COURSE DESCRIPTION

1. Course title: Industrial, mining, medical and social rescue systems

2. Course code SI-TOBHP/39


4. Level of studies: BSc programme / 1st cycle of higher education

5. Mode of studies: intramural studies

6. Field of study: SAFETY ENGINEERING (FACULTY SYMBOL) RG 3

7. Profile of studies: academic profile

8. Programme: Industrial Safety Organization and Engineering

9. Semester: VI

10. Faculty teaching the course: Department Of Mining Management And Safety Engineering

11. Course instructor: MSc. Maja Taraszkiewicz-Łyda

12. Course classification: programme course

13. Course status: compulsory

14. Language of instruction: English

15. Pre-requisite qualifications: general knowledge about organization of emergency systems

16. Course objectives: Provide students with interdisciplinary knowledge about the function, structure and operation of emergency systems, expanding horizon on emergency systems in Poland and their action in the face of threats based on the integrated rescue system.

17. Description of learning outcomes:

<table>
<thead>
<tr>
<th>Nr</th>
<th>Learning outcomes description</th>
<th>Method of assessment</th>
<th>Teaching methods</th>
<th>Learning outcomes reference code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student has structured and theoretically founded knowledge in the organization of emergency systems used to formulate and solve simple problems of practical engineering typical for safety engineering</td>
<td>Written exam, design task</td>
<td>Lecture, project, class</td>
<td>K_W12 +++</td>
</tr>
<tr>
<td>2</td>
<td>Student has detailed and theoretical underpinnings of technical knowledge in the field of security systems used to formulate and solve simple problems of practical engineering concerned of rescue, industrial, mining, medical and social rescue systems</td>
<td>Written exam, design task</td>
<td>Lecture, class</td>
<td>K_W20 ++</td>
</tr>
<tr>
<td>3</td>
<td>Student has have basic knowledge on developments in the field of safety engineering and related fields</td>
<td>Written exam, design task</td>
<td>Lecture, project</td>
<td>K_W21 ++</td>
</tr>
<tr>
<td>4</td>
<td>Student has a basic understanding of the life cycle of equipment, facilities, and technical systems security engineering typical for safety engineering</td>
<td>Written exam, design task</td>
<td>Lecture, project</td>
<td>K_W22 ++</td>
</tr>
</tbody>
</table>
5. has a basic knowledge necessary to understand the social, economic, legal and other non-technical considerations engineering activities and their role in engineering practice

   Written exam, design task  |  Project, class  |  K_W23 ++

6. able to develop documentation on the task of engineering and prepare a text containing a discussion of the results of this task

   Written exam, design task  |  Lecture, class  |  K_U03 ++

7. can see aspects, including social, economic and legal in formulating and solving engineering tasks

   Written exam, design task  |  Lecture, project  |  K_U09 ++

8. **18. Teaching modes and hours**

   Lecture 15h  Class 15h  Project 15h

9. **19. Syllabus description:**

   Lecture
   National Firefighting and Rescue System, organizational structure and basic operations of the State Fire, structures of emergency medicine, hospital emergency departments, mine rescue organization.
   Civilizational threats, toxic industrial agents, emergency plans, organization of civil defense in Poland and the task of the Government Centre for Security, communication with the media in case of crisis.

   Project
   The movie about co-operation in the field of emergency services in case of an accident, evacuation of people, animals, property from the risk areas. The biggest natural and manmade disasters, logistics in crisis management, the importance of logistics in emergency, critical infrastructure, protection of critical infrastructure.

**20. Examination:** semester VI
21. Primary sources:


Cieckiewicz J., Benin-Goren O., Gula P., Krzowski K., Nakonieczny S., Nitecki J., Ratownictwo medyczne w wypadkach masowych. Wydawnictwo Medyczne 2005

Zawadzki A.: Medycyna ratunkowa i katastrof. Wydawnictwo PZWL, Warszawa

22. Secondary sources:


23. Total workload required to achieve learning outcomes

<table>
<thead>
<tr>
<th>Lp.</th>
<th>Teaching mode</th>
<th>Contact hours / Student workload hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lecture</td>
<td>15/15 refer to the indicated literature (3h), preparation for lectures (10h), participate in the exam (2h)</td>
</tr>
<tr>
<td>2</td>
<td>Classes</td>
<td>15/15 preparation of the exercise (5h), exercise away (8h), participated in the grading test (2h)</td>
</tr>
<tr>
<td>3</td>
<td>Laboratory</td>
<td>/</td>
</tr>
<tr>
<td>4</td>
<td>Project</td>
<td>15/35 refer to the indicated literature (4h), the project (10h) Project dissemination (1h)</td>
</tr>
<tr>
<td>5</td>
<td>BA/ MA Seminar</td>
<td>/</td>
</tr>
<tr>
<td>6</td>
<td>Other</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>Total number of hours</td>
<td>45/45</td>
</tr>
</tbody>
</table>

24. Total hours: 90

25. Number of ECTS credits: 3

26. Number of ECTS credits allocated for contact hours: 3

27. Number of ECTS credits allocated for in-practice hours (laboratory classes, projects): 2
26. Comments:

Approved:

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(date, Instructor’s signature)

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(date, the Director of the Faculty Unit signature)