

## Karta przedmiotu / Course description

| Informacje ogólne o przedmiocie / General information about the course   |   |
|--|---|
| <b>1. Kierunek studiów / Major of study:</b><br>Pharmacy   | <b>2. Poziom kształcenia / Study level:</b> uniform master's studies<br><b>3. Forma studiów / Form of study:</b> stationary |
| <b>4. Rok / Year:</b> I  | <b>5. Semestr / Semester:</b> I or II   |
| <b>6. Nazwa przedmiotu / Course name:</b> Pharmaceutical botany  |   |
| <b>7. Status przedmiotu / Course status:</b> compulsory  |   |
| <b>8. Jednostka realizująca przedmiot, adres, e-mail:</b><br><b>Name of Department, mailing address, e-mail:</b> Department of Pharmaceutical Botany and Herbalism, Faculty of Pharmacy, <a href="mailto:botanikasekr@sum.edu.pl">botanikasekr@sum.edu.pl</a> , ul. Ostrogórska 30, 41–200 Sosnowiec, Poland   |   |
| <b>9. Treści programowe przedmiotu Course contents:</b> Basic study on plant cell, plant tissue, plant morphology with special attention to medicinal plants.  |   |
| <b>10. liczba godzin z przedmiotu / Number of hours for the course</b>   | <b>30</b>   |
| <b>11. liczba punktów ECTS dla przedmiotu / Number of ECTS points for the course</b>   | <b>2</b>  |
| <b>12. Formy i tematy zajęć / Forms and topics of classes</b><br><b>12.1. Lectures</b><br>Plant cell. Plant anatomy. Plant morphology. Mosses and fern-allies. Vocabulary of phytotherapy and herbalism. A review of Angiosperms. A review of Monocots and Gymnosperms. Herbarium.<br><b>12.2. Seminars</b><br>–<br><b>12.3 Laboratory classes</b><br>Field classes<br>Introductory class. Occupational safety and health in a botanical lab. Regulations of the botanical lab and course. Methodology of herbarium of medicinal plants as a tool for botanical documentation. Course handbooks and aid in identification of plants. Operation of optical microscope. Specimen preparation. Methodology of botanical drawing. Structure of plant cell. Crystalline substances and storage organelles. Leaf anatomy, covering tissues: epidermis and its cell differentiation (stomata, trichomes). Secretory and excretory structures.<br>Anatomy of axial organs (rhizome, roots, stem). Meristems (primary and secondary). Mechanical tissues.<br>Morphology of generative organs. Fundamentals of morphology-based systematics and practical identification of species of medicinal plants.<br>Non-generative organs of plants (morphology).<br>Selected bryophytes and fern-allies plants.<br>Identification of medicinal and toxic ferns and fern-allies.<br>Selected medicinal dicot plants, part 1. Fundamentals of identification of flowering plants.<br>Selected medicinal dicot plants, part 2. Identification of flowering plants.<br>Selected medicinal dicot plants, part 3. Identification of flowering plants.<br>Selected medicinal monocot plants and gymnosperms. Identification of flowering plants.<br>Medicinally and pharmaceutically important fungi, lichens, algae and seaweeds.<br>Summary classes. | <b>Liczba godzin<br/>Number of<br/>hours</b>  |
| <b>13. Literatura / Readings</b>   |   |

**14. Kryteria oceny – szczegóły / Detail evaluation criteria**

Zgodnie z zaleceniami organów kontrolujących / In accordance with the recommendations of the inspection bodies

Zaliczenie przedmiotu - student osiągnął zakładane efekty uczenia się / Completion of the course – student has achieved the assumed learning outcomes

Szczegółowe kryteria zaliczenia i oceny z przedmiotu są zamieszczone w regulaminie przedmiotu / Detail criteria for completion and evaluation of the course are specified in the course regulations