



## Subject card

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                          |                                                                                                                                                                                                                                                                                                           |                                     |                                                                      |            |     |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------|------------|-----|
| Subject name and code                       | STRATEGIES AND TECHNIQUES OF EFFECTIVE LEARNING, PG_00070812                                                                                                                                                                                                                                                                                                                                                             |                                                          |                                                                                                                                                                                                                                                                                                           |                                     |                                                                      |            |     |
| Field of study                              | Economic Analytics                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          |                                                                                                                                                                                                                                                                                                           |                                     |                                                                      |            |     |
| Date of commencement of studies             | October 2026                                                                                                                                                                                                                                                                                                                                                                                                             |                                                          | Academic year of realisation of subject                                                                                                                                                                                                                                                                   |                                     | 2026/2027                                                            |            |     |
| Education level                             | first-cycle studies                                                                                                                                                                                                                                                                                                                                                                                                      |                                                          | Subject group                                                                                                                                                                                                                                                                                             |                                     | Obligatory subject group in the field of study                       |            |     |
| Mode of study                               | Full-time studies                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          | Mode of delivery                                                                                                                                                                                                                                                                                          |                                     | at the university                                                    |            |     |
| Year of study                               | 1                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          | Language of instruction                                                                                                                                                                                                                                                                                   |                                     | Polish                                                               |            |     |
| Semester of study                           | 1                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          | ECTS credits                                                                                                                                                                                                                                                                                              |                                     | 1.0                                                                  |            |     |
| Learning profile                            | general academic profile                                                                                                                                                                                                                                                                                                                                                                                                 |                                                          | Assessment form                                                                                                                                                                                                                                                                                           |                                     | assessment                                                           |            |     |
| Conducting unit                             | Administration, Faculty of Management and Economics -> Faculty of Management and Economics -> Faculties of Gdańsk University of Technology                                                                                                                                                                                                                                                                               |                                                          |                                                                                                                                                                                                                                                                                                           |                                     |                                                                      |            |     |
| Name and surname of lecturer (lecturers)    | Subject supervisor                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          | mgr Alina Guzik                                                                                                                                                                                                                                                                                           |                                     |                                                                      |            |     |
|                                             | Teachers                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                          |                                                                                                                                                                                                                                                                                                           |                                     |                                                                      |            |     |
| Lesson types                                | Lesson type                                                                                                                                                                                                                                                                                                                                                                                                              | Lecture                                                  | Tutorial                                                                                                                                                                                                                                                                                                  | Laboratory                          | Project                                                              | Seminar    | SUM |
|                                             | Number of study hours                                                                                                                                                                                                                                                                                                                                                                                                    | 0.0                                                      | 15.0                                                                                                                                                                                                                                                                                                      | 0.0                                 | 0.0                                                                  | 0.0        | 15  |
|                                             | E-learning hours included: 0.0                                                                                                                                                                                                                                                                                                                                                                                           |                                                          |                                                                                                                                                                                                                                                                                                           |                                     |                                                                      |            |     |
| Learning activity and number of study hours | Learning activity                                                                                                                                                                                                                                                                                                                                                                                                        | Participation in didactic classes included in study plan |                                                                                                                                                                                                                                                                                                           | Participation in consultation hours |                                                                      | Self-study | SUM |
|                                             | Number of study hours                                                                                                                                                                                                                                                                                                                                                                                                    | 15                                                       |                                                                                                                                                                                                                                                                                                           | 1.0                                 |                                                                      | 9.0        | 25  |
| Subject objectives                          | To prepare students to consciously and effectively plan and improve their own learning process by applying strategies and techniques that support memory, comprehension, and knowledge transfer, based on knowledge of learning psychology and study skills methodology, as well as to develop attitudes related to responsibility for personal development and lifelong learning in academic and professional contexts. |                                                          |                                                                                                                                                                                                                                                                                                           |                                     |                                                                      |            |     |
| Learning outcomes                           | Course outcome                                                                                                                                                                                                                                                                                                                                                                                                           |                                                          | Subject outcome                                                                                                                                                                                                                                                                                           |                                     | Method of verification                                               |            |     |
|                                             | [K6_U06] acquires specialized knowledge in the field of economic analytics, demonstrating the ability to effectively plan individual work and pursue lifelong learning.                                                                                                                                                                                                                                                  |                                                          | is able to plan and organize the process of acquiring specialized knowledge in study field by applying effective learning strategies and techniques, including setting learning goals, selecting appropriate individual work methods, and monitoring their progress within a lifelong learning framework. |                                     | [SU4] Assessment of ability to use methods and tools                 |            |     |
|                                             | [K6_K03] is prepared to critically assess the knowledge they possess, which is necessary for solving cognitive and practical problems, and to supplement any gaps with opinions from external experts.                                                                                                                                                                                                                   |                                                          | is ready to critically evaluate their knowledge and applied learning strategies in solving cognitive and practical problems, particularly by identifying personal competence gaps and using expert opinions and specialized sources to improve their own learning process.                                |                                     | [SK5] Assessment of ability to solve problems that arise in practice |            |     |

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| Subject contents                                               | Course content – exercises<br>1. Introduction to the learning process and cognitive mechanisms involved in knowledge acquisition<br>2. Differences between passive and active learning and their impact on knowledge retention<br>3. Active learning strategies<br>4. Deep processing of information in the learning process<br>5. Mechanisms of forgetting and strategies for long-term knowledge retention<br>6. Knowledge retrieval strategies and learning through testing<br>7. Techniques for effective memorization and mnemonic methods<br>8. Meta-learning and developing awareness of ones own learning strategies<br>9. Common cognitive errors related to learning<br>10. Using images, associations, and multiple cognitive channels in learning<br>11. The role of motivation in the learning process and stimulating dormant curiosity<br>12. The influence of stress and emotions on the learning process and methods of regulating cognitive tension<br>13. Conditions conducive to concentration<br>14. Planning the learning process over time and strategies of spaced repetition<br>15. Time management, cognitive energy management, and learning environment management<br>16. Self-regulation and building learning habits<br>17. Use of digital tools (including AI) that support the learning process |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                               |
| Prerequisites and co-requisites                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                               |
| Assessment methods and criteria                                | Subject passing criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Passing threshold                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Percentage of the final grade |
|                                                                | Individual report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 60.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 60.0%                         |
|                                                                | Tasks completed during the classes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 60.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 40.0%                         |
| Recommended reading                                            | Basic literature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1. Brown P. C., Chabrajska D., McDaniel M. A., Roediger H. L. 2016. Harvardzki poradnik skutecznego uczenia się. Warszawa: Instytut Wydawniczy Pax.<br>2. Daniel L. Schwartz, Jessica M. Tsang, Kristen P. Blair, 2017 Jak się uczymy? 26 naukowo potwierdzonych mechanizmów, Wydawnictwo Naukowe PWN<br>3. Gołębiowska-Szychowska, Szychowski Ł. 2019. Powiem ci, jak się uczyć. Przewodnik dla ambitnych nauczycieli i rodziców<br>4. Robert M. Martin. 2024. Metody efektywnej nauki. Praktyczny podręcznik, Sensus<br>5. Dehaene S. 2022., Jak się uczymy? Dlaczego mózgi uczą się lepiej niż komputery... jak dotąd. Copernicus Center Press<br>6. Leitner S. 2011., Naucz się uczyć. Cztery Głowy |                               |
|                                                                | Supplementary literature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1. Kotarski R., 2017. Włam się do mózgu, Altenberg<br>2. Boral B., Boral T., 2022., Techniki zapamiętywania. Ucz się od mistrzów pamięci!, Samo Sedno<br>3. Young, S, H., 2024., Zostań ultrasamoukiem. Jak opanować twarde umiejętności w zadziwiająco krótkim czasie, Sensus<br>4. Pool R., Anders E., 2020., Droga na szczyt. Jak ćwiczyć, aby osiągnąć mistrzowską biegłość w dowolnej dziedzinie. Freedom Publishing<br>5. Oakley B., Rogowsky B., Sejnowski T., J., 2021., Naucz się nauczania, Sensus<br>6. Boser U., 2017., Learn Better, Rodale Books                                                                                                                                          |                               |
|                                                                | eResources addresses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                               |
| Example issues/<br>example questions/<br>tasks being completed | <ul style="list-style-type: none"><li>• Analysis of one's own learning strategies and identification of factors that facilitate and hinder learning</li><li>• Comparison of passive and active learning methods using selected material as an example</li><li>• Designing test questions that support learning by extracting knowledge</li><li>• Analysis of typical cognitive errors related to the assessment of one's own knowledge</li><li>• Identification of factors affecting concentration and learning effectiveness</li><li>• Application of selected memorization techniques and mnemonics in learning new information</li><li>• Development of a revision plan using the strategy of spaced learning</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                               |
| Practical activites within the subject                         | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                               |

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