DESCRIPTION OF THE COURSE OF STUDY

| Course code | | 0541.6.MAT1.E.PD | | | | |
|-------------|---------|--------------------------|--|--|--|--|
| Name of the | Polish | Pracownia dyplomowa | | | | |
| course in | English | Bachelor Thesis Workshop | | | | |

1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

| 1.1. Field of study | mathematics |
|------------------------------------|-------------------------------------|
| 1.2. Mode of study | full-time studies |
| 1.3. Level of study | Undergraduate (Bachelor) |
| 1.4. Profile of study* | general academic profile of studies |
| 1.5. Person/s preparing the course | dr Magdalena Nowak |
| description | |
| 1.6. Contact | mnowak@ujk.edu.pl |

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

| 2.1. Language of instruction | Polish and English | | |
|------------------------------|--|--|--|
| 2.2. Prerequisites* | Lectures connected with the subject of the | | |
| | seminar | | |

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

| 3.1. Form of classes | | workshop |
|-------------------------|------------------|--------------------------------------|
| 3.2. Place of classes | | classes in the UJK teaching room |
| 3.3. Form of assessment | | graded credit |
| 3.4. Teaching n | nethods | Project, case study, discussions |
| 3.5. Bibliogra | Required reading | Depending on the subject of lectures |
| phy | Further reading | |

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES

4.1. Course objectives (including form of classes) Workshop:

- C1 deepening of knowledge in the selected field of mathematics
- C2 acquiring skills of preparing and editing the diploma thesis
- C3 acquainting students with the literature on a selected topic
- C4 improving the ability to prove mathematical theorems and select counterexamples
- C5 implementing to precisely formulate the results of own work in oral and written form
- C6 obtaining proficiency in independent planning of work and searching for necessary information
- C7 forming an attitude characterized by systematicness and independence towards the tasks to be performed

4.2. Detailed syllabus (including form of classes)

Workshop:

- 1. Collection of professional literature in terms of the topic of the thesis. Translation from English of excerpts
- articles. Selection of available literature in terms of the topic of the thesis.
- 2. Assimilation of specialized knowledge and terminology (including foreign language terminology).
- 3. Collection of materials, (possibly) conducting a computational experiment, substantive and technical guidance.
- 3. Formulation of the topic of the work, selection of substantive content, examples and counter-examples.
- 4. Development of results and writing of the thesis. Taking care of the completeness of the thesis and formal correctness.
- 5. Substantive guidance. Undergraduate thesis reviews.

4.3. Intended learning outcomes

| | <u> </u> | |
|---------|----------------------------------|-------------|
| a | | Relation to |
| , Po | A student, who passed the course | learning |
| 0 | | outcomes |

| | within the scope of KNOWLEDGE : | | | | |
|-----|---|-------------|--|--|--|
| W01 | Has a deepened knowledge from a chosen branch of mathematics | MAT1A_W01 | | | |
| | | MAT1A_W02 | | | |
| | | MAT1A_W03 | | | |
| | | MAT1A_W04 | | | |
| | | MAT1A_W05 | | | |
| | | MAT1A_W14 | | | |
| | | MAT1A_W17 | | | |
| W02 | Has an orientation in the current directions of development of the selected field | MAT1A_W01 | | | |
| | of mathematics and its applications | MAT1A_W02 | | | |
| | within the scope of ABILITIES: | | | | |
| U01 | Constructs mathematical reasoning: proves theorems, selects counter-examples | MAT1A_U01 | | | |
| | to refute erroneous hypotheses. | MAT1A_U16 | | | |
| | | MAT1A_U19 | | | |
| U02 | Presents mathematical contents in oral and written form in miscellaneous | MAT1A_U01 | | | |
| | mathematical texts | MAT1A_U02 | | | |
| | | MAT1A_U16 | | | |
| U03 | Plans his work effectively. | MAT1A_U16 | | | |
| | | MAT1A_U18 | | | |
| | | MAT1A_U19 | | | |
| U04 | Finds ourselves information about the subject, also in foreign languages | MAT1A_U15 | | | |
| | | MAT1A_U19 | | | |
| | within the scope of SOCIAL COMPETENCE : | | | | |
| K01 | Precisely formulates questions to deepen one's own understanding of a topic or | MAT1A_K01 | | | |
| | to find missing pieces of reasoning | MAT1A_K06 | | | |
| | | MAT1A_K07 | | | |

| 4.4. Methods of a outcomes | issess | men | it or | tne | intei | naed | i iea | rnin | g | |
|----------------------------|--------|----------------------------|-------|-----------------|------------------|-----------------|-----------------|------|---|--|
| | | Method of assessment (+/-) | | | | | | | | |
| Teaching | Pı | Project* | | | Effort in class* | | Self-stud y* | | | |
| outcomes <i>(code)</i> | | Form of classes | | Form of classes | | Form of classes | | | | |
| | L | С | W | L | С | W | L | С | W | |
| W01 | | | + | | | + | | | + | |
| W02 | | | + | | | + | | | + | |
| U01 | | | + | | | + | | | + | |
| U02 | | | + | | | + | | | + | |
| U03 | | | + | | | + | | | + | |
| U04 | | | + | | | + | | | + | |
| K01 | | | + | | | + | | | + | |

| 4.5. Crit | 4.5. Criteria of assessment of the intended learning outcomes | | | | | |
|-----------------|---|---|--|--|--|--|
| Form of classes | Grade | Criterion of assessment | | | | |
| | 3 | at least 50% and no more than 60% of the total number of points possible | | | | |
| § | 3,5 | more than 60% and no more than 70% of the total number of points possible | | | | |
| Workshop | 4 | more than 70% and no more than 80% of the total number of points possible | | | | |
| rks | 4,5 | more than 80% and no more than 90% of the total number of points possible | | | | |
| Wo | 5 | more than 90% of the total number of points possible | | | | |

5. BALANCE OF ECTS CREDITS – STUDENT'S WORK INPUT

| | Student's workload | | |
|--|----------------------|--------------------|--|
| Category | Full-time studies | Extramural studies | |
| NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/ | 45 | | |
| Participation in seminars* | 45 | | |
| INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/ | 130 | | |
| Collection of materials | 45 | | |
| Editing the thesis | 85 | | |
| TOTAL NUMBER OF HOURS | 175 | | |
| ECTS credits for the course of study | 7 | | |

| Accepted for execution (date and legible signatures of the teachers running the course in the given | academic |
|--|----------|
| year) | |
| | |
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