

## Syllabus of an educational component of a degree programme

Name of unit conducting a component	<i>Doctoral School of Social Sciences</i>
Name of an educational component	<b>Everything you always wanted to know about... biological bases of behaviour (but were afraid to ask).</b>
Language of education	English
Goals of education	The main aim of the course is to familiarise students with the assumptions, applications, and restrictions of the use of the basic methods of identifying genetic, endocrinological, anthropometric and microbiome indicators of behaviour. We will discuss the possibilities of using various biological correlates in psychological research during the course. In addition, we will consider the limitations of their interpretation and possible applications in building psychological theories.
Learning outcomes of an educational component	<p><b>W1 Knows the basic methods of identifying biological correlates of behaviour and understands the limitations of their application.</b></p> <p><b>U1 Is able to use the methods of studying biological correlates of behaviour in designing their own research projects.</b></p> <p><b>U2 Is able to use the data on biological indicators of behaviour in building a scientific theory.</b></p> <p><b>K1 Is ready to critically analyse scientific texts based on the use of biological indicators of behaviour.</b></p>
Verification methods and assessment criteria of learning outcomes obtained by students	Group project: writing and disseminating a short report devoted to the possibility of practical use of biological indicators of behaviour in student's own research.
Type of an educational component (obligatory/optional)	optional
Year of study	I-II
Semester	Summer
Name and surname of the coordinator of a component and/or person/s conducting a component	Wojciech Dragan
Name and surname of person/s conducting an examination or	As above

granting credit in the case when this sponšís other person than conducting a component	
Manner of completion	Course
Preliminary and additional requirements	None
Type and number of hours of courses requiring direct participation of academic staff and students, if in a given component such courses are included	Course – 30 h
Number of ECTS credits assigned to a component	2 ECTS
Balance of ECTS credits	Classes: 30 hours Student's own work: 30 hours - <i>preparing for classes: 15 hours</i> - <i>final project preparation: 15 hours</i>
Applied teaching methods	Lecture, seminar, discussion, group project
Form and conditions of passing a component, including conditions of allowing to take an examination, as well as form and conditions of passing each type of courses included in a given component	Completing the course includes preparing a group project (2-3 people) on the possibility of using one of the biological indicators of behaviour in the research area in which students are interested.  While participating in the course, students are required to read assigned scientific papers. Absences from two meetings are acceptable.
Content of an educational module (with division into forms of courses completion)	<ul style="list-style-type: none"> <li>• Twin studies as a primary quantitative genetics' method.</li> <li>• Molecular genetics of behaviour - candidate gene studies, GWASs, PRSs.</li> <li>• Gut microbiome indicators.</li> <li>• Anthropometrics biomarkers of behaviour.</li> <li>• Hormonal measures.</li> <li>• Open repositories and biobanks.</li> </ul>
List of basic as well as supplementary literature, knowledge of which is required in order to pass a given component	<ul style="list-style-type: none"> <li>• Bik, E. M. (2016). Focus: microbiome: the hoops, hopes, and hypes of human microbiome research. <i>The Yale journal of biology and medicine</i>, 89(3), 363.</li> <li>• Choi, S. W., Mak, T. S. H., &amp; O'Reilly, P. F. (2020). Tutorial: a guide to performing polygenic risk score analyses. <i>Nature protocols</i>, 15(9), 2759-2772.</li> </ul>

	<ul style="list-style-type: none"><li>• Neave, N. (2007). <i>Hormones and behaviour: a psychological approach</i>. Cambridge University Press (various chapters).</li><li>• Saunders, G., &amp; McGue, M. (2020). Behavioral and Molecular Genetics. In A. Wright &amp; M. Hallquist (Eds.), <i>The Cambridge Handbook of Research Methods in Clinical Psychology</i> (Cambridge Handbooks in Psychology, pp. 136-152). Cambridge: Cambridge University Press.</li><li>• Tarnoki, A.D., Tarnoki, D.L., Harris, J., Segal, N. (2022). <i>Twin Research for Everyone: From Biology to Health, Epigenetics, and Psychology</i>. Academic Press (various chapters).</li></ul>
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