemporary principles of application of occupational health and safety. <ul style="list-style-type: none"> ○ Proper work placement ○ Assessment of workplace environment factors ○ Assessment and control of occupational health and safety risks ○ Sporadic control examination 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/1	1/1	2/3

Sequence No/Course	3- Overview of Occupational Health and Safety and Culture of Safety		
General purpose of the subject	To help participants understand the basic principles of occupational health and safety and the importance of safety culture.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> List basic principles of occupational health and safety. Define the safety culture and explain its benefits. To reach the conclusion for the necessity of establishment and sustaining a safety culture. 		
Sub headings of the subject	<ul style="list-style-type: none"> Basic principles of occupational health and safety Healthy and safe living Life-Long Learning in Occupational Health and Safety Holistic approach to occupational health and safety Place of occupational health and safety in business management Risk prevention culture in workplace Importance of safety culture and its place in daily life Establishment and continuation of safety culture Duties of national institutions and organizations in the establishment of safety culture 		
Face-to-face / total course hours	Class A	Class B	Class C
	-/3	1/3	2/4
Trainer	U-11		
Sequence No/Subject	4/ Occupational Health and Safety in Turkey and in the World		
General purpose of the subject	Participants are given statistical data and provided with basic information about the comparison of occupational health and safety in Turkey and in the world.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> use ILO occupational health and safety data, WHO occupational disease data, OSHA EU countries occupational health and safety data, and SSI Turkey occupational health and safety data in order to determine the current status of occupational health and safety. 		
Sub headings	<ul style="list-style-type: none"> Status of occupational health and safety in the world by statistics Status of occupational health and safety in Turkey by SSI data Comparison of Turkey with developed and developing countries 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/1	1/1	1/1
Trainer	U-11		

Sequence No/Subject	5/ Basic Law		
General purpose of the subject	To ensure that the participants have knowledge on the nature of legal norms and basic concepts of law.		
Learning objectives	At the end of this course, the participants will define the nature of legal norms and the concepts of constitution, law, statute, regulation, communiqué, circular and directive.		
Sub headings of the subject	<ul style="list-style-type: none"> The nature of legal norms Concepts of constitution, law, statute, regulation, communiqué, circular and directive 		
Face-to-face / total course hours	Class A	Class B	Class C
	-/1	-/1	-/2
Trainer	U-11* *Faculty of Law graduate		

Sequence No/Subject	6/ Labour Law		
General purpose of the subject	To ensure that the participants have information about the main objectives and principles of labour law, and the responsibilities, rights and obligations of the parties in the field of		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> • Define the basic aims and principles of labour law, • Define national legislation on occupational health and safety. • Analyse the organization of occupational health and safety services • Explain the roles of legal authorities in occupational health and safety. • List the responsibilities of the employer in terms of occupational health and safety and the provisions for the regulation of the work. • Identify the responsibilities of Occupational Safety Specialists and parties and the rights of employees (insurance, days with health report, health support, disability, pension and other benefits) in the field of social safety. • Show the legal application methods. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Concepts of worker, employee, employer, sub-employer, representative of employer and importance in terms of occupational health and safety • Responsibilities, right and obligations of employer • Legal ground of employers' responsibility <ul style="list-style-type: none"> ○ Scope of the employers' responsibility and the role of the fault in this responsibility ○ Compensation to be paid by employers ○ Material and moral indemnities ○ Compensation for deprivation of support ○ Recourse claim ○ Administrative liability of the employer ○ Criminal liability of the employer • Contracting with employer and termination of contract • Provisions relating to working hours (full and part-time) • Penal sanctions related with occupational health and safety • Liability of the employer's representative • Regulations on job safety and compensations of Occupational Safety Specialist and employees' employment • Rights and liabilities of employees • Rights and liabilities of Occupational Safety Specialists • General guidelines of job safety • Liability of trade unions <ul style="list-style-type: none"> ○ Liability on training ○ Utilization of collective bargaining in occupational health and safety issues • Legal structure of work accidents and occupational diseases • Work accident and occupational disease in terms of individual labour law <ul style="list-style-type: none"> ○ Causality ○ Legislation on Occupational Diseases (Law No. 5510, Regulation on Determining the Loss of Working Force and Occupational Loss Ratio Procedure, Higher Health Board Regulation) 		
Face-to-face / total course hours	Class A 2/4	Class B 2/4	Class C 3/5
Trainer	U-3, U-4, U-6* *Faculty of Law graduate		

Sequence No/Subject	7/ Occupational Health and Safety in Laws		
General purpose of the subject	To ensure that participants are informed about the current legal arrangements regarding occupational health and safety in Turkey.		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> • Define the basic aims and principles of the Occupational Health and Safety Law, • Explain the existing statutory regulations on occupational health and safety in Turkey. • List the basic principles in legislation on occupational health and safety in Turkey. 		
Sub headings of the subject	<ul style="list-style-type: none"> • The Constitution, the Public Hygiene Law, the Law of Obligations, the Labour Law, the Law on Occupational Health and Safety • Basic principles in legislation on occupational health and safety • Annulled provisions of Law No. 4857 		
Face-to-face / total course hours	Class A -/1	Class B -/1	Class C -/2

Sequence No/Subject	8/ National and International Organizations and Agreements		
General purpose of the subject	To ensure that the participants learn about the place and significance of government, employee and employer in the field of occupational health and safety, the national and international organizations in this field and the relevant agreements.		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> • State the place and importance of the government, employers and employees in the field of occupational health and safety. • Define institutions and organizations that are responsible for occupational health and safety in Turkey and the international institutions and organizations such as ILO, WHO, OSHA which are in the field of occupational health and safety. • Explain the international occupational health and safety agreements and their place in national legislation. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Place and importance of the government, employers and employees in the field of occupational health and safety. <ul style="list-style-type: none"> ○ National Occupational Health and Safety Council ○ Ministry of Labour and Social Security <ul style="list-style-type: none"> ◇ İSGGM, İSGÜM ◇ Labour Supervisory Board Presidency ◇ ÇASGEM ◇ SSI ○ Ministry of Health ○ Workers 'and employers' organizations ○ Professional organizations in the form of public institutions • International Labour Organization (ILO) and its agreements • World Health Organization (WHO) • European Occupational Health and Safety Agency (OSHA) 		
Face-to-face / total course hours	Class A -/1	Class B 1/2	Class C 1/3
Trainer	U-11		

Sequence No/Subject	9/ Occupational Health and Safety Services		
General purpose of the subject	To ensure that participants are informed on responsibilities, rights and obligations of the organization, structure and functioning of the Occupational Health and Safety Unit (ISGB), the Common Health and Safety Unit (OSGB) and the Community Health Centre (TSM), occupational physicians, Occupational Safety Specialists and other health personnel.		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> • Identify the establishment of the ISGB, OSGB and TSM, their functioning, employees, and the related regulations • Describe legal regulations on workplace doctor, Occupational Safety Specialists and other health personnel. • Explain the importance of team work in occupational health and safety services. • Have detailed information about the use of OHS-KATİP. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Regulation on Occupational Health and Safety Services, Regulation on Duties, Authorities, Responsibilities and Trainings of Occupational Safety Specialists, Regulation on Duties, Authorities, Responsibilities and Trainings of Workplace Doctors, Communiqué on Workplace Hazard Classes Concerning Occupational Health and Safety, • The purpose, structure and employees of ISGB, OSGB and TSM • The qualifications, assignments, powers and responsibilities of occupational safety specialists, workplace doctors and other health personnel • Occupational safety specialty certificate classes • Training and examinations of occupational safety specialists and workplace doctors and other health personnel • Regulations on occupational health and safety services, workplace doctors and occupational safety specialists and other health personnel 		
Face-to-face / total course hours	Class A 2/4	Class B 2/4	Class C 2/4
Trainer	U-1, U-3, U-4* * Technical		

Sequence No/Subject	10/ Occupational Health and Safety Boards		
General purpose of the subject	To ensure that participants are informed about the establishment, duties and importance of occupational health and safety boards.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify the legal basis and importance of occupational health and safety boards. • Describe the legislation on the functioning of the health and safety boards and its members. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Legal ground, Regulation on Occupational Health and Safety Boards • Establishment of the Board, its members and the workplaces they will be established at • The activities, duties and responsibilities of the Board • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/1	1/2	1/2
Trainer	U-1, U-3, U-4*, U-12, U-13 * Technical		

Sequence No/Subject	11/ Occupational Health and Safety Management Systems		
General purpose of the subject	To ensure that participants are informed about the occupational health and safety management system documentation standards which are widely used in the field of		
Learning objectives	At the end of this course, participants will explain the establishment, implementation and maintenance of management systems.		
Sub headings of the subject	<ul style="list-style-type: none"> • ILO OHS 2001, TS OHSAS 18001, BS 8800 • TS ISO EN 9000, TS ISO EN 14001 • Benefits of the management system • Policy setting and planning • Control and corrective-preventive actions • Registration and audit 		
Face-to-face / total course hours	Class A	Class B	Class C
	3/4	2/4	2/4
Trainer	U-3, U-4*, U-6**, U-13 * Technical **Engineer,		

Sequence No/Subject	12 / Risk Management and Assessment		
General purpose of the subject	To ensure that participants have knowledge about concepts of risk assessment and management and risk assessment methods.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Defines the basis and necessity of risk assessment. • Lists the risk assessment methods. • Evaluates the risks in the workplace. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Occupational Health and Safety Risk Assessment Regulation • Risk management and general management • Concept of danger and risk • Sources of danger and the risks they generate • Risk assessment as part of risk management • Main reasons of risk assessment • Risk assessment team and employee participation • Risk assessment methods and comparisons • Risk analysis and methods • Risk Assessment applications • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	12/18	15/18	15/18
Trainer	U-1, U-3, U-4*, U-6**, U-13** * Technical **Engineer,		

Sequence No/Subject	13/ Work Environment supervision		
General purpose of the subject	To help participants comprehend the definition of work environment supervision, its scope and place and importance in Occupational Safety Specialist.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Describe the supervision of work environment and explain its scope. • Measure the environment for supervision purposes. • List the records of the supervision of the working environment. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Definition and scope of supervision of the working environment • Measuring the environment for supervision purposes. • Records and statistics for the supervision of working environment • Relevant Legislation • Explanation of the subject with model applications 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	1/2	1/2
Trainer	U-11* * Occupational Safety specialist		

Sequence No/Subject	14/ Labour Hygiene		
General purpose of the subject	To ensure that participants have basic knowledge of hygiene definitions, measurement methods and responsibilities in the workplace.		
Learning Objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Make the definition of labour hygiene, tell its scope and dimensions. • List responsibilities and associations for labour hygiene (workplace doctor, labour hygienist, other health personnel, occupational safety specialist, etc.). • List the measurement and control methods. 		
Sub headings	<ul style="list-style-type: none"> • Definition of labour hygiene, • Responsibilities of occupational safety specialist on labour hygiene • Measurement and control methods • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	1/2	1/2
Trainer	U-11* * Chemical engineer, chemist, pharmacist, biologist, public health specialist or occupational		

Sequence No/Subject	15/ Work Place Buildings and Attachments		
General purpose of the subject	To ensure that participants learn about the health and safety risks faced in work place buildings and attachments and the measures to be taken against such risks.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify possible threats in workplace buildings and attachments. • Define the general risks that may arise in accordance with the nature of work done. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Minimum health and safety requirements for workplaces • Structure of work places and the measures to be taken • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	1/2	1/2
Trainer	U-1, U-3, U-4*, U-6**, U-12**, U-13** * Technical ** Civil engineer, architect or construction (building) technical teacher		

Sequence No/Subject	16/ Physical Risk Factors		
General purpose of the subject	To ensure that participants are informed about the physical risk factors that adversely affect health and safety at work, and that they learn the health and safety measures that should be met against such factors.		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> Describe the physical risk factors that adversely affect the health of employees at workplaces. List environment and person-based measurement methods of physical risk factors. Specify the permissible values in national and international standards. Compare the sectors with high level of exposure to physical risk factors in Turkey and world. Explain the control of physical risk factors in workplace and duties of 		
Sub headings of the subject	<ul style="list-style-type: none"> Physical risk factors that may adversely affect health in the workplace <ul style="list-style-type: none"> Noise- Vibration Thermal Comfort (working under humidity, heat or cold, Heating and ventilation) Lighting Ionized and non-ionized beams Low and high pressure Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	6/9	6/9	4/9
Trainer	U-11* * Graduate in physics, industry, mining, machinery or physics engineers		

Sequence No/Subject	17/ Chemical Risk Factors		
General purpose of the subject	To ensure that participants are informed about the chemical risk factors that adversely affect health and safety at work, and that they learn the health and safety measures that should be met against such factors.		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> Describe the chemical risk factors that adversely affect the health of employees at workplaces. List environment and person-based measurement methods of chemical risk factors. Specify the permissible values in national and international standards. Compare the sectors with high level of exposure to chemical risk factors in Turkey and world. Explain the control of chemical risk factors in workplace and duties of occupational 		
Sub headings of the subject	<ul style="list-style-type: none"> Material Safety Data Sheets (MSDS) Manufacture, transport, storage and control of chemicals Process control and detection equipment in the production of chemicals Naming, labelling and classification of chemicals Carcinogenic, mutagen and toxic substances Inflammable, explosive, hazardous and harmful chemical substances Documents for protection from explosion and machinery and equipment to be used in explosive atmospheres Asbestos and other fibrous chemicals 		
Face-to-face / total course hours	Class A	Class B	Class C
	6/12	4/8	4/8
Trainer	U-11* * Chemical engineer, bachelor of chemistry		

Sequence No/Subject	18/ Biological Risk Factors		
General purpose of the subject	To ensure that participants are informed about the biological risk factors that adversely affect health and safety at work, and that they learn the health and safety measures that should be met against such factors.		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> Describe bacteria, viruses, fungi and parasites that may be encountered as risk factors in the workplace. Explain the characteristics of microorganisms that can be encountered as risk factors in the work environment. List the methods of protection against biological risk factors. 		
Sub headings of the subject	<ul style="list-style-type: none"> Risks that may arise from biological factors Work environments where biological risk factors may be encountered 		

	<ul style="list-style-type: none"> Risks which health sector employees may be exposed Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/4	1/4	1/2
Trainer	U-11* * Physician, biologist		

Sequence No/Subject	19/ Psycho-social Risk Factors		
General purpose of the subject	To ensure that participants are informed about the psycho-social risk factors that adversely affect health and safety at work, and that they learn the health and safety measures that should be met against such factors.		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> Describe the psycho-social risk factors that adversely affect the health of employees at workplaces. List person-specific measurement methods related to psychosocial risks. Compare the sectors with high level of exposure to psycho-social risk factors in Turkey and world. Explain the control of psycho-social risk factors in workplace and duties of 		
Sub headings of the subject	<ul style="list-style-type: none"> Psycho-social risk factors that may adversely affect health in the workplace: <ul style="list-style-type: none"> Working Environment Working time Wage Administrative and employee-related factors Syndication Nurseries, day nurseries etc. Pregnant and nursing employees Young employees Harassments Stress Discrimination and oppression Branches of work with high level of exposure to psycho-social risk factors Importance of team work and occupational psychologist for the protection of spiritual and physical health of employees Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/4	1/4	1/2
Trainer	U-7, U-11* * Public health specialist, psychiatrist or psychologist		

Sequence No/Subject	20/ Ergonomics		
General purpose of the subject	To ensure that the participants are familiar with the basic concepts of ergonomics and work physiology, and be familiar with ergonomic regulations and work environment designs in the workplace.		
Learning objectives	<p>At the end of this course, the participants will;</p> <ul style="list-style-type: none"> Define ergonomics and its basic concepts. Identify the effects of ergonomic risks. Explain the work to be done to prevent the effects of ergonomic risks. 		
Sub headings of the subject	<ul style="list-style-type: none"> Working life and ergonomics Work physiology and bio-mechanics Anthropometry and work environment design Ergonomic regulations based on information technology Ergonomic regulations based on safety method Office ergonomics Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/4	2/4	2/6
Trainer	U-1, U9*, U11** * Physical therapy and rehabilitation or public health specialist ** Industrial engineer		

Sequence No/Subject	21/ Protection Policies		
General purpose of the subject	To help participants learn the definitions, methods and importance of prevention and protection in occupational health and safety.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Define the dangerous situation and behaviour. • State the basic features of prevention practices such as prevention at the source, protection towards the environment and personal protection. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Dangerous status and behaviour • Prevention at the source applications <ul style="list-style-type: none"> ○ Disposal ○ Replacement ○ Machine protectors ○ Technical measures • Protection practices for the environment <ul style="list-style-type: none"> ○ Isolation ○ Ventilation ○ Organizational arrangements • Individual protection practices 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/4	2/4	2/4
Trainer	U-1, U-3, U-4*, U-6**, U-12, U-13 * Technical **Engineer,		

Sequence No/Subject	22/ Occupational Health and Safety in Welding		
General purpose of the subject	To inform the participants about the risks that arise from welding work done at the workplace and help them learn about OSH measures that should be taken against these risks.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Define welding types and welding equipment. • Evaluate the risks of gas, dust, fumes and beams generated during welding and explain the precautions to be taken. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Welding types <ul style="list-style-type: none"> ○ Electrical source ○ Oxyacetylene source • Gases and gas tubes • Welding equipment • Risks of gas, dust, fumes, beams, light and heat and protection methods • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	3/4	3/6	2/3
Trainer	U-1*, U-3, U-4**, U-6*, U-12* * Machinery, metallurgy and welding engineers and machinery, metal and welding technical trainers		

Sequence No/Subject	23/ Occupational Health and Safety in Works Related with Electricity		
General purpose of the subject	To inform the participants about the risks that arise from electricity work done at the workplace and help them learn about OSH measures that should be taken against these risks.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify the risk factors related to electricity. • Classify the controls necessary for health and safety and describe precautions to be taken when working with electricity. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Electric energy and definitions • Safety in electrical installations • Repair and maintenance of electrical works • Safety and explosive environments in electrical installations • Static electricity • Protection against lightning • Grounding installation • Control of electricity installation • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/6	3/6	3/6
Trainer	U-1, U-11* * Electric or electric-electronic engineers and electric or electric-electronic technical trainers.		

Sequence No/Subject	24/ Occupational Health and Safety in Lifting Vehicles		
General purpose of the subject	To ensure that participants are informed about the lifting vehicles used in the workplace and the risks arising from these vehicles, elimination of such risks and the periodic controls required for these vehicles.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Specify the vehicles used in work such as lifting, moving, stacking. • Explain the precautions to be taken by evaluating the risks that may arise during the use of lifting vehicles. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Lifting, moving, stacking • Classification and elements of lifting vehicles • Safe use of lifting devices • Periodical controls of lifting devices • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/4	2/4	3/6
Trainer	U-1*, U-3, U-4**, U-6*, U-12* * Mechanical engineer or machine technical trainers ** Technical		

Sequence No/Subject	25/ Occupational Health and Safety in Motor Vehicles		
General purpose of the subject	To help the participants learn the risks arising from any motor vehicle used in the workplace and the precautions to be taken.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify the documents that motor vehicle operators and machine operators should have. • Evaluate the health and safety risks arising from the work carried out with motor vehicles and explain necessary precautions to be taken. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Documents of operators of motor vehicles and work machine operators • Works done by forklifts and cranes • Safety measures in works carried out by work machines • Aspects to consider for maintenance and repair of motor vehicles and work machines • Periodical tests of motor vehicles and work machines • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/3	2/3	1/2
Trainer	U-1*, U-3, U-4**, U-6*, U-12* * Mechanical engineer, machine or motor technical trainer ** Technical		

Sequence No/Subject	26/ Occupational Health and Safety in Hand Tools		
General purpose of the subject	To help the participants learn the risks arising from any hand tools used in the workplace and the precautions to be taken.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify the hand tools. • Determine the points to be considered in all kinds of work done using hand tools. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Hand Tools <ul style="list-style-type: none"> ○ Electrical ○ Pneumatic ○ Hydraulic ○ Mechanical • Risks that may arise in the use of hand tools and aspects to be considered • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	1/2	1/2
Trainer	U-1, U-3, U-4* * Technical		

Sequence No/Subject	27/ Occupational Health and Safety in Maintenance and Repair Works		
General purpose of the subject	To inform the participants about the risks that may arise in maintenance-repair work and the precautions to be taken against these risks.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify the hazards that may arise in building, plant or machine maintenance. • Specify the precautions to be taken regarding risks that may arise in maintenance-repair 		
Sub headings of the subject	<ul style="list-style-type: none"> • Maintenance / repair of machinery, electricity, buildings or facilities • Risks that may arise in maintenance and repair works and aspects to be considered <ul style="list-style-type: none"> ○ Before Maintenance and Repair ○ During Maintenance and Repair ○ After Maintenance and Repair • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/3	1/3	1/2
Trainer	U-1, U-3, U-4**, U-6*, U-12 * Engineer or technical trainer ** Technical		

Sequence No/Subject	28/ Fire		
General purpose of the subject	To ensure that participants are informed about fire hazards, things to do in case of fire and precautions to be taken against fire.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify fire and chemistry. • Explain precautions that can be taken against the fire. • Specify what to do in case of fire. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Basic concepts of fire and a general view of fire chemistry • Fire protection • Classification of fires and principles of extinguishing • Fire Risk Assessment • Safety during fire • Modern fire detection and alarm systems and their features in enclosed spaces • Fire extinguisher devices and systems • Fire intervention and rescue team • Relation between fire and environment • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	3/6	3/6	5/10
Trainer	U-1*, U-3, U-4**, U-6* * Chemical, mining, oil and natural gas engineers ** Technical		

Sequence No/Subject	29/ Emergency Plans		
General purpose of the subject	To provide participants with information about the plans to be implemented in case of emergency in their workplaces and the implementation of these plans.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify the concepts of intervention and communication in emergency situations. • Prepare the emergency plans. • Inform the employees about this and make them implement the application. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Preparing emergency plans and transmitting them to employees • Measures and exercises • Training of emergency teams and employees • Emergency equipment • Prevention of large industrial accidents • First aid and emergency intervention • Danger communication • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/4	2/4	2/4
Trainer	U-11* * Occupational Safety specialist		

Sequence No/Subject	30/ Health and Safety Signs		
General purpose of the subject	To enable participants, learn about health and safety signs used in the workplace.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Explain the meanings of health and safety signs. • Indicate the places of use for health and safety signs. • Define the shape of health and safety signs. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Health and safety signs used in workplace <ul style="list-style-type: none"> ○ Signs ○ Signs with light and audible signals ○ Hand signs • Places of use for health and safety signs. • Communication with health and safety signs • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	-/2	-/2	-/2
Trainer	U-1, U-3, U-4*, U-6**, U-12, U-13 * Technical ** Engineer, architect or technical staff		

Sequence No/Subject	31/ Ventilation and Air Conditioning Principles		
General purpose of the subject	To provide participants with information on ventilation and air conditioning in their workplaces.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Explain the characteristics of ideal working environment air. • Explain the necessary ventilation and air conditioning principles for the health and comfort of employees in working environment. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Characteristics of environment air • General principles of ventilation • Ventilation and need for air • Natural, local or general ventilation • Air conditioning in work place • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/4	2/4	1/3
Trainer	U-1, U-3, U-4*, U-6**, U-13** * Technical ** Machine or mining engineer		

Sequence No/Subject	32/ Occupational Health and Safety in Works with Pressure Vessels		
General purpose of the subject	To ensure that participants are informed about risks related with pressure vessels used at workplace, and precautions to be taken against those.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Classify the pressure vessels. • Identify periodical tests, controls and register records. • Identify the risks that may arise from the use of all kinds of pressure vessels and disclose methods of protection from them. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Types of pressure vessels and classification • Risks of pressure vessels and measures for precaution • Safety in boilers • Safety in compressors • Pressure tanks and tubes • Periodical controls of pressure vessels and test methods • Responsibilities of manufacturers • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	2/4	2/4	2/4
Trainer	U-1, U-3, U-4**, U-6*, U-12* *Mechanic Engineer ** Technical		

Sequence No/Subject	33/ Occupational Health and Safety in Works at Enclosed Areas		
General purpose of the subject	To help the participants learn the possible risks that may arise from work done in enclosed areas and the occupational health and safety measures that must be taken against them.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Assess the occupational health and safety risks that may arise from work done in enclosed areas. • Explain the precautions against the occupational health and safety risks that may arise from work done in enclosed areas. 		
Sub headings of the subject	<ul style="list-style-type: none"> • In enclosed and narrow spaces <ul style="list-style-type: none"> ○ Ventilation ○ Explosion and Fire ○ Lighting ○ Operating system (pre-authorization, measurement, supervision) ○ Work equipment to be used • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	2/4	2/2
Trainer	U-1, U-3, U-4*, U-6**, U-12** * Technical ** Chemistry, machinery, metallurgy, metallurgy and materials or mining engineers		

Sequence No/Subject	34/ Occupational Health and Safety in Works with Shielded Vehicles		
General purpose of the subject	To help the participants learn the possible risks that may arise from work done with shielded vehicles and the occupational health and safety measures that must be taken		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Assess the occupational health and safety risks that may arise from work done with shielded vehicles. • Explain the precautions against the occupational health and safety risks that may arise from work done with shielded vehicles. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Use of shielded vehicles • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	-/1	-/1	-/1
Trainer	U-1, U-3, U-4*, U-6** * Technical ** Engineer or technical trainer		

Sequence No/Subject	35/ Occupational Health and Safety in Handling and Transport Works		
General purpose of the subject	To help the participants learn the possible risks that may arise from handling and transport works and the occupational health and safety measures that must be taken against them.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> Assess the occupational health and safety risks that may arise from handling and transport works. Explain the precautions against the occupational health and safety risks that may arise from handling and transport works. 		
Sub headings of the subject	<ul style="list-style-type: none"> Handling and transport works Accurate handling and transport works Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/1	½	2/3
Trainer	U-1, U-3, U-4*, U-6** * Technical **Engineer,		

Sequence No/Subject	36/ Occupational Health and Safety in Working at Height		
General purpose of the subject	To help the participants learn the possible risks that may arise from working at height and the occupational health and safety measures that must be taken against them.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> Identify the equipment used while working at height. Assess the risks generating from working at height. Explain the precautions against the occupational health and safety risks that may arise from working at height. 		
Sub headings of the subject	<ul style="list-style-type: none"> Collective and individual protection of workers working at height <ul style="list-style-type: none"> Work platform Mobile stairs and ropes Scaffolds Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/3	2/4	1/3
Trainer	U-1, U-3, U-4**, U-6* ** Civil engineer or construction (building) technical trainer ** Technical		

Sequence No/Subject	37/ Occupational Health and Safety at Construction Sites		
General purpose of the subject	To help the participants learn the possible risks that may arise from work done at construction sites and the occupational health and safety measures that must be taken against them.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> Identify the significant issues at construction sites in terms of occupational health and safety, Determine the risks that may be encountered during construction works. Explain the precautions against the occupational health and safety risks that may arise 		
Sub headings of the subject	<ul style="list-style-type: none"> Construction works and projects Health and safety plan Minimum health and safety conditions for construction sites <ul style="list-style-type: none"> Excavations Moulding works Scaffolds Construction of roads, tunnels, dams, buildings, bridges Shipbuilding and ship dismantling Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	6/12	3/8	2/6
Trainer	U-1, U-11** ** Civil engineer or construction (building) technical trainer		

Sequence No/Subject	38/ Occupational Health and Safety at Mining Workplaces		
General purpose of the subject	To help the participants learn the possible risks that may arise from work done at mining workplaces and the occupational health and safety measures that must be taken against		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify important issues in terms of occupational health and safety in underground, on-ground and drilling mining operations. • Specify the risks that may be encountered in underground, on-ground and drilling mining operations. • Explain the precautions against the occupational health and safety risks that may arise in underground, on-ground and drilling mining operations 		
Sub headings of the subject	<ul style="list-style-type: none"> • Underground and on-ground mining businesses • Businesses mining by drilling • Works conducted in on-ground mines • Machines used in mining businesses and their properties • Struggle with dust • Ventilation in mines • Mine gas and dust explosions • Drilling, exploding • Dents, landslides and floods in mines • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	6/12	3/8	2/6
Trainer	U-11* * Mining engineer		

Sequence No/Subject	39 / Personal Protective Equipment		
General purpose of the subject	To ensure that participants are informed about the characteristics of the Personal Protective Equipment (PPE) required to be used by employees, their places of use, utilization, supervision		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • List the PPE types, areas of use and properties. • Specify the suitability of PPEs. • Assesses the accurate use of PPE. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Definition and Characteristics of PPE • PPE types • Selection and use of PPE • Works that require the use of PPE • Market Supervision and Control (MSC) • Relevant legislation and applications 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/3	1/3	2/4
Trainer	U-11**Engineer		

Sequence No/Subject	40 / Occupational Health and Safety in Design, Manufacturing and Use of Work		
General purpose of the subject	To ensure that the participants have knowledge of occupational health and safety issues that must be taken into account in design, manufacturing and use of work equipment used in the workplace.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Specify the minimum safety requirements for work equipment. • List the responsibilities of manufacturers about the work equipment. • Identify signs and instructions for safe use of the machines. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Responsibilities of manufacturers of work equipment • Safe use of work equipment <ul style="list-style-type: none"> ○ Safety in machinery, workbenches and facilities • Marking of machines • Operating instructions • Minimum requirements for work equipment • Machine protectors • Relevant legislation and applications 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/3	2/5	2/4
Trainer	U-1, U-3, U-4**, U-6*, U-12*		

	* Industrial engineer, mechanical engineer or motor technical trainer ** Technical
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Sequence No/Subject	41/ Work Accidents		
General purpose of the subject	To ensure that participants have the necessary knowledge to prevent work accidents at workplaces and to keep records of such.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> Identify the work accident. Analyse the statistics of work accidents and the factors that play a role in the occurrence of accidents in the workplace. Explain the methods of preventing work accidents. Create the work accident records and notifications. Conduct the work accident review and arrange the report. 		
Sub headings of the subject	<ul style="list-style-type: none"> Concepts of accident and work accident Reasons of work accidents Material and moral losses caused by work accidents Classification of work accidents Work accident statistics Documents to be arranged after accident and accident notification Review of accident, preparing report and statistics Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	3/6	3/6	3/6
Trainer	U-11* * Engineer, architect or technical staff		

Sequence No/Subject	42/ Health Supervision and Occupational Diseases		
General purpose of the subject	To ensure that the participants learn what an occupational safety specialist should do about the health supervision and inform them about occupational diseases.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> Identify the basic concepts of health supervision and occupational diseases. List the types of occupational diseases and diagnosis methods. Describe methods of protection from occupational diseases. Describe occupational diseases statistics. 		
Sub headings of the subject	<ul style="list-style-type: none"> Concept of health supervision and its implementation Concept of occupational disease Types and reasons of occupational disease Occupational disease diagnosis methods Protection from occupational diseases Statistics of occupational disease Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	1/3	1/3
Trainer	U-11* * Workplace Doctor		

Sequence No/Subject	43 / Controls to be Conducted for Occupational Safety and the Documents to be Arranged		
General purpose of the subject	To ensure that participants learn all types of controls that need to be done in terms of occupational health and safety and the documents that need to be arranged.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> Specify the controls that need to be done at workplace in terms of occupational safety. Create the documents that must be prepared with the controls that must be done at work in terms of occupational safety. 		
Sub headings of the subject	<ul style="list-style-type: none"> Documents that need to be arranged Controls need to be done at work places Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	½	1/2
Trainer	U-11* * Occupational Safety specialist		

Sequence No/Subject	44/ Groups That Necessitate a Special policy at Work Life		
General purpose of the subject	To ensure that participants have information about the groups that have different risks in terms of health and safety in their working life who need special protection.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Explain the importance of risk groups in occupational health and safety. • Identify the special health provision requirements for risk groups. • Identify the special protection methods for the improvement of health of risk groups. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Risk groups in Occupational Health and Safety <ul style="list-style-type: none"> ○ Women ○ Disabled ○ Young Adults ○ Elder People ○ Immigrant • Health supervision of risk groups • Special protection methods of risk groups • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	-/1	-/1	-/2
Trainer	U-11* *Workplace doctor or occupational safety specialist		

Sequence No/Subject	45/ Shift Working and Night Working		
General purpose of the subject	To ensure that participants learn occupational health and safety practices during shift work and night work.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Assess the occupational health and safety risks that may arise from shift work and night work. • Identify the measures to be taken against the occupational health and safety risks that may arise from shift work and night work. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Concepts of shift work and night work • Possible risks and the measures to be taken • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	-/1	-/1	-/1
Trainer	U-11* *Workplace doctor or occupational safety specialist,		

Sequence No/Subject	46/ Ethics in Working Life		
General purpose of the subject	To ensure that participants are informed about the concept of ethics and international ethical rules in occupational health and safety applications.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify ethics in working life. • Identify the national and international legal/ non-legal arrangements that include the ethical rules. • Compare the basic ethical and engineering values. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Ethical factors affecting the working life • Related definitions • "International Ethics Rules Guide for Occupational Health Professionals" and its applications • Facts that might conflict with ethical values in working life <ul style="list-style-type: none"> ○ Reasons of facts and the ethical problems in these facts <ul style="list-style-type: none"> • Obligation of keeping secrets in information of employees' health and recording • Solution of ethical problems in working life • Concepts of autonomy, confidentiality and professional independence 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	½	1/2 ½
Trainer	U-11* *Workplace doctor or occupational safety specialist		

Sequence No/Subject	47 / Adult Training, Workplace Health and Safety Training and Communication		
General purpose of the subject	To help the participants obtain information on adult training, workplace health and safety training and the necessary communication skills at workplace.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Describe the characteristics and techniques of adult education. • Identify how and how often the trainings will be provided at work and by whom. • Specify the requirements for an effective communication process in the workplace. 		
Sub headings of the subject	<ul style="list-style-type: none"> • Characteristics and techniques of adult education. • Qualifications of training institutions and trainers • Quality and period of training • Training of employees on occupational health and safety and on the occupation • Basic concepts about effective communication process in the workplace • Relevant legislation 		
Face-to-face / total course hours	Class A	Class B	Class C
	1/2	2/3	2/3
Trainer	U-11		

Sequence No/Subject	48 / Occupational Health and Safety in Agriculture, Forestry and Livestock Activities		
General purpose of the subject	To help the participants learn about the problems of agriculture workers and agricultural workplaces; and multi-dimensional issues such as health, housing, social environment, work and social security.		
Learning objectives	At the end of this course, the participants will; <ul style="list-style-type: none"> • Identify the working and social life conditions of the employees in Agriculture, Forestry and Livestock with a holistic and multidimensional perspective and have a foresight to improve those within the generated activity plan. 		
Sub headings of the subject	In Agriculture, Forestry and Livestock Activities; <ul style="list-style-type: none"> • Occupational diseases risks, Work accident risks • The provision of occupational health and safety training to employees on the use, transport, storage of pesticides and use and securing of personal protective equipment, • Risks of working with cattle, sheep, poultry, beekeeping, silk bug etc. • Dangers arising from working in an open environment, • Struggle against pests in working, accommodation and feeding environments, • Control of drinking and utility water, food safety • Suitability of common areas such as toilets and bathrooms with health conditions, • Control of waste, 		
Face-to-face / total course hours	Class A	Class B	Class C
	-/1	-/1	-/1
Trainer	U-11* * Agriculture, environment, chemistry, woodworking industry, forest and forest industry engineer, chemistry graduate or veterinary doctor		

Sequence No/Subject	49/ Assessment and Final Test		
General purpose of the subject	To make a general evaluation of the program at the end of the training program. To implement a final test within the institution in order to get participants' feedback and to determine their levels of learning outcome.		
Face-to-face / total course hours	Class A	Class B	Class C
	1/1	1/1	1/1
Trainer	U-11		

Sequence No/Subject	50/ Practical Applications in Work Place
General purpose of the subject	To enable the participants, use the theoretical knowledge they have obtained within the scope of this training program in a work place environment with occupational safety specialist and to improve their implementation skills.
Learning Objectives	At the end of this application, the participants will; <ul style="list-style-type: none"> • actualize their theoretical knowledge. • Identify the problems experienced in the field and develops solutions. • Conduct working environment supervision at workplace. • Execute workers' training. • Prepare a working report.
Duration	40 hours of workplace implementation training
Trainer	Occupational safety specialist and workplace doctor

NOTE: The expression "relevant legislation" means the legislation prepared and issued by the Ministry of Labour and Social Security in the fields of occupational health and safety and all the other national legislation published.

Targets, Durations and Distribution of Trainers for Basic Training for Other Health Personnel

Item No / Subject	1 / Opening, Introduction, presentation of the programme and pre-test run
Main objective of the subject	To form a positive educational environment by introducing attendees, trainers and presenting the programme during the opening of face to face training programme, and to run a pre-test in order to obtain information on attendee's expectations before the test and to determine their knowledge level on the subject
Face to face / total number of lessons	1/1
Trainer	D-19* *Full-time trainers assigned to the training

Item No / Subject	2 / Health and Safety in Turkey and in World
Main objective of the subject	Providing attendees with information regarding national and international occupational health and safety organizations, importance of government, employee and employers as well as historical development of occupational health and safety, and informing attendees in order to evaluate status quo based on statistics. In addition, aiming to gain information regarding international agreements that are approved by Turkey.
Training Targets	<p>At the end of this lesson, attendees will be able to:</p> <ul style="list-style-type: none"> ● Describe the notion of occupational health and safety, ● Summarize the historical development of occupational health and safety in Turkey and in World, ● State the importance of government, employer and employee in occupational health and safety field, ● Describe the responsible institutions and organizations of occupational health and safety fields in our country, ● Describe the international institutions and organizations that are running occupational health and safety activities such as ILO, WHO and OSHA, and institutions and organization that are responsible with occupational health and safety in our country, ● Describe international responsibilities of Turkey regarding occupational health and safety (ILO 155, ILO 161, ILO 187 agreements), ● Specify existing health and safety situation in Turkey with data from SGK, ● Specify the situation of existing health and safety by using data regarding health and safety from ILO, data regarding occupational illnesses from WHO, data regarding EU countries health and safety from OSHA, ● Compare the situation of occupational health and safety in Turkey and in World based on national and international statistics, ● Specify and compare relations between health and safety and socio-economic development.

Subtopics of the Subject	<ul style="list-style-type: none"> ● Developmental stages of health and safety and the notion of health and safety ● Importance and roles of government, employee and employers <ul style="list-style-type: none"> ○ National Council of Occupational Health and Safety ○ Ministry of Labour and Social Security <ul style="list-style-type: none"> ◇ İSGGM, İSGÜM ◇ Department of Work Inspection Board ◇ ÇASGEM ◇ SGK ○ Ministry of Health ○ Employer and employee organisations ● Professional organizations with public institution status ● International Labour Organization (ILO) ● World Health Organization (WHO) ● European Agency of Occupational Health and Safety (EU-OSHA) ILO 155, ILO 161, ILO 187 ● Situation of occupational health and safety in Turkey based on Sata by SGK ● Statistical data from international organizations ● Comparison of Turkey and World countries
Face to face / total number of lessons	1/2
Trainer	D-19

Item No / Subject	3 / Occupational Health and Safety Code of Practice and Safety Culture
Main objective of the subject	Informing attendees regarding occupational health and safety code of practice, helping attendees to understand the importance and philosophy of risk prevention culture, system and preventative culture of occupational health and safety.
Training Targets	<p>At the end of this lesson, attendees will be able to:</p> <ul style="list-style-type: none"> ● Specify occupational health and safety codes, ● Explain how to apply such codes at management level, ● Describe occupational health and safety risk prevention culture, ● Find benefits of occupational health and safety preventative approach and system approach, ● Conclude the necessity of formation and continuation of occupational health and safety culture.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Occupational health and safety code of practice ● Proper job placement ● Evaluation of environmental factors at workplace ● Evaluation and control of occupational health and safety risks ● Control examination at intervals ● Integrated approach in occupational health and safety ● Risk prevention culture at workplace ● Lifelong education in occupational health and safety field.
Face to face / total number of lessons	1/2
Trainer	D-1, D-2, D-3, D-6*, D-12, D-13, D-14, D-15, D-18 *Doctor

Item No / Subject	4 / Basic Law and Business Law
Main objective of the subject	Providing attendees with information regarding properties of legal norms, basic concepts of law, basic purposes and principles of business law, as well as information regarding their responsibilities, rights and liabilities in regards to 4857 numbered business law, 6331 numbered Health and Safety Law, 5510 numbered Social Security and General Health Insurance Law.
Training Targets	<p>At the end of this lesson, attendees will be able to:</p> <ul style="list-style-type: none"> ● Describe the nature of legal norms, as well as concepts of constitution, law, regulation, legislation, declaration, circular and public mandates, ● Describe basic purpose and principles of business law, ● Explain the roles of officials in regards to occupational health and safety, ● List provisions in regards to employers' responsibilities in occupational health and safety and provisions in regards to management of work, ● Gain information regarding responsibilities of other health personnel and all parties, as well as employees' social security rights (being covered by insurance, off days due to health issues, health benefits, disablement, retirement and other aids), ● Show legal methods for application.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Properties of legal norms ● Concepts of law, regulation, legislation, declaration, circular and public mandates ● Concepts of employee, employer, employer representative and importance of such concepts in terms of occupational health and safety ● Responsibilities, rights and liabilities of the employer and employer representative ● Responsibilities and rights of employees ● Provisions in regards to work durations (full and part time) ● Penal sanctions in regards to occupational health and safety ● Responsibilities and rights of other health personnel, health and safety specialists and workplace doctors ● Legal structure of occupational accidents and occupational illnesses ● Occupational accidents and occupational illnesses in terms of individual business law <ul style="list-style-type: none"> ○ Lien of causality ○ Regulations on Occupational Illnesses (the law no.5510, Regulations on work strength and loss of occupational work strength, regulations by Supreme Committee of Health) ● Concluded judicial decisions
Face to face / total number of lessons	1/3
Trainer	D-5, D-6*, D-7*, D-8*, D-9* *Law School Graduate

Item No / Subject	5 / Occupational Health and Safety Laws
Main objective of the subject	Providing attendees with information regarding existing occupational health and safety laws in our country.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> • Describe existing occupational health and safety laws in our country, • List basic principles of occupational health and safety regulations in our country.
Subtopics of the Subject	<ul style="list-style-type: none"> • Constitution, Occupational Health and Safety Law, Business Law, Public Health Law, Law of Obligations, Social Securities and General Health Information • Basic principles of secondary regulations regarding occupational health and safety.
Face to face / total number of lessons	0/1
Trainer	D-5, D-6, D-7, D-8, D-9, D-10

Item No / Subject	6 / Workplace Health and Safety Services
Main objective of the subject	Providing attendees with information regarding establishment, structure and mechanism of Occupational Health and Safety Unit (ISGB), Unit of Common Health and Safety (OSGB) and Public Health Centre (TSM responsibilities, rights and liabilities of workplace doctors, health and safety specialists, and other health personnel, as well as the importance of team-work.
Training Targets	At the end of this lesson, attendees will be able to; <ul style="list-style-type: none"> • List duties, responsibilities and authority of workplace doctor, • State duties, responsibilities and authority of occupational health and safety specialist, • List duties, responsibilities and authority of other health personnel, • State presentation of workplace doctors and other health personnel through Community Health Centres (TSM), • State presentation of workplace doctors and other health personnel through ISGB and OSGB, • List duties of other health personnel in regards with application of other occupational health and safety regulations, • Explain the importance of team-work at occupational health and safety services.
Subtopics of the Subject	<ul style="list-style-type: none"> • Occupational Health and Safety Services Regulations, Regulations on Liabilities, Duties Training and Responsibilities of Occupational Health Specialists, Regulations on Liabilities, Duties Training and Responsibilities of Workplace Doctors and Other Health Personnel • Duties, responsibilities and authority of workplace doctor and occupational safety specialist • Duties, authorities and responsibilities of workplace doctor and occupational health specialist • Duties, authorities and responsibilities of other health personnel • Occupational health service presentation by ISGB, TSM and OSGB • Importance of teamwork in occupational health and safety services • Duties, authorities and responsibilities of other health personnel within OHS regulations
Face to face / total number of lessons	2/6
Trainer	D-1, D-4, D-5, D-6*, D-13, D-15 * Technical

Item No/ Subject	7 / Workplace Hazard Classification and HS-KATIP Practices
Main objective of the subject	Providing attendees with information regarding workplace hazard classification disclosures and Publicity of HS-KATIP software systems which includes HS services, records, tracking and approvals.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Hold information regarding jobs classified as low-hazardous, hazardous and high-hazardous, ● Log in, use and approve agreement of HS-KATIP system, ● Hold information regarding interface of HS-KATIP system.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Occupational Health and Safety Workplace Hazard Classification Disclosure ● HS-KATIP Software
Face to face / total number of	1/2
Trainer	D-1*, D-4*, D-5*, D-6*, D-10* * Trainer who has clearance to Access HS-KATIP

Item No / Subject	8 / Health Monitoring and Biological Tracking at Workplaces
Main objective of the subject	Helping attendees learn basic principles of health monitoring and biological tracking at workplace and understand the application of such practices.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Specify description of health monitoring and application steps, ● State employees right to claim health monitoring, ● Fill in recruitment/periodical examination forms employees that includes health and work history, and assist workplace doctor during examination.
	<ul style="list-style-type: none"> ● Hold information regarding principle of “job that fits employee” while other health personnel are executing their duties ● Ensure necessary health examination of groups that require special policies ● Take in charge in employees’ health training ● List responsibilities of other health personnel during health monitoring
Subtopics of the Subject	<ul style="list-style-type: none"> ● Description of health monitoring and steps of application ● Responsibilities of other health personnel during health monitoring (recruitment examinations by workplace doctor at workplace, duties and responsibilities regarding periodical examinations) ● General principles of job that fits the employee ● Identification and protection of special policy groups ● Health training to be given to employees ● Relevant legislation
Face to face / total number of lessons	2/4
Trainer	D-1, D-2*, D-3, D-6*, D-12, D-13, D-14 *Doctor

Item No / Subject	9 / Proper Job Placement
Main objective of the subject	Providing attendees with information regarding and practices to run in order to protect and develop employees' health considering employees' health characteristics and workplace environment factors.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Describe proper job placement ● Know the importance of individual health in proper job placement ● Know the importance of workplace environment in proper job placement ● Know how to utilize recruitment and periodical examinations in proper job placement, ● Know principle of "right job for employee" while other health personnel performing their duties
Subtopics of the Subject	<ul style="list-style-type: none"> ● Description and scope of proper job placement ● Importance of proper job placement ● Effects of individual health characteristics on proper job placement ● Effects of workplace environment factors to proper job placement
Face to face / total number of lessons	1/2
Trainer	D-1, D-2, D-3, D-6*, D-12, D-13, D-14 *Doctor

Item No / Subject	10 / Risk Evaluation and Management
Main objective of the subject	Providing attendee with information regarding basic topics, evaluation methods and application of risk evaluation.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Describe concepts of hazard, risk and near miss, ● Describe risk evaluation and its stages, ● Know methods of risk evaluation, ● Hold information to specify hazards at workplace.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Concepts of hazard, risk and near miss ● Occupational Health and Safety risk evaluation regulation ● Risk evaluation team and attendance of employees ● Descriptions of hazards ● Specification and analyses of risks ● Steps of risk control ● Duties and responsibilities of other health personnel in risk management
Face to face / total number of lessons	1/2
Trainer	D-4, D-5, D-6*, D-9*, D-10, D-11 *Technical

Item No / Subject	11/ Psycho-social Risk Factors
Main objective of the subject	Helping attendees to learn about psycho-social risk factors and necessary precautions to be taken against such factors.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Know psycho-social risk factors that affect employees, ● Explain position of psycho-social risk factors at workplace control, ● Know about prevention of exposure to psycho-social risks and protection
Subtopics of the Subject	<ul style="list-style-type: none"> ● Psycho-social risk factors that might occupational health and safety: <ul style="list-style-type: none"> ○ Factors in terms of management and employees (Role ambiguity, role conflict, organization, work load, salary etc.) ○ Stress ○ Discrimination, oppression ○ Mobbing ● Prevention of exposure to psycho-social risks and protection measures ● Teamwork on protection of employees physical and mental health ● Importance of providing and continuation of a positive communication environment at work place ● Relevant legislation
Face to face / total number of lessons	1/1
Trainer	D-1, D-2*, D-3, D-4**, D-5, D-6, D-8**, D-9**, D-12, D-13, D-14, D-15 *Psychiatrist, **Industrial Engineers

Item No / Subject	12 / Physical Risk Factors
Main objective of the subject	Providing attendees with information regarding physical risk factors and necessary precautions to be taken against such.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Hold information regarding physical risk factors that affect employees at workplace, ● Learn about situations that require measurement and analysis of physical risk factors, ● Know about work process and equipment that causes physical risk factors and prevention measures, ● Explain duties of other health personnel during control of physical risk factors at workplace.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Physical risk factors: <ul style="list-style-type: none"> ◇ Noise-Vibration ◇ Thermal Comfort (humidity, working in hot or cold, heating and ventilation) ◇ Lighting ◇ Ionized and non-ionized rays ◇ Electric and magnetic fields ◇ Low and high pressure ● Preventative measures against physical risk factors and use of PPE ● Relevant legislation <ul style="list-style-type: none"> ○ Work Hygiene Measurement, Test and Analysis Regulation ○ Regulations on Protection of Employees from Noise Related Risks ○ Regulations on Protection of Employees from Vibration Related Risks
Face to face / total number of lessons	1/1
Trainer	D-4, D-5, D-6*, D-8*, D-9**, D-10, D-11, *Technical** Engineering or Science/Science and Literature Graduates

Item No / Subject	13 / Chemical Risk Factors
Main objective of the subject	Providing attendees with information regarding chemical risk factors and necessary precautions to be taken against such.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Hold information regarding chemical risk factors that affect employees at workplace, ● Learn about situations that require measurement and analysis of physical risk factors, ● Hold information regarding chemical risk factors and preventative measures, ● Explain duties of other health personnel during control of chemical risk factors at workplace.
Subtopics of the Subject	Chemical Risk Factors: <ul style="list-style-type: none"> ● Material Safety Data Forms (MSDF), Risk (R) and Safety (S) descriptions of such forms ● Classification of chemicals (gas, dust, vapour, smoke, etc.) ● Methods of prevention and protection (substitution method, use of PPE, etc.) ● Production, transportation, storage and control of chemicals ● Cancerogenic, mutagenic and toxic substances ● Inflammable, explosive, dangerous and hazardous chemical substances
	<ul style="list-style-type: none"> ● Explosive workplaces and working conditions in such conditions ● General information of explosive protection document ● Relevant legislation <ul style="list-style-type: none"> ○ Regulation on Laboratories that runs Work Hygiene, Measurement and Analysis ○ Regulation on Health and Safety Precautions Working with Chemical Substances ○ Regulation on Protection of Employees Working at Explosive Environment ○ Regulation on Health and Safety Precautions Working with Cancerogenic or
Face to face / total number of lessons	1/1
Trainer	D-4, D-5, D-6*, D-8*, D-9**, D-10, D-11 *Technical ** Engineering or Science/Science and Literature Graduates

Item No / Subject	14 / Biological Risk Factors
Main objective of the subject	Providing attendees with information regarding biological risk factors and necessary precautions to be taken against such.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> • Specify bacteria, viruses, fungi and parasites that could be encountered as risk factors at workplace, • Describe characteristics of microorganisms that could be encountered as risk factors at workplace, • List protection methods to avoid biological risk factors.
Subtopics of the Subject	<ul style="list-style-type: none"> • Illnesses that can be caused by biological risk factors • Information regarding illnesses caused by results of employee's exposure to biological factors • Allergic and toxic effects caused by biological factors • Classification of biological factors based on infection risk levels • Work environment likely to be exposed to biological risk factors • Preventative and protective measures to be taken against exposure to biological risk factors • Hygiene and personal protection measures aimed at employees who work at workplaces with biological risk factors • Risks that health sector employees likely to be exposed • Relevant legislation <ul style="list-style-type: none"> ○ Regulation on Prevention of Exposure to Biological Risk Factors • Relevant legislations of other institutions
Face to face / total number of lessons	1/1
Trainer	D-1, D-2, D-3, D-6*, D-9**, D-10**, D-11**, D-12, D-13, D-14, D-15 *Doctor **Biologist

Item No / Subject	15 / Ergonomics
Main objective of the subject	Providing attendees with information on basic concepts of ergonomics and ergonomical arrangements at workplace as well as workplace designs.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> • Describe ergonomics and basic concepts, • Know ergonomical risks, • Specify effects of ergonomical risks, • Explain activities in order to prevent the effects of ergonomical risks, • Hold information regarding work physiology and its basic concept.
Subtopics of the Subject	<ul style="list-style-type: none"> • Working life and ergonomics • Work physiology and biomechanics • Anthropometry and workplace design • Designation of ergonomical risks and preventative measures • Relevant legislation
Face to face / total number of lessons	1/1
Trainer	D-2, D-3, D-5, D-6*, D-8**, D-9**, D-10**, D-11**, D-12, D-14, D-15 *Technical or doctor **Industrial Engineer

Item No / Subject	16 / Workplace Environment Monitoring and Work Hygiene
Main objective of the subject	Helping attendees to understand role and importance of work environment monitoring and its extent, in occupational health and safety activities. Providing attendees with information regarding basic information on workplace hygiene description, measurement methods and responsibilities.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> • Describe workplace hygiene and explain its scope and extent, and hold information regarding how to apply, • List methods of control and measurement, • Know records of work environment monitoring, • Describe work hygiene and state its scope, • Hold information regarding measurements, tests and analyses within the scope of work hygiene activities, • List responsibilities and relations (workplace doctor, workplace hygienist, work safety specialist etc.) about the workplace, • List records of work hygiene, • Hold information regarding monitoring and auditing of work hygiene conditions at work environment.
Subtopics of the Subject	<ul style="list-style-type: none"> • Scope and application steps of work environment monitoring • Records and statistics of occupational accident, occupational illness, work related illnesses and near-miss in regards to monitoring of workplace environment • Control methods of work environment monitoring • Description and scope of work hygiene • Measurement, test and analyses of work hygiene • Responsibilities of other health personnel in regards to work hygiene • Relevant legislation
Face to face / total number of lessons	1/2
Trainer	D-1, D-4, D-5, D-6*, D-10*, D-11**, D-12, D-15 *Technical

Item No / Subject	17 / Occupational Health and Safety Management Systems
Main objective of the subject	Providing attendees with information regarding occupational health and safety management systems certification standards that is being commonly used in the field of occupational health and safety.
Training Targets	At the end of this lesson, attendees will be able to explain management system concept and approach.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Occupational health and safety management system approach ● Comparison of regulations in terms of management system approach in order to ensure occupational health and safety ● ILO OHS 2001, TS OHSAS 18001, BS 8800 ● TS ISO EN 9000, TS ISO EN 14001 ● Policy determination and planning ● Controlling, corrective and preventive activities ● Record and survey
Face to face / total number of lessons	0/1
Trainer	D-4, D-5, D-6*, D-11** *Technical **Engineer

Item No / Subject	18 / Protection Approaches Aimed at Sources and Environment at Workplace
Main objective of the subject	Helping attendees to learn description, methods and importance of prevention and protection aimed at source and environment at workplace.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Describe prevention and protection, ● Describe dangerous situation and behaviour, ● Prevention at source, prevention measures aimed at environment, ● List principles of protection from risks, ● State basic principles of collective protection measures and individual protection practices.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Descriptions ● Protection levels (basic, primary, secondary, tertiary) ● Principles of risk protection ● Prevention at source practices (machinery protection, design, ventilation, closing at source/isolation, etc.) ● Prevention measures aimed at environment (principles of ventilation and climatization, labelling, etc.) ● Collective protection measures and individual protection (Personal protection equipment (PPE), training, emergency preparedness, etc.)
Face to face / total number of lessons	2/4
Trainer	D-4, D-5, D-6*, D-8*, D-9**, D-11** * Technical **Engineer

Item No / Subject	19 / Protection Approaches Aimed at Individuals at Workplace
Main objective of the subject	Providing attendees information regarding importance and methods of personal protection in terms of occupational health and safety, and specifications, places of use, utilization, monitoring and auditing of Personal Protective Equipment (PPE) that is required to be used by the employees.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Know the importance of employee awareness regarding occupational health and safety through training, ● Know the importance of ensuring the design of fixed layout (work station, bench, desk, etc.) considering individual characteristics, ● List types, uses and properties of PPEs, ● Specify suitability of PPEs, ● Evaluate proper use of PPEs, ● Specify role of PPEs in principles of risk protection.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Importance of training in regards to personal protection ● Importance of workplace design in regards to personal protection ● Description and characteristics of PPEs ● Types of PPEs ● Selection and use of PPEs ● Jobs that require use of PPEs ● Suitability of PPEs ● Conformation of PPEs with CE sign and supporting documents (manual in Turkish) ● Market Surveillance and Control (PGD) ● Relevant legislation and practices
One on one / total class	1/4
Trainer	D-1, D-4, D-5, D-6* *Technical

Item No / Subject	20/ Executive Approaches and Practices Aimed at Workplace Protection
Main objective of the subject	Providing attendees with information regarding importance and applications of executional/organizational approach in occupational health and safety.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Know description and scope of work organization ● Know the importance of work organization in regards to protection, ● Know the importance of occupational health and safety organization in regards to protection, ● Describe positive effects of occupational health and safety at management level.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Work organization (work environment and duration) ● Breaks, shift/nightshift ● Factors regarding management and employees (role ambiguity, role conflict, organization, work load, salary, etc.) ● Health and safety organization at workplace ● Occupational health and safety approach of management at workplace
Face to face / total number of lessons	1/3

Trainer	D-4, D-5, D-6*, D-8*, D-9**, D-11** * Technical **Engineers
Item No / Subject	21 / Work Accidents
Main objective of the subject	Providing attendees with information regarding causal and sectoral classification of workplace accidents and near miss incidents.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> • Describe work accident and near miss, • Interpret factors that causes work accidents through casual and sectoral analyses, • Hold general information regarding work accident records and notices, • Hold information in order to report near miss accidents, • List basic, primary and secondary methods of protection from work
Subtopics of the Subject	<ul style="list-style-type: none"> • Description and causes of work accident and near miss • Statistical analyses and epidemiology of work accidents • Record and notification of work accident • Evaluation of work accident and near miss report • Work accident protection • Evaluation of required measures and accident reports through facts
Face to face / total number of lessons	1/4
Trainer	D-4, D-5, D-6*, D-9*, D-11 * Technical

Item No / Subject	22 / First-Aid Organization and Emergency Medical Response at Workplace
Main objective of the subject	Providing attendees with information regarding first-aid organization and emergency medical response practices at workplace.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> • Know the description and applications of first-aid, • List situations that require first-aid at workplace, • Explain first-aid organization at workplace, • Know process of first-aid services organization and operation, • Know duties of emergency medical intervention, • Know necessary actions following first-aid or emergency medical intervention, • Know to content and use of first-aid kit and emergency medical intervention equipment.
Subtopics of the Subject	<ul style="list-style-type: none"> • Description of first-aid • Situations that require first-aid and emergency medical intervention at workplace • First-aid organization at workplace • Organization of first-aid support personnel at workplace • Proper conservation and periodical control of first-aid kits and emergency medical intervention equipment's in hygienic conditions • Relevant legislation
Face to face / total number of lessons	1/1
Trainer	D-1*, D-2*, D-3*, D-12*, D-13*, D-14*, D-15*, D-16*, D-17* *First-aider certificate or first-aid training

Item No / Subject	23 / Occupational Illnesses and Work Related Illnesses
Main objective of the subject	Providing attendees with information regarding occupational illnesses and work related illnesses, and understand cause and effect relation.
Training Targets	<p>At the end of this lesson, attendees will be able to:</p> <ul style="list-style-type: none"> ● Describe occupational illness, ● List classification of occupational illness, ● Hold information regarding medical and legal processes of occupational illnesses, ● Hold general information about forming records and notifications of occupational illnesses, ● Hold information regarding prevention of occupational illnesses, ● Interpret factors that causes occupational illnesses at workplace through causal and sectoral analyses, ● Describe work related illnesses and show difference from occupational illnesses, ● Evaluate cause and effect relation in work related illnesses, ● Describe duties of other health personnel while health monitoring of work related and occupational illnesses.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Description of occupational disease ● Importance of recruitment and periodical examinations in terms of determining occupational and work related illnesses ● Classification of occupational illnesses ● Medical and legal diagnosis process of occupational illnesses ● Record and notification of occupational illnesses ● Statistical analyses and epidemiology of occupational and work related illnesses ● Description of work related illness ● Types of work related illness ● Difference of occupational and work related illness ● Prevention of occupational and work related illnesses ● Relevant legislation ● Duties of other health personnel during health monitoring
Face to face / total number of lessons	3/6
Trainer	D-1, D-2, D-3, D-6*, D-12, D-13, D-14 *Doctor

Item No /	24 / Basic Principles of Toxicology
Main objective of the subject	Providing attendees with information regarding basic concepts and importance of toxicology in terms of occupational health and safety.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Describe toxicology, ● Hold information regarding occupational exposure signs, ● Describe concept of ecotoxicity, ● Hold information regarding health effect of toxic substance that are commonly being used in the industry ● Hold information regarding occupational illnesses that can be caused by toxic substances, ● State issues to be considered during health monitoring of employees who are exposed to toxic substances and responsibilities of other health personnel.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Introduction to toxicology and descriptions ● Occupational Exposure Signs (MAC, TLV, TWA, NOAEL, PEL, OEL, STEL, etc.) ● Concept of ecotoxicity, ● Effects of toxic substances that are commonly being used in the industry; <ul style="list-style-type: none"> ○ Health effects of various toxic substances widely used in the industry; Heavy metal poisoning ○ Hexane poisoning ○ Benzene poisoning ● Subjects to be considered while monitoring health of employees that are exposed to toxic substances and responsibilities of other health personnel.
Face to face / total number of lessons	1/2
Trainer	D-1*D-2*, D-3, D-9**, D-12, D-13*, D-14, * Masters in Toxicology or Toxicology Minor ** Masters in Toxicology or Biologist with Toxicology Minor

Item No / Subject	25 / Current Issues on Occupational Health
Main objective of the subject	Providing attendees with information regarding rapidly changing and developing new factors emerging in work life, occupational illnesses and new method approaches.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Finds emerging new factors at workplace, ● State emerging diseases that are described as occupational illnesses or work related illnesses, ● Specify recent expansions in occupational health and safety approach, ● Know how to Access new and up-to-date information in this area.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Recently emerging factors at workplaces ● Potential situations that can be specified as occupational or work related illnesses ● Recent expansions in occupational health and safety approach ● Information sources (internet, academic data bases)
Face to face / total number of lessons	1/2
Trainer	D-1, D-2, D-3, D-6*, D-12, D-13, D-14, D-15, D-16, D-17, D-18 * Doctor

Item No / Subject	26 / Groups that Require Special Policy in Work Life
Main objective of the subject	Providing attendees with information regarding the groups that require special policy in terms of health and safety in work life.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Describe groups that require special policy in terms of occupational health and safety, ● Explain necessity of exclusive protection women in terms of occupational health and safety, ● Specify required health examinations for groups that require special policy, ● Know methods of protection for groups that require special policy.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Groups that require special policy in terms of occupational health and safety; <ul style="list-style-type: none"> ◇ Disabled, Pregnant and Nursing Employees ◇ Young ◇ Seniors ◇ Immigrants ◇ Ex-convicts, etc. ● Female employees ● Employees with chronic illnesses ● Health monitoring of groups that require special policy ● Methods of protection for groups that require special policy ● Relevant legislation
Face to face / total number of lessons	2/6
Trainer	D-1, D-2, D-3, D-6*, D-12, D-13, D-14, D-15, D-16, D-17, D-18 * Doctor

Item No / Subject	27 / Health Development Practices in Work Life
Main objective of the subject	Helping attendees to gain necessary basic information in order to prepare and apply programmes for health development of the employees.
Training Targets	Attendees; <ul style="list-style-type: none"> ● Describe the concept of health development at work place, ● Prepare health development programme at work place, ● State aspects to be considered in regards to application and observation of prepared programme.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Concept of “health development at work place” ● Samples of health development at work place programme; <ul style="list-style-type: none"> ◇ Smoking and use of addictive substances ◇ Adequate and balanced diet ◇ Health diet of employees ◇ Problems that can be seen at employees who have inadequate and imbalanced diet ◇ Overcoming stress ● Health life <ul style="list-style-type: none"> ◇ Healthy diet ◇ Life-long exercise Smoking and use of addictive substances ◇ Overcoming psycho-social factors ● Preparation of a sample programme ● Aspects to be considered in regards to application and observation of the programme
Face to face / total number of lessons	2/5
Trainer	D-1, D-2, D-3, D-6*, D-12, D-13, D-14, D-15, D-16, D-17, D-18 * Doctor

Item No / Subject	28 / Health Training and Training of Adults at Workplace
Main objective of the subject	Providing attendees with information regarding health training and training of adults at work place.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Hold information regarding content and properties of health trainings to be given at work place, and know how, by who and frequency of such trainings. ● Describe properties and methods of training for adults.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Content, properties and periods of health trainings at workplace ● Properties and methods of training for adults ● Relevant legislation
Face to face / total number of lessons	2/4
Trainer	D-1, D-2, D-3, D-12, D-14, D-15, D-18

Item No / Subject	29 / Communication Techniques
Main objective of the subject	Providing employees with information regarding necessary communication skills at work place.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Describe communication, ● Know effective communication techniques, ● Specify requirements for an effective communication process.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Describe communication ● Basic concepts of effective communication process at work place ● Communication between other health personnel and assigned HS professionals ● Communication between other health personnel and employer and employers representative
Face to face / total number of lessons	2/3
Trainer	D-2, D-5, D-6, D-8, D-9

Item No /	30 / Research Methods on Occupational Health and Safety
Main objective of the subject	Helping attendees to know research methods that can be utilized at workplace and learn basic principles of such methods.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Describe research and list methods in use, ● Know ethical responsibilities of other health personnel during research at workplace.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Basic concepts of research ● Importance of observation ● Data bases for research ● Intended use of research in occupational health ● Benefits of research results ● Ethical responsibilities of workplace research ● Epidemiologic research methods in use in work life: <ul style="list-style-type: none"> ◇ Cross-sectional research ◇ Case-control research ◇ Cohort research ● Presentation of research samples at workplace
Face to face / total number of lessons	2/4
Trainer	D-2, D-3, D-12, D-15

Item No / Subject	31 / Health Records at Workplace and Evaluation
Main objective of the subject	Providing attendees with information regarding keeping health records, and evaluation of records of safety at workplace.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Understand the importance of record keeping in occupational health services, ● State the records to be kept regarding health and safety at workplace, ● State how to utilize the health and safety records at workplace, ● Know the duties of health record keeping at workplace, ● Discuss other health personnel's responsibility to keep records.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Workplace health and safety records ● Importance of records in health monitoring ● Conservation of records ● Evaluation of records that require notification ● Sample works from workplace records ● Relevant legislation
Face to face / total number of lessons	2/4
Trainer	D-1, D-3, D-6*, D-12, D-13, D-14, D-17 * Doctor

Item No / Subject	32 / Ethical Principles of Occupational Health and Safety Services
Main objective of the subject	Providing attendees with information regarding occupational health and safety practices in accordance with occupational independence and ethical principles.
Training Targets	At the end of this lesson, attendees will be able to: <ul style="list-style-type: none"> ● Describe the concept and rules of ethics, ● Know the importance of occupational independence over ethical principles,
	<ul style="list-style-type: none"> ● Know national and international legal regulations that include ethic rules. Explain importance of ethical approach in activities of other health personnel, ● Specify possible options of action in order to solve ethical problems in activities of other health personnel, ● Discuss ethical principle and application examples in in activities of other health personnel.
Subtopics of the Subject	<ul style="list-style-type: none"> ● Concept and rules of ethics ● National and international documents on ethical rules ● Facts in conflict with ethical rules in work life <ul style="list-style-type: none"> ◇ Reasons and ethical problems of such facts ● Confidentiality obligation in regards to keeping information and records on health of the employees ● Resolution of ethical problems of other health personnel
Face to face / total number of lessons	1/1
Trainer	D-1, D-2, D-3, D-6*, D-12, D-13, D-14, D-15, D-16, D-17, D-18 * Doctor

Item No / Subject	33 / Case Study Based on Small Group Dynamics
Main objective of the subject	<p>Helping attendees to improve methods of occupational health problem solving with pre-prepared sample cases and to gain team-work skills.</p> <ul style="list-style-type: none"> • Sample cases: <ul style="list-style-type: none"> ◊ First-aid and emergency medical intervention ◊ Inspection of contagious/epidemic diseases at workplace ◊ Occupational accident (root analyses) ◊ Occupational illness (root analyses) ◊ Health training (preparation and application of a programme)
Training Targets	<p>At the end of this lesson, attendees will be able to:</p> <ul style="list-style-type: none"> • Use problem solving methods of occupational health with pre- prepared sample cases, • Work with a team and utilize presentation skills, • Use methods of adult training.
Subtopics of the Subject	<ul style="list-style-type: none"> • Creating a case pool that provides 1 case for 5 attendees • Forming groups of maximum five persons • Giving enough material and time (half-day) for preparations • Group presentations • Evaluation of presentations by groups
Face to face / total number of lessons	3/3
Trainer	D-1, D-2, D-3, D-12, D-13, D-14, D-15, D-16, D-17, D-18
Item No / Subject	34 / Final Test and General Evaluation
Main objective of the subject	General evaluation of programme at the end of the training. Receiving feedback from the attendees after the training and applying a final test at the establishment in order to specify the level of acquisition.
Face to face / total number of lessons	1/1

HS Trainings of Employees

MODULE 1

DOCTOR

This training program aims to create knowledge and sensitivity about general health and HS issues and includes all employees of a workplace. The program consists of initially 4 hours of training, and 2 hours of refreshment training in every month for following 6 months.

Learning Targets:

At the end of 4 hours of initial training, attendees will be able to learn;

- Basic concepts of health and importance of health protection,
- Basic concepts of occupational health and practices,
- Foundations of protection methods from occupational illnesses,
- Basic concepts of occupational safety and practices,
- Prevention methods for occupational accidents,
- Importance of first-aid practices and some first-aid practices.

Content of Program:

1 hour lecture: Concept of risk and health protection

1 hour lecture: Basic concepts of occupational health, protection from occupational illnesses

1 hour lecture: Basic concepts of occupational safety, prevention of occupational accidents

1 hour lecture: Importance and priorities of first-aid, basic first-aid practices

Trainers: Workplace doctor and occupational safety specialist

Method of Training:

- Training will be executed using attendee training techniques in accordance with adult training principles.
- Group will hold 15-20 people.
- Attendees will receive "Participation Certificate" at the end of the training.
- Visual and audio training materials, and lecture notes and brochures for attendees will be prepared and produced by trainers.

• MODULE 2

DOCTOR

Principles of this training program is designed by Turkish Standards Institute. Thereby, the training will hold TSI certificate. It includes 60 hours of training for the employees chosen based on level of heavy and hazardous work, number of employees, number of shifts. 1 “health care employee” out of 10-50 employees will be chosen. Refreshment training should be planned based on workplace characteristics.

Health care employees are assigned to first-aid organization at workplace with specific planning and practice first-aid when necessary, comply and help their co-workers comply with health and safety measures at workplace.

Training Targets:

At the end of 60 hours of training, attendees will be able to learn and gain practice in tasks that require skills;

- Basic concepts of health and Importance of health protection,
- First-aid practices,
- Concept of employee health and practices,
- Protection methods for occupational illnesses,
- Occupational safety practices,
- Workplace specific issues and protection methods.

Program content:

Concept of risk, protection of health, basic health: 10 hours

First-aid 20 hours

Occupational Health 10 hours

Occupational Safety 10 hours

TOTAL 50 hours

Trainers: Doctors and engineers who hold trainers’ certificate

Method of Training:

- Training will be executed using attendee training techniques in accordance with adult training principles.
- Group will hold 10-12 people.
- Attendees will receive “Health Care Employee Certificate” at the end of the training.
- Refreshment training will be determined based on workplace characteristics.
- Visual and audio training materials, and lecture notes and brochures for attendees will be prepared and produced by trainers.
- Upskill materials such as first-aid dummy (mouth-to-mouth resuscitation, patient transportation), PPEs, bandages, splint and etc. will be provided by trainers.

- **MODULE 3**

DOCTOR

FIELD: INDIVIDUAL DEVELOPMENT AND TRAINING

MEMBER OF PROFESSION

Member of profession complies with employee health regulations and takes occupational safety measures.

ENTRY CONDITIONS

- Be literate or primary school graduate.
- Have physical and substantial features required for the profession.

AREA OF EMPLOYMENT

Individual who has professional competence and trainees who graduate from certificate programs in the field of individual development, are eligible to work at the sector in accordance with certified skills.

TRAINING-EDUCATION ENVIRONMENT AND EQUIPMENT

- Training are being executed at Occupational Training Centres, Public Education Centres and companies in the industry.
- Individual Development area and standard equipment as well as equipment, required by the profession, should be provided in order to apply the program.

TRAINERS

- In order to apply the program, educators who received training in the field of Individual Development should be assigned.
- In order to apply the program, members of profession can be utilized in the field of Individual Development when necessary.
- Qualified instructor should have received all modules and qualifications regarding this program.

SURVEY AND EVALUATION

By using various surveying devices;

- Gained qualifications will be surveyed at the end of the modules,
- Gained information, skill and behaviour from modules will be surveyed.
- Survey results will be evaluated at the end of the program.
- All educational activities at training centre, company and of individuals will be evaluated.

CERTIFICATION

- Certificate programs provides education and training in order to gain skills directed to members of profession. The purpose of this programs is to train profession members who hold qualifications of the profession.
- Completed modules, all training and gained qualifications during certificate program will be certified.
- At the end of the program, earned portfolios of qualified individuals is being evaluated on the certificates in accordance with the regulations. Individuals may receive certificates according to their level of profession.
- Qualifications will be evaluated if individuals want to receive training in order to change profession in the future or transfer to other profession that are related to current profession.
- Individuals will be able to improve themselves in a second profession if absent modules are completed.
- Qualification certificate of an individual who leaves the training program, will be evaluated for other certificate programs when necessary.
- All individuals with professional qualifications and levels will gain right to receive certificate and can be employed at related workplaces.

LATERAL AND VERTICAL TRANSFERS

The purpose is to gain broad based professional qualifications.

- At the end of the training, individuals with professional certificates can complete the diploma program by taking difference training when necessary.
- Individuals who are in training or completed the training will be able to transfer between other branches/occupations by completing required modules.

DURATION OF THE TRAINING

- Total training duration of profession program is planned as 40/24 hours.
- Distribution of training duration for school, company and individuals will be applied as specified on explanation on modules.

TRAINING METHODS AND TECHNIQUES

Individual training methods and techniques are being used for modular education.

- Trainers guide individuals.
- Individual are encouraged to learn by themselves.
- Ensure that individuals are active.
- Lead individuals to research.
- Individuals can evaluate themselves.
- Methods and techniques in order to gain professional qualifications, are applied to individuals.

COLLABORATION WITH INSTITUTES AND ORGANIZATIONS

Individuals are being assisted in cooperation with institutes and organizations, and members of profession regarding training activities required by the program, areas of employment and planning, universities in the vicinity, non-governmental organizations, early childhood education institutions, private education institutions and rehabilitation centres, as well as related professional associations and all kinds of institutions and organizations that can be communicated for research, observation and application purposes.

STUDENT/TRAINEE ACQUISITION

At the end of the program, student/trainee will be able to;

- Gain basic information and skills in the profession,
- Hold basic qualifications required by the profession,
- Execute works that profession requires,
- Gain special Professional qualifications required by the profession,
- Gain opportunity for student/trainee centred active learning and chance to learn at one's own pace.

TRAINING-EDUCATION ACTIVITIES

Training-education activities will be hold that are projected modules of certificate programs.

OCCUPATIONAL DEVELOPMENT MODULES

- These modules help students/trainees to gain general information and skills that are beneficial to life-long occupational development, prone to production of science and technology and to be trained as high-skill employee, to able to create positive communication and to adapt to a profession.
- The purpose of these modules is to help students/trainees to acquire qualifications that is required by national and international workforce.
- Modules will be chosen from occupational development module tables considering employment situation in the area and level of availability of student/trainee, and will be added to the duration on sufficiency table.
- Fourth level members of profession will complete all occupational development modules.
- Occupational development modules could be used independent from the programs.

GAINED PROFICIENCIES		LECTURE MODULES	DURATION
1	Creating and maintaining healthy and effective social relations	Communication in social life	40/16
2	Creating and maintaining healthy and effective relations in business life	Communication in business life	40/16
3	Proper use of Turkish	Diction-1	40/32
4		Diction-2	40/32
5	Observing development in the profession and continuously work on personal growth	Personal growth	40/16
6	Gaining skills in business, finances, marketing, advertising, sales, business law, career development and business establishment	Entrepreneurship	40/24
7	Being sensitive about environment and environmental protection	Environmental Protection	40/16
8	Complying with occupational ethics	Occupational ethics	40/16
9	Planning, programming and work organization at workplace	Work organization	40/16
10	Complying with employee health regulations and taking work safety measures	Work safety and employee health	40/24
11	Basic research	Research methods	40/16

MODULES AND CONTENTS

- Training duration is 40 hours for each module.
- Each model can be performed as 40/8, 40/16, 40/24, 40/32, 40/40 depending on qualification to be acquired.
- These recommended durations on modules contain all theoretical and practical content in educational activities.
- Activities can be performed in collaboration with other schools and companies if the application of educational activity of a module is not possible.
- Students/trainees are not required retake qualification that are acquired previously.
- Modules and qualifications will be received based on application order of the program.
- Application order of modules and qualifications of the program will be designated by group decision.

NOT: Work Safety and Employee Health Program Qualification Tables and Modules are as follows:

TABLE OF QUALIFICATION AND MODULES

QUALIFICATIONS		MODULES	DURATION
1	Complying with employee health regulations and taking work	Work safety and employee health	40/24
TOTAL:			40/24

TABLE OF EDUCATION SUBJECTS

EDUCATION SUBJECTS
1. Basic Topics a) Information regarding labour legislation, b) Legal rights and liabilities of employees, c) Workplace hygiene and organization, d) Legal effects of occupational accidents and illnesses
2. Health Topics a) Causes of occupational illnesses, b) Principles of prophylaxis and application of protection methods, c) Biological and psycho-social risk factors, d) First-aid
3. Technical Topics a) Chemical, physical and ergonomical risk factors, b) Manual handling, c) Inflammables, explosives, fire and fire protection, d) Secure use of work equipment, e) Working with devices with monitors f) Electrical hazards, risks and prevention, g) Causes of occupational accidents, prevention principles and application of methods, h) Safety and health signs, i) Use of Personal Protective Equipment g) General rules of occupational health and safety and safety culture h) Evacuation and rescue

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