

Orthopedic and Spinal Surgery

(Code:4857, 1st – 2nd year, 4 units)

(Course ID: GS—c4857—S)

1. Instructors

Name	Position	Department	Contact Information
YOSHII Toshitaka	Chief Instructor / Professor	Department of Orthopedics	yoshii.orth@tmd.ac.jp

2. Classroom/Lab Lecture Location

Orthopedic Surgery Office Room, Lab room (21st floor, M&D tower) or online

3. Course Purpose and Outline

This course aims to develop students with up-to-date knowledge of the pathophysiology of bone and joint disorders, as well as spinal and spinal cord diseases. Through the use of molecular biological techniques and disease model animals, students will conduct analyses of disease mechanisms. Ultimately, this course seeks to contribute to the development of therapeutic strategies for these conditions.

4. Format

Student-centered, small-group learning for graduate students.

5. Course Details

This course will cover recent research on age-related degeneration and metabolism of bone and cartilage, neurological disorders caused by spinal and spinal cord diseases, and the regeneration of bone, cartilage, and neural tissues.

Students will review selected research papers and present their own research in Research Progress Meetings, with guidance on research planning and experimental methods.

6. Grading Rule

Evaluation will be conducted out of 100 points as follows:

- Attendance at journal and Research Progress Meetings (60 points)
- Full attendance will receive the maximum score of 50 points, and scores will be assigned according to the attendance rate.
- Research activities and presentations (40 points)
- Evaluation will be based on Research Progress Meeting presentations, research notes, and research outcomes such as conference presentations and publications.

7. Grading System

Evaluation will be based on participation, contributions to discussions, and reports.

8. Preparation and Self-Study

Students are expected to attend the basis journal club held twice a week at 7:30 a.m. and the clinical journal club held once a week, and to review the material and engage in self-study.

9. Textbooks

1. 標準整形外科学 (ISBN:9784260049368)

Author: 井樋, 栄二, 1956-, 津村, 弘, 田中, 栄, 整形外科学, 高木, 理彰, 松田, 秀一, 井樋栄二,
津村弘 監修, 田中栄, 高木理彰, 松田秀一 編集, 井樋栄二 [ほか] 執筆

Publisher: 医学書院

Year: 2023.2

2. リハビリテーション医学・医療コアテキスト (ISBN:9784260049597)

Author: 日本リハビリテーション医学教育推進機構, 日本リハビリテーション医学会, 久保, 俊一,
1953-, 角田, 亘, 1966-, 佐浦, 隆一, 三上, 靖夫, 日本リハビリテーション医学教育推進機構, 日本
リハビリテーション医学会 監修, 久保俊一 総編集, 角田亘, 佐浦隆一, 三上靖夫 編集

Publisher: 医学書院

Year: 2022.3

10. Reference Materials

Students are expected to conduct literature searches related to their own research topics and read relevant review articles as appropriate.

11. Related Courses

Collaborative with other fields and research institutions is also possible.

12. Office Hours

Mon – Fri: 9:00 AM – 17:00 PM

Contact: YOSHII Toshitaka, Department of Orthopedic

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13. Note(s) to Students

None