ACIBADEM MEHMET ALİ AYDINLAR UNIVERSITY

FACULTY OF PHARMACY

INTERNSHIP NOTEBOOK IV

PHAR 5.....

STUDENT'S AND INTERNSHIP PLACE INFORMATION

STUDENT'S

Name-Surname :

Student Number :

Academic Year :

E-Mail Address :

Mobile Phone :

Address :

PHARMACY/INSTITUTION/HOSPITAL INFORMATION

Pharmacy/Institution/Hospital Name :

Pharmacy/Institution/Hospital Phone Number :

Address :

E-Mail :

Pharmacist's/Responsible Person's Name-Surname :

Pharmacist's/Responsible Person's Stamp and Signature:

Internship Start and End Dates : ...../...../..... - ...../...../.....

Total Internship Duration (Total Working Days) : ..... working days

PHAR 5….. PROFESSIONAL EDUCATION IN PHARMACEUTICAL BUSINESS GUIDE

During your internship and while filling out your internship notebook, please consider the following points. The notebook should be written in clear and comprehensible Turkish, adhering to proper grammar and spelling rules, and using scientific language. Sentences should be concise and to the point. **Your weekly reports must include the relevant learning objectives pertaining to the institution where you are completing your internship, as listed below.** At the end of each weekly report, you are required to indicate the learning outcomes you have achieved during that week (e.g., LO 1a, LO 1b). Each weekly report must be stamped and signed by the responsible pharmacist or relevant staff at the internship site to confirm approval. The approved logbook must then be submitted, against signature, to the research assistant responsible for internships during the first week of the following Fall semester.

Community Pharmacy Internship
A total of 10 Learning Outcomes (LOs) must be selected, provided that at least one LO is chosen from each section. Each LO is worth 9 points.

1. Explains general information about the pharmacy where the internship is conducted, and lists key considerations in prescription handling and pharmacist-patient communication (4 LOs to be chosen).
   a. Describes the roles, authorities, and responsibilities of pharmacists and supporting staff working in a community pharmacy.
   b. Explains the design of the pharmacy and the systematic placement of medications and other products.
   c. Defines the working hours of the pharmacy, the concept of on-call duty (duty roster), and the preparation of duty schedules.
   d. Recognizes prescription terminology and ICD-10 diagnostic codes used in prescriptions and medical reports.
   e. Evaluates the systematic approach to assessing patient needs; lists the questions a pharmacist asks during prescription dispensing and the key factors considered.
   f. Describes the clinical pharmacy/pharmaceutical care services provided in the pharmacy (e.g., medication counseling, patient education, rational drug use, drug interactions, treatment monitoring in chronic diseases) with examples.
   g. Lists the medications that must be kept in a pharmacy, explains the drugs that require special prescriptions (purple, orange, red, and green), outlines the procedures related to these prescriptions, identifies cabinets for poisonous and separately stored drugs, and explains appropriate use of the refrigerator and the medications that must be stored in it.
   h. Identifies the organization of the pharmacy laboratory, lists required substances and materials, and explains the process of preparing magistral preparations.
   i. Explains the pharmacist's counseling services provided for dermocosmetic products, dietary supplements, herbal/OTC products, orthopedic aids, and mother-baby health products.

2. Explains the procurement procedures for medicines and medical devices and the records/books that must be kept in the pharmacy (1 LO to be chosen).
   a. Describes the points a pharmacist considers during procurement and ordering, and the role of support staff; summarizes ordering procedures (e.g., large-scale purchases, procurement of rarely used medicines).
   b. Summarizes the relationship between the pharmacy and pharmaceutical warehouse, inspection and recording of procured items, and payment procedures.
   c. Lists the records that must be kept in pharmacies (e.g., management, inventory, narcotics, inspection logs) and professional reference books (e.g., codex, pharmacopoeia,

formularies), and explains their use.

3. Summarizes computer use in the pharmacy, computer-assisted applications, and the pharmacy's relationship with official institutions and organizations (3 LOs to be chosen).
   a. Uses the Social Security Institution (SGK) provision system (MEDULA), pharmacy software programs (TEBEOS, Farmakom, etc.), the Healthcare Implementation Communiqué (SUT), and the drug tracking system.
   b. Lists the sources and computer-assisted programs used to check prescriptions and drug interactions.
   c. Conducts inventory and expiration date checks of medications and medical supplies; takes precautions for medications nearing expiration.
   d. Plans the recording of patient medication profiles in accordance with the Personal Data Protection Law; explains processes for monitoring patients, observing contribution to therapy, and follow-up.
   e. Explains financial tracking and analysis through the Pharmacy Information System, including income-expense balance, debt drugs, profit status, profit calculation per drug, and seasonal purchasing/sales variations.
   f. Evaluates relationships between pharmacist–pharmacist, pharmacist–other healthcare professionals, and pharmacist–regional chamber of pharmacists, as well as relations with the Ministry of Health, Ministry of Finance, and the Social Security Institution (SGK).

4. Explains the functions of pharmacists in preventive healthcare services (e.g., family planning, weight management, disease-specific diets, blood pressure monitoring, smoking cessation) and the areas in which they provide health counseling, giving examples. Provides patient education by explaining instructions for the use of dosage forms that require special handling (e.g., inhalers, ophthalmic preparations, insulins) and medical devices **(This section is mandatory).**

5. Explains patient rights and summarizes what was learned about professional ethical practices through discussion with the internship supervisor **(This section is mandatory).**

Hospital Pharmacy Internship

A of 10 Learning Outcomes (LOs) must be selected, provided that at least one LO is chosen from each section. Each LO is worth 9 points.

1. Explains general information about the hospital pharmacy, lists the practices performed while fulfilling prescriptions and the responsibilities of the pharmacist. **(3 LOs to be chosen)**
   a. Defines the type of hospital (university, state, high specialty, private, etc.), lists the number and names of services/outpatient clinics in the hospital.
   b. Explain the number and expertise of pharmacists and auxiliary staff in the hospital pharmacy, define the duties and responsibilities of the pharmacists and auxiliary staff.
   c. Explains the layout of the hospital pharmacy in the hospital, the parts of the hospital pharmacy and the functions of these parts, the classification, arrangement of shelves and storage procedures of drugs.
   d. Lists the drugs that should be kept in the hospital pharmacy, explains the "high-risk drugs" in the pharmacy and the special procedures applied to them (packaging, warning labels, etc.), explains the drugs that should be written on special prescriptions (purple, orange, red and green colored) and the procedures related to these prescriptions, defines the poisonous and separate drug cabinets, explains the appropriate use of the refrigerator and the drugs that should be kept in the refrigerator.
   e. Lists the issues that the pharmacist pays attention to when fulfilling the prescription, explains how the clinical control of the prescription (drug, dose, interaction, administration route control) is carried out and which resources – computer-aided programs are used.
   f. Explains how the pharmacist controls the drugs that the patient brings to the hospital and

uses depending on his chronic disease and manages the process. List the duties and responsibilities of the clinical pharmacy specialist (if any) in the services.

g. Explains the preparation and distribution processes of drugs and medical devices written in prescription or doctor's instructions/request forms in the hospital pharmacy and the drug distribution system (unit-dose, etc.) used in the hospital.
h. List the committees (e.g. infection control committee, etc.) that the pharmacist is a member of in the hospital and explain his role in the development of hospital formulary.

2. Gives information about the daily operation of the hospital pharmacy. **(3 LOs to be chosen)**
   a. Explains the working hours and shift system of the hospital pharmacy, defines the legislation to which the employees in the hospital pharmacy are bound.
   b. Explains how the communication between the hospital pharmacy and the inpatient services proceeds, and describe how the drugs are delivered from the hospital pharmacy to the services.
   c. Defines the workflow between the hospital pharmacy and the pharmaceutical warehouses.
   d. Explains the procedures followed when purchasing medicines and/or medical devices for the hospital pharmacy, the annual tender procedures and the procurement law, and defines the role of the pharmacist in this process.
   e. Lists the devices and equipment used in the hospital pharmacy; measures temperature and humidity in the pharmacy and in the cold rooms connected to the pharmacy; describes routine calibration of refrigerators, thermometers, moisture meters and weighing devices.
   f. Explains the processes of applying hygiene conditions in the hospital pharmacy, inspecting the stock status and expiry dates of pharmaceuticals and medical devices, managing wastes (separation and disposal of hazardous and pharmaceutical wastes).
   g. Explain the process of magistral drug preparation (raw material and final product weighing, packaging, etc.) in hospital pharmacy.

3. Explains the responsibilities of the pharmacist in order to order, prepare and administer drugs in Total Parenteral Nutrition (TPN) and chemotherapy units. **(1 LO to be chosen)**
   a. Lists the practices to be considered while preparing the nutrition product in the TPN unit and explains the responsibilities of the pharmacist in the TPN unit.
   b. Lists the responsibilities of the pharmacist and the things to be considered in requesting, preparing and administering drugs in the chemotherapy unit, and explains the procedures applied to the remaining drugs while preparing drugs in the chemotherapy unit.
   c. Describes special clothing practices and safety precautions to be followed when working with cytotoxic drugs.

4. Describes practices on inspections and drug withdrawals in the hospital pharmacy - adverse effect reporting. **(2 LOs to be chosen)**
   a. Describes the inspections carried out at the hospital pharmacy, their frequency and the practices specifically checked during the audit.
   b. Defines the role of the pharmacist in the occupational health and safety risk assessment process.
   c. Explain the steps taken by the pharmacist when reporting drug adverse effects to TUFAM.
   d. d. Explains the control and withdrawal procedure of drugs withdrawn by the Ministry of Health, defines the follow-up and registration procedures.
   e. Describes the documents archived in the hospital pharmacy and their retention periods.

5. Explain patient rights and summarizes what was learned about professional ethical practices through discussion with the internship supervisor **(This section is mandatory.)**

Industry Internship

A of 10 Learning Outcomes (LOs) must be selected, provided that at least one LO is chosen from each section. Each LO is worth 9 points.

1. Describes the workflow in the department where the internship is performed. Explains collaborated wıth which departments (R&D, quality control, production, regulatory affairs, marketing and sales, patent and data protection, etc.), the functions and responsibilities of these departments, and the pharmacist's place, duties, and responsibilities within this departments. **(This section is mandatory.)**

2. Describes the daily practices in the institution's relevant department.
   a. Lists the devices, instruments, computer-aided programs, and data search resources used in the department.
   b. Describes the in-house and external trainings received during the internship.

3. Describes the activities carried out in the quality assurance and/or regulatory affairs department.
   a. Lists the areas covered by quality assurance related to drug manufacturing.
   b. Explains filing and documentation processes, organizes the creation of retrospective databases and records, defines the control processes of the drug starting from raw material to production, and explains the workflow diagram through the relevant system networks.
   c. Explains the steps to be observed when preparing regulatory submission dossiers.
   d. Lists the characteristics / specifications related to the finished product, explains the KÜB (short product information) -dossier preparation processes, topics within the regulatory technical dossier and the preparation processes of the technical dossier, the stages of preparing substance and product information in accordance with CTD rules, etc.
   e. Evaluates pilot production and the preparation of required documents for pilot production, the process validation report, and pilot production controls.
   f. Explains GMP and standard operating procedures (SOPs).

4. Describes the activities carried out in the pharmacovigilance department.
   a. Describes the pharmacovigilance system established to perform pharmacovigilance activities.
   b. Explains the questions to be asked and the information to be collected when a user reports a side event.
   c. Uses MedDRA terminology in the classification of adverse reactions.
   d. Explains the evaluation stages of a drug/product adverse event reporting.
   e. Lists the steps to be followed in adverse event reporting and explains correspondence with and documentation systems for TİTCK and TÜFAM.

5. Describes the activities carried out in the laboratory and/or R&D and/or quality control and production units.
   a. Lists and explains the analytical methods for active pharmaceutical ingredients and excipients.
   b. Performs preformulation and stability studies, compares quantitative assay methods, conducts quantitative analyses, and explains formulation development processes.
   c. Explains the determination and validation processes of analytical methods.
   d. Tests production-related controls and impurity determinations.
   e. Explains quality control and documentation, quarantine, and storage processes for pharmaceutical raw materials.
   f. Defines production-stage and follow-up quality control operations, as well as in-process and finished product quality controls, summarizes SOPs.
   g. Lists the regulatory procedures to be followed during the product development stage
   h. Lists the regulatory procedures to be followed during the product manufacturing stage.

6. Describes the functioning of the medical and clinical research department.
    a. Summarizes the Clinical Trials Regulation, the Declaration of Helsinki, and related legislations.
    b. Explains the Regulation on the Promotional Activities of Medicinal Products for Human Use and related legislation
    c. Explains the preparation of PSUR, KÜB (Short product Information), and KT (User Information) documents for products
    d. Explains the processes for preparing the medical training of medical representatives.
    e. Explains the design techniques of bioavailability/bioequivalence and other clinical studies.
    f. Explains the monitoring of clinical trials, the review, evaluation, and documentation of study reports.
    g. Explains agreements made with contracted clinical research organizations.

7. Describes the practices related to drug/product marketing activities.
    a. Defines the legal requirements to be complied with in the marketing phase of the drug-product.
    b. Explains the relationships between medical representative – pharmacist and medical representative – physician in the marketing process.
    c. Explains the criteria for selecting promotional items and the related legal requirements.
    d. Defines the pharmacist's duties and responsibilities in the marketing process of the drug/product.
8. Summarizes, in consultation with the internship supervisor, what was learned regarding professional ethical practices. (Filling this item is mandatory.)

IMPORTANT NOTICE FOR INTERNSHIP STUDENTS

During your internship, unannounced calls and visits will be conducted to check your attendance at the institution where you are completing your internship. If you are not present at the institution during such a check, the validity of your internship will be evaluated by Internship Commission and will be reflected in your grade.

INTERNSHIP NOTEBOOK CHECKLIST

- □ All information on the "Student and Internship Institution Information" page has been completed
- □ The signature and stamp on the "Student and Internship Institution Information" page has been completed
- □ The signatures and stamps on the weekly report pages are complete
- □ Dates and times are specified on the weekly report pages
- □ The internship logbook is filled out with a blue ballpoint pen
- □ The attendance sheet is completed and signed by the responsible person

ATTENDANCE SHEET

	Date	Signature		Date	Signature
1	…/…/20…		**16**	…/…/20…	
2	…/…/20…		**17**	…/…/20…	
3	…/…/20…		**18**	…/…/20…	
4	…/…/20…		**19**	…/…/20…	
5	…/…/20…		**20**	…/…/20…	
6	…/…/20…		**21**	…/…/20…	
7	…/…/20…		**22**	…/…/20…	
8	…/…/20…		**23**	…/…/20…	
9	…/…/20…		**24**	…/…/20…	
10	…/…/20…		**25**	…/…/20…	
11	…/…/20…		**26**	…/…/20…	
12	…/…/20…		**27**	…/…/20…	
13	…/…/20…		**28**	…/…/20…	
14	…/…/20…		**29**	…/…/20…	
15	…/…/20…		**30**	…/…/20…	

WEEKLY REPORT-I

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-II

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-III

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-IV

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-V

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-VI

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-VII

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-VIII

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-IX

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):

WEEKLY REPORT-X

Date:
Working Hours:

Learning Objective No	**Weekly Practices and Achievements**

Approval of Responsible Person (Stamp and Signature):