



## COURSE DESCRIPTION

| 1. Course title: <b>INTERDISCIPLINATY RESEARCH IN ERGONOMICS</b>   |  | 2. Course code:<br><b>RAR-A-SSII-II - IRiE</b>                         |                  |                                  |
|--|--|--|------------------|----------------------------------|
| 3. Validity of course description: <b>2018/2019</b>  |  |  |                  |                                  |
| 4. Level of studies: <b>MSc programme</b>  |  |  |                  |                                  |
| 5. Mode of studies: <b>Full-time studies</b>   |  |  |                  |                                  |
| 6. Field of study: <b>Architecture</b>   |  |  |                  |                                  |
| 7. Profile of studies: <b>general academic profile</b>   |  |  |                  |                                  |
| 8. Programme: <b>--</b>  |  |  |                  |                                  |
| 9. Semester: <b>2</b>  |  |  |                  |                                  |
| 10. Faculty teaching the course: <b>Faculty of Architecture, Department of Design and Qualitative Research in Architecture</b>   |  |  |                  |                                  |
| 11. Course instructor: <b>Anna SZEWCZENKO PhD Eng. Arch.</b>   |  |  |                  |                                  |
| 12. Course classification: <b>optional</b>   |  |  |                  |                                  |
| 13. Course status: <b>elective</b>   |  |  |                  |                                  |
| 14. Language of instruction: <b>English</b>  |  |  |                  |                                  |
| 15. Pre-requisite qualifications: <b>Basic knowledge in the field of human factors and ergonomics .</b>  |  |  |                  |                                  |
| 16. Course objectives:   |  |  |                  |                                  |
| <p>The main goal of the course is to acquiring skills in evaluating the built environment and interpreting the relationships between people, buildings and environment in terms of human factors and ergonomics. Course is aimed to rise the students' competences in evaluation of design solutions and realisation of scientific research, according to the methodology proposed by the lecturer and to use appropriate research criteria. The students' research concern the evaluation of architectonic solutions from ergonomics perspective in selected buildings. The results are presented and discussed on the classes.</p> |  |  |                  |                                  |
| 17. Description of learning outcomes:  |  |  |                  |                                  |
| Nr   | Learning outcomes description  | Method of assessment   | Teaching methods | Learning outcomes reference code |
| 1  | Student is familiar with theory and advanced rules of architectural and urban design in the area of ergonomics.  | Preparation and presentation of the paper, participation in discussion | Seminar          | K2A-W01                          |
| 2  | Student is able to diagnose the users' needs, has knowledge of methodology of research work, is able to interpret the social phenomena and relationship between people, buildings and environment. | Preparation and presentation of the paper, participation in discussion | Seminar          | K2A-W12<br>K2A-U08               |



|   |   |  |         |                    |
|---|---|--|---------|--------------------|
| 3 | Student is able to analyse and to evaluate the ergonomic conditions in architecture and urban design; is able to use the research method in architecture. | Preparation and presentation of the paper, participation in discussion | Seminar | K2A-U04<br>K2A-U05 |
| 4 | Student correctly uses the standards, literature and gains the knowledge independently.   | Preparation and presentation of the paper, participation in discussion | Seminar | K2A-U09            |
| 5 | Student is able to work in a team and to solve the problems in cooperation with a group, to formulate the results.  | Creative work in a team  | Seminar | K2A-K08            |

**18. Teaching modes and hours**

**Lecture / BA / MA Seminar / Class / Project / Laboratory**

- 30 - - -

**19. Syllabus description:**

**Seminar:** Substantive content of the seminars are related to the main assessment criteria of architectural and urban space in terms of the ergonomics guidelines. Preferred techniques of research: in situ research, measurement, observations, interviews, photo documentation.

**20. Examination: NO**

**21. Primary sources:**

- Salvend G. (ed.): **Handbook of Human Factors and Ergonomics**. John Wiley & Sons, New Jersey 2012
- Niezabitowska E.D.: **Research methods and techniques in architecture**. Taylor&Francis Group, New York 2018.

**22. Secondary sources:**

- Salama A.S., Coutney L.: The impact of the spatial qualities of the workplace on architects' job satisfaction. *ArchNet International Journal of Architectural Research*, vol. 7 (1), 2013, pp. 52-64.
- Ahasan R., Cambell D., Salmoni A., Lewko J.: Ergonomics of Living Environment for the People with Special Needs. *Journal of Physiological Anthropology and Applied Human Science*, Vol. 20, 2001, No. 3, pp. 175-185.
- Demirbilek O., Demirkan H.: Universal product design involving elderly users: a participatory design model. *"Applied Ergonomics"*, 35, 2004, pp. 361-370.

**23. Total workload required to achieve learning outcomes**

| Lp. | Teaching mode :       | Contact hours / Student workload hours |
|-----|-----------------------|--|
| 1   | Lecture               |  |
| 2   | Classes               |  |
| 3   | Laboratory            |  |
| 4   | Project               |  |
| 5   | BA/ MA Seminar        | 30/30                                  |
| 6   | Other                 |  |
|     | Total number of hours |  |

**24. Total hours: 60**



25. Number of ECTS credits: 2

26. Number of ECTS credits allocated for contact hours: 1

27. Number of ECTS credits allocated for in-practice hours (laboratory classes, projects): 0

28. Comments:

26.09.2018 Anna Szwedko

(date, Instructor's signature)

Approved:

DZIEKAN  
Wydziału Architektury

(date, the Director of the Faculty Unit signature)

dr hab. inż. arch. Klaudiusz Pios