**osh state university**

**international medical faculty**

**Department of Public Health**

APPROVED

 Head of Public Health Department,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A.K. Turusbekova

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2023

**COURSE SYLLABUS**

**Occupational health**

2022-2023

For students of international medical faculty

5th year XX- semester

2 credits (60 h., including 30 class hours, 30h. of independent study)

|  |  |
| --- | --- |
| **Lecturer:**  |  |
| XX semester, all groups  | **Sulaimanova Cholpon Tashtanbekovna,** MD, PhD, Associate Professor |
| **Practice:**  |  |
| XX semester, groups # 2,4,6,8-А | **Zhanadilova Gulzat**+996 702121280 Law college, room № 306 |
| 3 semester, groups # 1,3,5,7, -B | **Abdimomunova Begimay,** +996 558626891 (WhatsApp) Law college, room № 302 |
| 3 semester, groups # 1,3,5,7, - A | **Mamatkulova Nazgul,** +90559101812 (WhatsApp)Law college, room № 303 |
| 3 semesters, groups # 2,4,6,8-B | **Abzhaparova Aiganysh** +9965557010712 (WhatsApp)Law college, room № 301 |

**Lecture Sessions**: according to timetable

 **Location**: zoom\ whatsApp\

 **Class Sessions**: Monday- Saturday according timetable

 **Location**: Law college, according to the room № above

1. **Justification of the need for an academic discipline for the education of a student**

The study of occupational diseases (OD) will allow developing measures to prevent their development, can prevent or reduce the effect of harmful factors in the working environment and the production process on the human body.

As a result of unfavorable working conditions and late diagnosis of diseases, in recent years there has been an increase in OD with moderately pronounced manifestations. This leads to an early decline in professional ability to work. High disability rates are due to limited employment opportunities for patients with OD, the lack of the right to transfer patients to work outside of contact with harmful factors.

Factors of the working environment can lead to an increase in general non-specific morbidity, temporarily compensated disorders of organs and systems, as well as a decrease in the body's resistance. Preserving and improving the health of workers, as the most important productive force that determines the country's economic development, is the basis of state social policy.

The solution to the problem of preserving the health of workers and reducing labor losses is possible taking into account the epidemiological analysis of the consequences of the influence of working conditions on morbidity and disability rates.

**2.The purpose of studying the discipline**

Formation of students' understanding of the importance of protecting and improving the health of the working population.

Achieve the ability to assess the problems of preserving life and health under the influence of harmful production factors and emergency situations, develop measures to ensure sanitary and hygienic and therapeutic and preventive measures to create the most favorable working conditions and prevent OD.

**Estimated results of studying the discipline.**

As a result of the course, it is expected that students in the field of public health will be able to highlight specific areas that require attention in addressing the health problems of the working population, contribute to the improvement of working conditions and the health of workers, and make changes in public policy in the implementation of health education in society, working in an interdisciplinary team.

**Interdisciplinary connections:**

**Pre-requisites**:

Before this course, it is recommended to complete the courses of Medical statistics, Epidemiology

**Post-requisites**: completing course makes it possible to work in hospitals as a manager of medical services, as well as work in the ministries of health, social development.

**3. Course Policies and Procedures:**

1. The Occupational health subject’s highly interactive and student attendance, and participation is critical. The lecturer expects a respectful environment to discuss different positions. Active participation is promoted taking care do not be dominant. **Attendance will be taken for each class.** Absenteeism, tardiness, and lack of participation will be reflected in the student’s grade. Please notify the instructor in advance if you will not be attending the classes.

2. Writing assignments must be presented on each classes. Projects and presentations must be completed or turned in on the assigned due date. **Late assignments will be not accepted.** If you know in advance that you will have to miss a class in which an assignment is due, you may make arrangements with the instructors to turn the assignment early. Self works you should submit before module week**. On module week any projects will be not accepted.**

3. *Academic Conduct*. Students at IMF are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. IMF is committed to upholding standards of academic behavior consistent with the academic and professional communities of which it is a part. **Plagiarism, cheating, and other misconduct are serious violations of the IMF Student Conduct Code.** We expect you to know and follow the faculty policies on cheating and plagiarism. Any suspected cases of academic misconduct will be handled according to IMF regulations.

4. Students must be ready for offline\online classes, not distracted by conversations with each other, must wear uniform. Mobile phones must be switched off. **Any disturbance and delay are expected as an absence on the classes.**

5. *Students with disabilities (with special needs):* Qualified students with disabilities needing appropriate academic adjustments should contact the dean and the lecturer as soon as possible to ensure your needs are met in a timely manner. Students must inform the lecturer of the disability early in the class so appropriate accommodations can be met. Handouts are available in alternative accessible formats upon request.

**4. Grading:**

* **Grading for each practical classes**

Class activity **15 points**

Test\case study **10 points**

Home assignments **5 points**

**Total**

 **30 points**

* **Evaluation criteria for the discipline "Occupational health" (1 lecture session)**

**Students in order to receive 30 lecture points must comply with the following rules:**

* **Timely arrival: for being late for a lecture by 1 or more minutes minus 5 points;**
* **Uniform (classic uniform and apron), in case of absence of uniform minus 5 points;**
* **Behavior: the student must not speak loudly or laugh loudly, nor interfere with the lecturer in any other way. If a student interferes with the lecturer with his bad behavior, in this case the student will receive NB and will have to work out (to independently study the topic and tell the lecturer).**
* **Willingness to answer the lecturer's questions, to assess the comprehensibility of the topic - Kahoot test. (10 points)**
* **Grading for individual work of student (self-work)**

**Assessment criteria for the discipline "Occupational health":**

**Choose one of the option**

1. Write an article and publish it - 30 points

2. Participation in international conference - 30 points

3. Make a visual aid on the prevention one occupational diseases - 30 points

***5.1. Thematic plan of lectures:***

|  |  |  |  |
| --- | --- | --- | --- |
| № | **Lecture topics**  | Hours  | Date  |
| 1. | Occupational diseases. | 2 |  |
| 2. | Occupational diseases from exposure to dust and industrial aerosols. | 2 |  |
| 3. | Occupational allergies. | 2 |  |
| 4. | Occupational diseases from exposure of toxic industrial chemicals.  | 2 |  |
| 5. | Occupational intoxication with neurotropic poisons. | 2 |  |
| 6. | Occupational diseases from exposure to physical factors and overstrain of organs and body systems. | 2 |  |
|  | **Total hours** | 12 |  |

 [***5.2.* Thematic plan of practical lessons:**](https://context.reverso.net/%D0%BF%D0%B5%D1%80%D0%B5%D0%B2%D0%BE%D0%B4/%D0%B0%D0%BD%D0%B3%D0%BB%D0%B8%D0%B9%D1%81%D0%BA%D0%B8%D0%B9-%D1%80%D1%83%D1%81%D1%81%D0%BA%D0%B8%D0%B9/practical%2Blessons)

|  |  |  |
| --- | --- | --- |
| **№** |  **Topics of practical classes** | **hours** |
| 1 | Occupational health hazards in general | 2 |
| 2 | Occupational diseases from exposure to physical factors | 2 |
| 3 | Occupational health hazards in Mines and Metal Extraction Industries | 2 |
| *4* | Occupational health hazards in chemical Industries  | 2 |
| 5 | Occupational health hazards in small scale industries | 2 |
| 6 | Occupational health hazards in other industries | 2 |
| 7 | Agriculture and occupational health hazards  | 2 |
| 8 | Occupational hygiene and threshold limit value  | 2 |
| 9 | Economics in Occupational health | *2* |
|  **Module**  |  |
| **Итого** | **18** |

**5.3. Thematic plan of IWS**

**1 module**

|  |  |  |
| --- | --- | --- |
| 1 | Occupational health hazards in Mines and Metal Extraction Industries  | *1. Make a statistical analysis for the last 3 years, find out the prevalence of diseases* |
| 2 | Occupational health hazards in chemical Industries  | *1. Make a statistical analysis for the last 3 years, find out the prevalence of diseases* |
| 3 | Occupational health hazards in small scale and other industries  | *1. Make a statistical analysis for the last 3 years, find out the prevalence of diseases* |
| 4 | Occupational health \ Miscellaneous  | *1. Make a statistical analysis for the last 3 years, find out the prevalence of diseases* |

*Readings:*

1. Occupational health hazards and remedies – R. Mohapatra, 1st edition, 2002.

**Topic№1**

**Topic:** **Occupational health hazards introduction**

**CONTROL QUESTIONS:**

1. Occupational health – what is it?
2. Human body at work
3. Industrial air pollution and health
4. Industrial dust and health
5. Industrial gas and health
6. Industrial noise and occupational deafness
7. Industrial vibration and health
8. Heat in industry and health

**Topic№2**

**Topic:** **Occupational diseases from exposure to physical factors**

**CONTROL QUESTIONS:**

1. Occupational allergy
2. Occupational skin diseases
3. Occupational blood diseases
4. Occupational musculoskeletal disorders
5. Occupational lungs diseases and occupational asthma
6. Occupational heart diseases
7. Occupational eye diseases
8. Occupational cancer

**Topic№3**

**Topic:** **Occupational health hazards in Mines and Metal Extraction Industries**

**CONTROL QUESTIONS:**

1. Asbestos, aluminium, antimony and components, arsenic and compounds, bromine and compounds, beryllium alloys and compounds,
2. Coal CWP and Caplan's syndrome, Cadmium and compounds, Calcium and compounds,
3. Chromium and compounds, cobalt alloys and compounds, Copper alloys and compounds,
4. Gold alloys and compounds, Lead and compounds, Nickel and compounds, Phosphorus and compounds,
5. Iron and steel industry, Manganese, Mercury and compounds, Sulphur and compounds, Silica and silicosis, Zink and metal fume fever (MFF)

**Topic №4**

**Topic:** **Occupational health hazards in chemical industries**

**CONTROL QUESTIONS:**

1. Diseases in chemical industries,
2. Alkalis, inorganic acids, Noxious gasses, Hydrocarbons and their toxic effects,
3. Benzene and compounds, Fluorine and compounds, Carbonell monoxide,
4. Carbon dioxide, Carbon disulphide, Plastics, Paintsville varnishes and lacquers,
5. Cosmetics, Pharmaceutical industries

**Topic №5**

**Topic:** **Occupational health hazards in small scale industries**

**CONTROL QUESTIONS:**

1. Button manufacture,
2. Brick, tile and briquettes manufacture,
3. Butchery trade, Cement industry,
4. Cotton industries and byssinosis,
5. Construction industry,

**Topic№6**

**Topic:** **Occupational health hazards in other industries**

**CONTROL QUESTIONS:**

1. Dairy products, Flour mills, Food industry,
2. Footwear industry, Glass industry;
3. Leather and tanning industries,
4. Power stations, Refractories,
5. Soft drink industry, Soap industry

**Topic №7**

**Topic: Agriculture and occupational health hazards**

**Control questions:**

1. Agriculture and occupational health hazards,
2. Tea plantation,
3. Coffee cultivation,
4. **Topic №8**

**Topic: Occupational hygiene and threshold limit value**

 **CONTROL QUESTIONS:**

1. Shift work and health,
2. Occupational hygiene and threshold limit value,
3. Industrial ventilation,

 **Topic №9**

**Topic: Economics in Occupational health**

**Control questions:**

1. Ergonomics in occupational health practice,
2. Occupational health management system,
3. Occupational health surveillance,