Attachment no. 5 to ZW 16/2020

Attachment no. **31** to studies program

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| **FACULTY OF ARCHITECTURE****COURSE SYLLABUS** Course title in Polish: ErgonomiaCourse title in English: **Ergonomics**Specialization (if applicable): **Architecture and Urban Planning**Profile (if applicable): **Architecture and Urban Planning**Level and form of studies: **2nd level, full-time**Semester: **2**Course type: **obligatory**Course code: **AUA117728W**Group of courses: **NO** |

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|  | **Lecture** | **Tutorial** | **Laboratory** | **Project** | **Seminar** |
| Number of hours of organized classes in University (ZZU) | **15** |  |  |  |  |
| Number of hours of total student workload (CNPS) | **25** |  |  |  |  |
| Form of crediting | **Crediting with grade** |  |  |  |  |
| For group of courses mark (X) final course |  |  |  |  |  |
| Number of ECTS points | **1** |  |  |  |  |
| including number of ECTS points for practical (P) classes  | **1** |  |  |  |  |
| including number of ECTS points for direct teacher-student contact classes or other people conducting classes (BU) | **0,8** |  |  |  |  |

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| **PREREQUISITES RELATED TO KNOWLEDGE, COMPETENCES AND SOCIAL SKILLS** |
| **No prerequisites.** |

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| **COURSE OBJECTIVES** |
| **C1** to introduce students to the basic principles of ergonomic designing in architecture.**C2** to introduce students with the influence of functional requirements on the spatial organization or ergonomic requirements on the functional quality of buildings and their interiors.**C3** to knowledge the principles of adapting architectural space to the needs and psychophysical abilities of a human being.**C4** to knowledge the possibilities of using various built material, finishing, decorative and aesthetic solutions as well as equipment to ensure ergonomic quality of interiors.**C5** to develop skills in applying color solutions in interiors compliant with ergonomic requirements.**C6** to acquaint students with the trends of development of architectural design, interior design and industrial forms in the context of human psychophysical needs. |

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| **COURSE LEARNING OUTCOMES** |
| **Relating to knowledge:**1.1.5) The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale.B.W1. The graduate knows and understands advanced theory of architecture and urban planning that is useful in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as development trends and current directions in architectural and urban design.B.W4. The graduate knows and understands issues related to architectural and urban design and to spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, economic, legal and social factors, which are necessary to understand the social, economic, ecological, natural, historical, cultural, legal and other non-technical determinants of engineering work and recognizes the need to take them into account in architectural, urban, rural design and spatial planning.**Relating to competences:**1.2.2) The graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values.B.U2. The graduate is able to recognize the importance of non-technical aspects and effects of an architect’s design work, including its impact on the cultural and natural environment, and take responsibility for his or her technical decisions in the environment and for transmitting the cultural and natural heritage to the next generations.B.U4. The graduate is able to formulate opinions in the form of a critical analysis related to architecture and present and synthetically describe the ideological basis for the design.**Relating to social skills:**B.S2. The graduate is ready to perform a thorough self-assessment, articulate constructive criticisms about architectural and urban planning activities, as well as accept criticisms of the solutions he or she presents, respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms. |

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| **TEACHING TOOLS** |
| **N1** - Informative lecture with elements of a problem lecture.**N2** -Multimedia presentation.**N3** - Case study. |

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| **PROGRAMME CONTENT** |
| **Form of classes - lectures** | **Number of hours** |
| Lec 1 | Different definitions of Ergonomics. | 1 |
| Lec 2 | Intuitive and scientific Ergonomics, conceptual and corrective Ergonomics. | 2 |
| Lec 3 | The canon of the human in the product design. | 2 |
| Lec 4 | Ergonomic criteria in architecture and design. | 2 |
| Lec 5 | Ergonomics in the work and rest environment. | 2 |
| Lec 6 | Ergonomic shaping of the interior microclimate components. | 2 |
| Lec 7 | Psychological aspects and interpersonal relations in shaping of architectural space | 2 |
| Lec 8 | Ergonomic design for disabled people and children. | 2 |
|  | **Total hours** | **15** |

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| **ASSESSMENT OF ACHIEVEMENT OF LEARNING OUTCOMES** |
| **Evaluation** (F – forming (during semester), C – concluding (at semester end) | Number of learning outcome | Method of assessing the achievement of learning outcome |
| F1 | 1.1.5)B.W1.B.W4.1.2.2)B.U2.B.U4.B.S2. | Attendance at lectures |
| F2 | Written test (possibly an essay) |
| **P = 30%F1 + 70%F2** |

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| **BASIC AND ADDITIONAL LITERATURE** |
| **basic LITERATURE:**1. Gedliczka, A., *Atlas miar człowieka*, Warszawa 2001.
2. Grandjean, E., *Ergonomia mieszkania*, Warszawa 1978.
3. Hall, E., *Ukryty wymiar*, Warszawa 2005.
4. Koradecka, D., *Bezpieczeństwo pracy i ergonomia*, Warszawa 1999.
5. Kreft, W., *Ladenplanung*, Stuttgart 2002.
6. Kuldschun, H., Rossmann, E., *Budownictwo dla upośledzonych fizycznie*, Warszawa 1980.
7. Lawson, F., *Restaurants, Clubs & Bars, Design*, Oxford 1998.
8. Neufert, E., *Podręcznik projektowania architektoniczno-budowlanego*, Warszawa 1995.
9. Ramsey, Ch., *Architectural Graphic Standards*, New York 1988.

**additional LITERATURE:**1. Bańka, A., *Behawioralne podstawy projektowania architektonicznego*, Poznań 1984.
2. Charytonowicz, J., *Projektowanie laboratoryjnych stanowisk pracy*, Wrocław 1994.
3. Hugues, T., *Die altengerechte Wohnung*, Munich 1975.
4. Marmot, A., *Office Space Planning*, New York 2000.
5. Tilley, A., *The measure of man and woman*, New York 2001.
6. Zeugner, G., *Barwa i człowiek*, Warszawa 1965.
7. Architectural and interior design magazines available in the Faculty library.
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| **COURSE SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)** |
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