SUBJECT TEACHING GUIDE (SYLABUS)

NAME OF THE UNIT CONDUCTING THE DIRECTION:
Department of Biomedicine and Experimental Surgery, Department of Endocrinology, Medical University of Lodz.

EDUCATION PROFILE: General Academic

LEVEL OF EDUCATION: 3 Degree (Doctoral School)

1. **Subject Name:** Practical issues of surgical wound suturing

2. **Type of subject:** Optional.

3. **Course Objectives:** ACQUIRING PRACTICAL KNOWLEDGE ABOUT THE CIRCUMSTANCES OF WOUND FORMATION, TYPES OF WOUNDS AND THEIR SURGICAL TREATMENT.

4. **Form of study:** Doctoral School

5. **Year of study: -**

6. **Form of classes and number of hours for each form of classes:** Optional classes (seminars) - stationary classes at 60 Narutowicza Street - 20 hours.

7. **Name and surname of the lecturer:**
   Zbigniew Pasieka, DSc,
   Piotr Arkuszewski, PhD,
   Karol Kłosiński, PhD,
   Paula Zdanowicz, PhD.

8. **Teaching methods:**
   Verbal transmission, practical classes, multimedia presentations, demonstrations, case-study method.

9. **Scope:**
   Part 1 (5 hours)
   a) History of wound suturing.
   b) Basic surgical instruments.
   c) Classification of surgical sutures and needles and their practical applications, mechanical tissue suturing – staplers and practical aspects of using them:
   - absorbable and non-absorbable sutures of natural and synthetic origin,
   - physical and biological properties of sutures,
   - sizes of surgical sutures and the use of each size,
   - types of surgical needles,
   - principles of selecting needles and sutures for suturing specific tissues,
   - presentation of staplers and their operation.

Part 2 (5 hours)
a) Wounds and wound healing. General principles of surgical and non-surgical wound care:
- overview of the wound healing process, including its individual phases and types of wound healing;
- Types and classification of wounds based on their origin and degree of contamination,
- Principles of wound management based on their location, degree of contamination, and time elapsed since their inception,
- Complications of wound healing.
b) Basics of surgical suturing:
- Discussion of basic surgical knots and learning how to tie them using only your hands,
- Basic surgical instruments and learning how to use them, learning how to tie surgical knots using surgical instruments,
- Learning how to thread surgical sutures onto a needle,
- Learning how to properly grasp a needle with a surgical instrument.

Part 3 (5 hours)
- Techniques for placing single-knot sutures: simple, vertical mattress, horizontal mattress, partially buried vertical mattress, partially buried horizontal mattress, and doubled, and a discussion of the applications of these sutures.
- Techniques for placing continuous sutures: simple, interleaved, intradermal, vertical mattress, and horizontal mattress, and a discussion of the applications of these sutures.

Part 4 (5 hours)
- Techniques for placing selected surgical sutures used in specific situations: purse-string suture, Z-suture suture, submerged knot suture, near-far-far-near-suture suture, and invaginating suture, as well as a discussion of the applications of these sutures.
- Advanced practice in surgical suture placement techniques,
- Learning how to properly remove sutures.

10. Learning outcomes

Knowledge: Gaining theoretical and practical knowledge about the mechanisms of wound formation and the principles of wound management, as well as knowledge about the types of surgical sutures used today – including the materials from which the sutures are made and the techniques of suturing.

Skills: Acquiring practical skills in surgical suturing of wounds and the principles of procedure applicable to the surgical management and treatment of wounds.

Social competences: The ability to convey knowledge to other people about the circumstances of wound formation, principles of dressing and types of sutures used, as well as the ability to communicate with the patient on topics related to wounds.

11. List of primary literature:

- Marek Trybus. PODSTAWY SZYCIA CHIRURGICZNEGO. Medycyna Praktyczna, Kraków 2006, wyd. III.
- Jan Fibak. CHIRURGIA. Podręcznik dla studentów. PZWL, Warszawa 2013, wyd. 3

12. Methods and ways of verification of learning outcomes, including the form and conditions for passing the course: Credit for the course is awarded on the basis of attendance

and activity in class. Attendance at a minimum of 50% of classes is required to receive positive credit.

13. Additional Information:

- **Contact information to the lecturers:** Karol Kłosiński, karol.klosinski@umed.lodz.pl; 427275318.
- **Class dates:** To be determined with PhD students

14. Statement of the leader and his signature:

I declare that the curricular content contained in this syllabus is the result of my individual creative work performed within the framework of an employment/collaborative relationship arising from a civil law contract, and that no third parties are entitled to copyright on this account.

15. Signature of the Director of the Doctoral School:

16. Date: