

Practical Year Logbook

Surgery

Surname, name			
Term number	Start of term	End of term	

Surgery at the University Hospital Munich (LMU Klinikum)

- **Klinik für Allgemein-, Viszeral- und Transplantationschirurgie (general, abdominal and transplantation surgery)**
Director: Prof. Dr. med. Jens Werner
- **MUM – Muskuloskelettales Universitätszentrum München (trauma surgery and orthopedics)**
Director: Prof. Dr. med. Wolfgang Böcker
- **Herzchirurgische Klinik und Poliklinik (cardiac surgery)**
Director: Prof. Dr. med. Christian Hagl
- **Abteilung für Thoraxchirurgie (thoracic surgery)**
Director: Prof. Dr. med. Rudolf A. Hatz

Addresses

Campus Großhadern	Campus Innenstadt
Marchioninistraße 15	Ziemssenstraße 5
81377 München	80336 München

(Cardiac and thoracic surgery only in Großhadern)

Teaching Hospitals for Surgery of the LMU

- Artemed Klinikum München Süd
- Asklepios Fachkliniken München-Gauting
- Asklepios Stadtklinik Bad Tölz
- Helios Amper-Klinikum Dachau
- Helios Klinik München Perlach
- Helios Klinikum München West
- InnKlinikum Altötting und Burghausen
- Klinikum Augsburg
- Klinikum Dritter Orden München-Nymphenburg
- Klinikum Fürstenfeldbruck
- Klinikum Garmisch-Partenkirchen
- Klinikum Ingolstadt
- Klinikum Kaufbeuren (Kliniken Ostallgäu-Kaufbeuren)
- Klinikum Landshut
- Klinikum Memmingen
- Klinikum Starnberg
- Klinikum Traunstein (Kliniken Südostbayern)
- Klinikverbund Allgäu – Klinik Mindelheim
- Krankenhaus Agatharied, Hausham
- Krankenhaus Martha-Maria München
- Krankenhaus Neuwittelsbach
- Kreisklinik Bad Reichenhall (Kliniken Südostbayern)
- Kreisklinik Wolfratshausen
- Maria-Theresia-Klinik, München
- München Klinik Harlaching
- München Klinik Neuperlach
- München Klinik Schwabing
- RoMed Klinik Prien am Chiemsee
- RoMed Klinikum Rosenheim

Practical Year Logbook for Students in the Term

Surgery

Surname, Name _____

Date of Birth _____

Matriculation Number _____

Home University University of Munich (LMU)

Address _____

Phone Number _____

Email _____

Current Term Start _____ End _____

Term Number 1 2 3

Hospital Name _____

Completed Terms Internal Medicine Elective

I am spending half of my term abroad. Yes No
I am spending my complete term abroad. Yes No

Country _____

Abbreviations

PJ... Praktisches Jahr (Practical Year, final year of undergraduate medical studies in Germany)
LMU... Ludwig-Maximilians-Universität München (University of Munich)

Dear Students in the Practical Year,

We are happy to present to you this logbook for surgery. It describes all the competences and practical skills you should acquire during this term. The purpose is to ensure an ideal preparation for your upcoming responsibilities as a medical professional and to close any gaps in your theoretical and practical knowledge. Ideally, this should prepare you for the Third Part of the Medical Licensing Examination at the end of your PJ.

You should use this logbook to document your learning progress and get regular feedback from your responsible supervisor. You must take the initiative and request assistance with learning from the on-call doctors if you need additional support.

A mentor will be there for any questions and problems you may encounter during this term and will also be responsible for supervising your learning progress.

Please make sure to complete this logbook thoroughly and to have the competences you acquire verified, as this logbook will be collected, checked, and evaluated by us. The certificate for the term you completed, which you need for the registration for the Medical Licensing Examination, will only be issued in exchange for this logbook.

We are always grateful for constructive feedback. To improve the logbooks and education, you will receive a link to an evaluation upon term completion. We appreciate you taking the time to thoroughly fill it out. Thank you in advance for your help.

We wish you an enjoyable and successful term!



Dr. med. Evi Fleischhacker

Representative of PJ of the Muskuloskelettales
Universitätszentrum (Trauma Surgery)

PD Dr. med. Petra Zimmermann

Representative of PJ of the Klinik für Allgemein-,
Viszeral- und Transplantationschirurgie (General
and Abdominal Surgery)



Prof. Dr. med. Wolfgang Böcker

Director of the Muskuloskelettales
Universitätszentrums



Prof. Dr. med. Jens Werner

Director of the Klinik für Allgemein-, Viszeral-
und Transplantationschirurgie



Prof. Dr. med. Martin Fischer

Dean of Studies of *Medicine (Clinical Portion)* of
the LMU



PD Dr. med. Matthias Angstwurm

Representative of PJ of the LMU

Table of Contents

General Information about the Practical Year	7
Maintaining the Logbook	7
Continuing Education.....	7
Voluntary Mock Exam During the PJ.....	8
Occupational Health Office	8
Vaccinations	8
Professional Liability Insurance.....	9
Stay Abroad	9
Logbook as a Basis for a Reference	9
Learning Objectives and Competences	10
Recommended Rotations in the Surgery Term	10
General Objectives.....	11
Personal Objectives.....	12
Specific Objectives	13
Practical Competences	13
Caring for Your Own Patients.....	18
Patients Evaluation of the PJ Student.....	19
Mentor Meetings.....	20
Mock Final Exam (optional)	20
PJ Seminar Topics	21
Additional Materials	22
Optional Additional Achievements	22
Evaluation of the PJ Student	23

General Information about the Practical Year

Contacts and Where to Find Information

Important information about the organization and the structure of the PJ can be found on the website of the Dean's Office of the Faculty of Medicine.

www.mecum.med.uni-muenchen.de

Information concerning the registration for and taking the Third Part of the Medical Licensing Examination are available at the Examination Office

Prüfungsamt zur Durchführung der Prüfungen nach der Approbationsordnung für Ärzte im Auftrag der Regierung von Oberbayern

(Examination Office for the Execution of the Examination in Accordance with Licensing Regulations for Physicians commissioned by the Government of Upper Bavaria)

Postal address: Geschwister-Scholl-Platz 1, 80539 München, GERMANY

Office: Amalienstraße 52, 80799 München

www.lmu.de/de/studium/wichtige-kontakte/pruefungsaemter/pruefungsamt-medizin/
Humanmedizin.pa@verwaltung.uni-muenchen.de

For questions about organization, please contact the PJ Office of the Dean of Faculty of Medicine.

PJ-Büro des Dekanats der Medizinischen Fakultät der LMU

(PJ Office of the Dean of the Faculty of Medicine of the LMU)

Bavariaring 19, 80336 München, GERMANY

pj-buero@med.uni-muenchen.de

For questions regarding the logbooks or education, contact the education director of your respective hospital or the Central PJ Coordination.

Zentrale PJ-Koordination

(Central PJ Coordination)

Raum D0.48 im ZeUS, Pettenkoferstraße 8a, 80336 München, GERMANY

PJ_Koordination@med.uni-muenchen.de

Maintaining the Logbook

You are obligated to maintain this logbook conscientiously. Your mentor will review and verify your learning objectives. In case you do not achieve the minimum number of points required, the term will have to be repeated.

To receive the certification of completion of the PJ, you must submit the logbook to the Central PJ Coordination.

Continuing Education

Please inform yourself at your clinic about the educational offers. According to the principle *learning through teaching*, you will have the possibility to make your own contributions, e.g. by presenting your own patients or preparing a seminar. You will find a list of possible topics in the section *Educational Objectives and Competences*. Register your contributions in the section *Additional Contributions*.

Voluntary Mock Exam During the PJ

If possible, every clinic should offer voluntary assessments, including a mock exam for practical year students. In the mock exam, similar to the Third Part of the Medical Licensing Examination, your mentor will assign you a patient for whom you will have a defined time period to take a medical history, perform a physical examination, and write an epicrisis. Your mentor will subsequently review your report and simulate an oral-practical exam. There is no danger of failing the term due to an insufficient performance in the mock exam. Ask your clinic if such an exam is offered. The Central PJ Coordination provides different formats for exam preparation. More information about this can be found on the homepage.

Occupational Health Office

According to section 4 and annex part 2 paragraph 1 of the Ordinance on Preventive Occupational Health Care (Verordnung zur arbeitsmedizinischen Vorsorge, ArbMedVV), the LMU requires an occupational health examination performed by the LMU's Occupational Medical Office prior to the start of the practical training components. The scope of the examination is based on the type and extent of your potential risk.

You can make an appointment with

**Betriebsärztlicher Dienst der LMU
(Occupational Health Office of the LMU)**
Goethestraße 31, 80336 München, GERMANY
Tel: +49 89 2180-73904 oder -73906
Betriebsarzt@lmu.de

If you do not want to use the offered service of the Occupational Health Office of the LMU, you can complete the examination with and receive valid certification from a physician authorized by the ArbMedVV

However, the LMU will not cover the expense. In this case, the student is responsible for any costs. Priorly issued valid certificates (in accordance with section 6 paragraph 3 no. 3 ArbMedVV) are generally accepted.

Vaccinations

According to the *EU Directive on the protection of workers from risks related to exposure to biological agents at work*, students at the LMU have the opportunity of receiving occupation-related vaccinations free of charge if their vaccination status is unclear or incomplete. To do this, please make an appointment with the LMU Occupational Medicine Office.

Please note that according to section 2 paragraph 9 of the *Law of the Prevention of Infection (Infektionsschutzgesetz, IfSG)* you are obligated to have a sufficient measles vaccination status or immunity against measles. For the protection of patients, as well as yourself, you should have immunization against COVID-19, mumps, rubella, diphtheria, varicella, pertussis, hepatitis B, influenza, and in areas of risk, additionally against hepatitis A. Please inform yourself in your clinic which vaccines are required.

Professional Liability Insurance

Damage caused to third parties by students during their PJ is usually covered by the professional liability insurance of the university hospital or the teaching hospital. Students of the LMU who spend their term abroad are not covered by the university or the teaching hospital. We therefore explicitly recommend that you insure yourself additionally against the risk of personnel injury and property damage caused by you.

Stay Abroad

Even if you are spending the term abroad, you are required to maintain the LMU logbook. Please document a term abroad in the correspondent pages. In case you are completing the whole term or the last part of your term abroad, we ask you to hand in your logbook at the Central PJ Coordination after your return. If a certificate of equivalence is required for the term abroad, the logbook must be shown to the PJ Representative before it is handed in. In any case, we recommend you consult the Examinations Office before starting a term abroad to ensure that it will be recognized.

Logbook as a Basis for a Reference

If you wish to receive a reference from your term, please communicate this to the administration of the respective clinic. In case you voluntarily complete on-call duties, shadowing, etc., note this in the section *Additional Materials*, including the date and signature so that it can be considered in the reference.

Learning Objectives and Competences

The German National Competence-based Catalog of Learning Objectives in Medicine (Nationaler Kompetenzorientierter Lernzielkatalog Medizin, NKLM) in version 2.0 of 2021 defines your future occupation as a doctor in various roles. The surgery term should develop skills in professional behavior and mannerisms. Communication and consultation as a qualified expert are essential for teamwork.

Recommended Rotations in the Surgery Term

In your surgery term, you should rotate for 4 weeks in trauma surgery and 4 weeks in general surgery. We highly recommend these rotations. Two 4 week blocks for rotations of your choice remain. With this, we want to guarantee a standardized training in the field of surgery, as well as offer a specialization in various surgical subspecialties.

The following options are possible in addition to the main rotations:

- Advanced trauma surgery
- Abdominal surgery
- Thoracic surgery
- Emergency department
- Surgical intensive care unit (SICU)
- Outpatient surgical clinic

Please note that a rotation the surgical subspecialty of **cardiac surgery** is only possible at the University Hospital Munich (LMU Klinikum). In this case, only an **8 week rotation** is possible. You then automatically rotate in the remaining 8 weeks in general and trauma surgery.

	Discipline	From	To	Signature (doctor)
Main rotation	Trauma surgery			
	General surgery			
Elective rotation	<input type="radio"/> Advanced trauma surgery			
	<input type="radio"/> Abdominal surgery			
	<input type="radio"/> Thoracic surgery			
	<input type="radio"/> Emergency department			
	<input type="radio"/> Surgical intensive care unit (SICU)			
	<input type="radio"/> Outpatient surgical clinic			
	<input type="radio"/> Cardiac surgery (8 weeks, only LMU)			

General Objectives

At the end of the surgery term, you should have acquired the following skills:

- independent care for patients under the supervision of medical teaching staff
- responsibility towards the patient and your colleagues
- application of practical skills and connection with theoretical knowledge
- use of a differential diagnosis approach
- development of problem-oriented thinking
- formulation of preliminary diagnoses
- independent conception of an appropriate treatment plan
- research, application, and communication of current scientific findings.

Personal Objectives

Please define your personal learning objectives for this term in the following chart. In which areas do you see the need for improvement?

At the beginning of your term, determine how and when you will achieve your goals. Reevaluate these objectives in fixed intervals to see how far you have progressed.

Personal objectives	Done ✓

Specific Objectives

Practical Competences

At the beginning of the term, please assess your **own competences** (see below *Definition of competency levels*) and record the corresponding scores in the column *Start of term*.

During the course of your term, e.g., at the end of each rotation (approx. after 4 to 8 weeks) and at the end of the term, **your mentor or the responsible attending is required** to assess your competences. In your presence, they record the competences you achieved in the other two columns (midterm and end of term) and confirm this with a signature/stamp. This allows you to identify corresponding deficits and, if necessary, specifically improve them in the next rotation.

Definition of competency levels

The different competency levels based on the NKLM are defined as follows:

- **Level 1: factual knowledge (1 point)**
The student has **theoretical knowledge** about a medical skill (facts, data).
- **Level 2: practical knowledge (2 points)**
The student **has seen** the medical skill implemented on a patient or in a demonstration. They should be able to explain the facts and place them in a clinical-scientific context.
- **Level 3: implementation under supervision (3 points)**
The student **has implemented the medical skill on a patient under supervision or demonstrated it in a simulation.**
- **Level 4: independent implementation (4 points)**
The student, knowing the consequences, has implemented the medical skill **independently** and **appropriately** to the situation and is experienced in its application.

General medical skills	Start of term	Mid-term	End of term	Goal
Appropriate doctor-patient communication and communication with patients' relatives				4
Structured patient interview				4
Structured physical examination (incl. neurological examination)				4
Care of patients in isolation (hygiene)				4
Presentation of patients, including differential diagnoses and treatment proposals				4
Implementation of various microbiological methods to detect pathogens (e.g. swab, blood culture)				4
Prepare discharge notes/epicrisis				4
Drawing of venous blood and establishment of peripheral venous access				4
Surgical hand disinfection				4

Skin and mucous membrane disinfection of patients				4
Don sterile gowns correctly and safely, work sterilely				4
Removal of drains (e.g, chest drain, Jackson-Pratt drain)				4
Professionally and sterilely change dressing				4
Proper removal of sutures				4
Conduction and interpretation of an ECG				4
Perform medical rounds on own patients				3
Adequate thrombosis prevention				3
Ordering of emergency laboratory testing				3
Basic principles of emergency treatment (CPR)				3
Check vital signs, determine Glasgow Coma Scale (GCS)				3
Knowledge of indication and interpretation of X-ray scans				3
Issue sick notes and prescriptions				3
Conduct informed-consent discussions about procedures, therapy, and diagnoses				2

Working in a team	Start of term	Mid-term	End of term	Goals
Participation in team meetings between different profession groups				2
Participation in rounds with different profession groups				2
Care of patients in a team of different profession groups				4
Work in a team with different professional groups				4
Participation in an interdisciplinary case discussion				2
Cooperation with different medical disciplines, obtain consultations				3

Special medical skills	Tertial- beginn	Tertial- hälfte	Tertial- ende	Ziel
Examination of large joints and the spine, as well as correctly describe axis deformities and gait abnormalities				4
Examination of range of motion				4
Preparation and performing of surgical wound care, incl. skin suture				3
Ultrasound, including Doppler ultrasound				3
Arterial puncture, interpretation of blood gas analysis				3
Application of local anesthesia and block anesthesia (Oberst-block)				3
Knowledge of guidelines for tetanus prophylaxis and correct vaccination of tetanus				3
Application of a shoulder sling				3
Application of a spica cast or a compression bandage				3
Skin sutures in the operating room				3
Knotting and stapling in the operating room				3
Sewing drains in the operating room				3
Application of a sterile dressing in the operating room				3
Operation of the camera during a laparoscopy or arthroscopy				3
Blood group determination, bedside test				3
Preparation of blood transfusions (technology, materials, procedure)				2
Emergency examination according to the ATLS®-scheme				2
Cystostomy/Arthrocentesis				2
Placement of a feeding tube				2
Application of a chest drain and collection container				2
Insertion of a Foley catheter				2
Placement of an arterial line				2
Placement of a central venous catheter				2

Reposition of a dislocated joint				2
Casts and other immobilization techniques, athletic taping				2
Participation in emergency room treatment				2
Methods of an accident insurance consultant				2

Surgical procedures	Start of term	Mid-term	End of term	Goal
Appendectomy				2
Cholecystectomy				2
Bowel resection				2
Hernia repair				2
Thyroid surgery				2
Osteosynthesis				2
Endoprosthesis implantation				2
Arthroscopy				2
Metal removal				2
Amputation				2
Bypass surgery and stent implantation				2
Variceal surgery				2
Placement of catheters (port, Hickman line, permacath, ...) or shunts				2

	Start of term	Mid-term	End of term	Goal
Sum				197

Minimum number of points: 137

Sum at midterm	Date and signature (doctor)
Sum at the end of the term	Date and signature (doctor)

The targeted competency level in the column on the right can be exceeded depending on available opportunities and your instructor's willingness to teach. Therefore, your overall score can be above 100 %.

Caring for Your Own Patients

An essential part of the PJ is the independent care of patients under the supervision of a specialist who will be at your side if you have any questions or problems. After an onboarding phase and proof of sufficient knowledge, you will take over the care of the patients. You should admit the patients yourself, initiate a diagnostic and treatment plan, discuss the results with the patients, and write the discharge note. You should also round on your patients daily.

	Diseases	Date	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Patients Evaluation of the PJ Student

To achieve the best possible development of your medical competences, feedback is important, especially from your patients. Have the patient fill out the form alone and discuss it with you afterwards. This is compulsory for at least one patient. Ideally, this should happen every four weeks. To do this, you can cut out and copy the attached form *Evaluation of the PJ Student*, which you may find in the section *Additional materials*.

	Disease	Date
1		
2		
3		
4		
5		

Mentor Meetings

At the beginning of every term, a doctor should be assigned as your mentor. If this does not happen, actively ask one of the doctors on your service to be your mentor. Your mentor is there to support you in your training during the PJ. They should help you achieve the learning objectives set at the beginning of term, answer questions, and help solve problems that may arise while you are on their service. Once a month, you should meet with your mentor to track your progress and ensure you are able to meet all the goals you set for yourself in this term.

My mentors

	Date	Signature (mentor)
Kick-off meeting		
Intermediate meeting 1		
Intermediate meeting 2		
Final meeting / evaluation		

Mock Final Exam (optional)

Evaluation

Date and signature (examiner)

PJ Seminar Topics

During your term, you should continue your education in the following areas and, if necessary, attend seminars.

Basics of surgical therapy	
Traumatology I	First aid for polytraumatized patients
Traumatology II	Basic principles of fracture treatment
Traumatology III	Joint injuries, rehabilitation
Wound care	
General surgery I	Acute abdomen
General surgery II	Intestinal surgery, inflammatory bowel diseases
General surgery III	Stomach, esophagus, gastrointestinal bleeding
General surgery IV	Pancreas, spleen
General surgery V	Liver, gallbladder
Hernias	
Thyroid surgery	
Cardiac surgery	
Septic surgery	
Traumatic brain injury	
Assessment of an occupational accident and expert report	

Additional Materials

Optional Additional Achievements

Here you can register your additional achievements and courses during the PJ, e.g...

- own presentations
- case presentations as part of a PJ seminar
- courses in ultrasound, suturing, ECG, CPR, etc.

Type of additional achievement	Date	Signature



Surname, name of

Term number

Evaluation of the PJ Student

Dear Patient,

Your care was supervised by a medical student in the last year of their studies. To further promote and improve the development of the student, we kindly ask you to assess their current communication skills.

Please mark the appropriate answer.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The student showed interest and empathy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt mutual respect and appreciation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The student took enough time for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I was being taken seriously.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The information given to me was conveyed to me in an understandable way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I had the chance to speak.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verbal and non-verbal communication and the behavior of the student were consistent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had the feeling that the student was competent and was able to answer my questions adequately.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would have preferred not to have been supervised by any student.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The student was available to me if I had any questions/problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could see the student becoming my doctor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please describe the student's working methods and your impression of them in your own words. (Use the back if necessary.)

Which aspects could the student still improve upon? What would you wish for the future? (Use the back if necessary.)

Postal address for returning the logbook

LMU Klinikum
Zentrale PJ-Koordination
Raum D0.48 im ZeUS
Pettenkofersstraße 8a
80336 München
GERMANY

Imprint

Editor

Zentrale PJ-Koordination des Klinikums der Universität München Anstalt des öffentlichen Rechts
(Central PJ Coordination of the University Hospital Munich)
Pettenkofersstraße 8a, 80336 München, GERMANY
Email: PJ_Koordination@med.uni-muenchen.de

Concept and text

PD Dr. med. Matthias Angstwurm, Prof. Dr. med. Martin Fischer, Prof. Dr. med. Martin Angele,
Prof. Dr. Matthias Siebeck, Dr. med. Evi Fleischhacker

Layout and design

Simon Millonig

Translation

Praskovia Ivanenko, Simon Millonig, Pia Lagler, Lucja Ciesieslka

4th edition, 2023, 8th German edition, 2022

We would like to thank our colleagues for their support in creating the logbooks.

The teaching content in the logbooks does not claim to be complete.