




DISCIPLINE SHEET

1.-Info about the program

| FOUNDATION FOR DEVELOPMENT AND MANAGEMENT | |
|--|-------------------------------------|
| 1.2-Faculty | FACULTY OF MEDICINE |
| 1.3-Departament | Preclinical/Fundamental Disciplines |
| 1.4-Study domain | Health |
| 1.5-Study cycle | Bachelor |
| 1.6-Study program/ Calification | Medicine-English |



2.-Info about discipline

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|-----------------------------|-----|--|------------------------|
| 2.1- Name of the discipline | | PHARMACOLOGY_II | |
| 2.2-Course lecturer | | Prof. Dr. ATANASE Leonard-Ionut,MD,PhD | |
| 2.3-Seminary lecturer | | Associate University Assistant VICOVAN Andrei-Gheorghe,MD,PhD | |
| 2.4-Year of study | III | 2.5 Semester | II |
| 2.6 Evaluation type | | Exam | 2.7. Discipline regime |
| | | Content | DF |
| | | Mandatory | DOB |

3. -Total time (hours of didactic activity per semester)

| | | | | | |
|--|-----|-------------|----|-----------------|-------|
| 3.1-Number of hours per week | 2 | 3.2 -course | 1 | 3.3- laboratory | 1 |
| 3.4-Total hours of the curriculum | 28 | 3.5 -course | 14 | 3.6 -laboratory | 14 |
| Distribution of time | | | | | Hours |
| Study after manual, course support, bibliography and notes | | | | | 40 |
| Additional documentatin in the library, on the specialized electronic platforms and on the field | | | | | 20 |
| Training seminars/laboratories/projects, themes, papers,portofolios and essays | | | | | 10 |
| Tutoring | | | | | - |
| Examination | | | | | 2 |
| Other activities | | | | | - |
| 3.7-Individual study hours | 72 | | | | |
| 3.8-Total hours per semester | 100 | | | | |
| 3.9-Credit number | 4 | | | | |

4.-Preconditions (if applicable)

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| 4.1.-Curriculum | Anatomy and Embriology, Physiology, Biochemistry, Parasitology, Morphopathology, Pathophysiology |
| 4.2.-Learning Outcomes | Interpretation of ECG, analysis report, chest X-ray |

5.-Conditions (where applicable)



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| 5.1. -Course Conduct | -Projector |
| 5.2.-conducting the seminar/laboratory | -white coats -laboratory equipment, laboratory guide |

6. Learning outcomes

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| Knowledge | Identifies, describes, explains and classifies the mechanisms of disease production, risk factors, pathogens (bacteria, viruses, parasites) and types of immunological response, as well as the development of pharmacological and genetic approaches. |
| Skills | Correctly interpret and apply fundamental concepts regarding disease mechanisms and methods for investigating biological functions. |
| Responsibilities and autonomy | Integrates fundamental notions and methods of investigating biological functions, formulates and assumes reasoned conclusions regarding the general mechanisms of disease production and general principles of treatment. |

7.-Objectives of the discipline (resulting from the grid of specific skills accumulated)

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| 7.1 -General objective of the discipline | 1.-The lecture aims to learn the terminology of pharmacokinetics, pharmacodynamics and general pharmacotoxicology, as well as the main classes of drugs. Within the classes of drugs, the use of their therapeutic uses, adverse effects, contraindications and drug interactions (drug-drug or drug-food) is sought. 2.-Practical objectives of applying the knowledge gained during the course by prescribing appropriate drugs to the selected cases according to the desired effect, contraindications and associated pathology. There is medical reasoning that prescribes the treatment of a disease based on scientific evidence. |
| 7.2- Specific objectives | 1.-Knowledge and understanding of the theoretical and practical knowledge of the different classes of medicines. |



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| | <p>2-Understanding the basis of choosing a drug/drug in certain pathologies depending on the mechanism of action and pharmacodynamic aspects.</p> <p>3.-Explanation of how to administer the medicinal product according to the pharmacokinetic properties of the medicinal products</p> <p>4.-Concern for professional development by engaging critical thinking skills demonstrated through active participation in the course and laboratory</p> <p>5.-Involvement in scientific research activities by participating in the elaboration of papers, studies, specialized articles as well as involvement in the activities of scientific students;</p> <p>6.-Efficient use of information sources and communication and assisted training resources (internet portals, specialized software applications, databases, online courses, etc.)</p> |
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8.-Contents

| 8. 1-Course (homework, number of hours, bibliography) | hours /2 week | Teaching methods |
|--|---------------|---|
| 1-2.-Pharmacology of antimicrobial drugs I (degenerative bactericidal type). Pharmacology of antimicrobial drugs II (absolute bactericidal type, bacteriostatic drugs) | 2 | Active and Interactive Video Projection |
| 3-4.-Pharmacology of antitubercular agents, antiviral drugs, antifungal drugs, antiparasitic agents. Pharmacology of immunosuppressive and anticancer drugs | 2 | Active and Interactive Video Projection |
| 5-6.-Pharmacology of opioid and non-opioid analgesics, and anti-inflammatory drugs. Pharmacology of local and general anesthetics | 2 | Active and Interactive Video Projection |
| 7-8.-Pharmacology of sedative-hypnotic and anxiolytic drugs. Pharmacology of antidepressants and antipsychotics | 2 | Active and Interactive Video Projection |
| 9-10.-Pharmacology of drugs used in Parkinson's disease. Pharmacology of antiepileptic drugs. Pharmacology of hormones I (thyroid and antithyroid drugs, hypothalamic and pituitary agents) | 2 | Active and Interactive Video Projection |
| 11-12. Pharmacology of hormones II (insulin and oral antidiabetics, adrenocorticosteroids). Pharmacology of hormones III (oxytocic and tocolytic hormones, sex hormones, hormonal contraception, erectile dysfunction drugs, pharmacology of osteoporosis) | 2 | Active and Interactive Video Projection |
| 13-14.-Dermatological pharmacology. Pharmacology of vitamins. | 2 | Active and Interactive Video Projection |
| Mandatory bibliography | | |



1.-Dobrescu Dumitru; Negres Simona; Dobrescu Liliana / ALLOPATHIC AND HOMEOPATHIC PHARMACOTHERAPEUTIC GUIDE – 2019, University Publishing House
 2.-DUMITRAȘCU, Victor s.a. PHARMACOLOGY Course for General Medicine Students, vol.1. – Timișoara: "Victor Babeș" Publishing House, 2018
 3.-DUMITRAȘCU, Victor s.a. PHARMACOLOGY Course for General Medicine Students, vol.2. – Timișoara: "Victor Babeș" Publishing House, 2018

Optional bibliography

1.-Karow T, Lang-Roth R. Pharmacology und Toxicology, 2015
 2.-Rang H.P, Ritter J.M, Flower R.J, Henderson G. Rang & Dale's Pharmacology Eighth Edition, Ed Elsevier 2016
 3.-Coord. Prof. univ. dr. DUMITRAȘCU, Victor Practical Applications of PHARMACOLOGY for General Medicine, vol.1. –Timișoara: "Victor Babeș" Publishing House, 2019
 4.-Coord. Prof. univ. dr. DUMITRAȘCU, Victor Practical Applications of PHARMACOLOGY for General Medicine, vol.2. –Timișoara: "Victor Babeș" Publishing House, 2019
 5.MIREL Simona, COLOBĂȚIU Liora – Medical devices available in pharmacy, Cluj-Napoca: Ed. M.U. Iuliu Hațieganu, 2015
 6.-Red. NECHITA, Aurel National Congress with International Participation for Students, Pharmacists and Resident Physicians BOOK OF ABSTRACTS, Galați, Ed. Universitas Galentensis, 2018
 7.-STAHL, Stephen M., The Prescriber's Guide (Sixth Edition) / Stephen M. Stahl. - Cambridge University Press, U.K. -Pag. V-XVI index, content, 868 pages, graph., fig., book in English. - Medicine Collection. - ISBN: 978-1-316-61813-4 , ISBN: 978-1-108-40488-4, Cambridge University Press, U.K, 2017
 8.-STAHL, Stephen M., Stahl's Essential Psychopharmacology Neuroscientific Basis and Practical Applications Cambridge University Press, U.K, 2017
<https://worldscholarshub.com/ro/free-medical-books-pdf>

| 8. 2- Laboratory (themes, number of hours, bibliography) | hours /week | Teaching methods |
|---|-------------|---|
| 1-2.-Practical applications of: <ul style="list-style-type: none"> • Degenerative bactericidal antimicrobial drugs • Absolute bactericidal and bacteriostatic drugs | 2 | Oral presentation of prescriptions for medicines in different forms of medicines; general rules; Discussions on the practical approach. Prescribing different therapeutic regimens for different pathologies; Interpretation of therapeutic |
| 3-4.-Practical applications of: <ul style="list-style-type: none"> • Antitubercular agents • Antiviral, antifungal, and antiparasitic medications | 2 | |
| 5-6.-Practical applications of: Anticancer medications Test 1: Antibacterial drugs, antitubercular agents, antivirals, antifungals, antiparasitics | 2 | |
| 7-8.-Practical applications of: <ul style="list-style-type: none"> • Immunotherapy • Analgesics and anti-inflammatory drugs • Anesthetics | 2 | |



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| <ul style="list-style-type: none"> Sedative-hypnotic and anxiolytic drugs | | <p>indications based on principles based on medical evidence. Targeted and supervised practice</p> |
| <p>9-10.-Practical applications of:</p> <ul style="list-style-type: none"> Antidepressants and antipsychotics Drugs used in Parkinson's disease and antiepileptics | 2 | |
| <p>11-12.-Practical applications of hormones:</p> <ul style="list-style-type: none"> Sex hormones, hormonal contraception Drugs for erectile dysfunction and osteoporosis | 2 | |
| <p>13-14. Practical applications of hormones:</p> <ul style="list-style-type: none"> Glucocorticoids, mineralocorticoids Thyroid and antithyroid drugs Insulin and oral antidiabetics Practical applications of vitamins <p>Test 2: Pharmacology of the Central Nervous System Drugs</p> | 2 | |
| <p>Mandatory bibliography</p> <ol style="list-style-type: none"> Dobrescu Dumitru; Negres Simona; Dobrescu Liliana / ALLOPATHIC AND HOMEOPATHIC PHARMACOTHERAPEUTIC GUIDE – 2019, University Publishing House DUMITRAȘCU, Victor s.a. PHARMACOLOGY Course for General Medicine Students, vol.1. – Timișoara: "Victor Babeș" Publishing House, 2018 DUMITRAȘCU, Victor s.a. PHARMACOLOGY Course for General Medicine Students, vol.2. – Timișoara: "Victor Babeș" Publishing House, 2018 <p>Optional bibliography</p> <ol style="list-style-type: none"> Karow T, Lang-Roth R. Pharmacology und Toxicology, 2015 Rang H.P, Ritter J.M, Flower R.J, Henderson G. Rang & Dale's Pharmacology Eighth Edition, Ed Elsevier 2016 Coord. Prof. univ. dr. DUMITRAȘCU, Victor Practical Applications of PHARMACOLOGY for General Medicine, vol.1. –Timișoara: "Victor Babeș" Publishing House, 2019 Coord. Prof. univ. dr. DUMITRAȘCU, Victor Practical Applications of PHARMACOLOGY for General Medicine, vol.2. –Timișoara: "Victor Babeș" Publishing House, 2019 MIREL Simona, COLOBĂȚIU Liora – Medical devices available in pharmacy, Cluj-Napoca: Ed. M.U. Iuliu Hațieganu, 2015 Red. NECHITA, Aurel National Congress with International Participation for Students, Pharmacists and Resident Physicians BOOK OF ABSTRACTS, Galați, Ed. Universitas Galentensis, 2018 STAHL, Stephen M., The Prescriber's Guide (Sixth Edition) / Stephen M. Stahl. - Cambridge University Press, U.K. -Pag. V-XVI index, content, 868 pages, graph., fig., book in English. - Medicine Collection. - ISBN: 978-1-316-61813-4 , ISBN: 978-1-108-40488-4, Cambridge University Press, U.K, 2017 STAHL, Stephen M., Stahl's Essential Psychopharmacology Neuroscientific Basis and Practical Applications Cambridge University Press, U.K, 2017 <p>https://worldscholarshub.com/ro/free-medical-books-pdf</p> | | |



9.-Corroborating/validating the contents of the discipline with the expectations of the representatives of the epistemic community, professional associations and employers representative of the field related to the program


The contents of the discipline are in accordance with the RNCIS standards.

10.-Evaluation

| Activity Type | 10.1-Evaluation criteria | 10.2-Evaluation methods | 10.3- Weight of the final grade |
|---------------------------------|--|--|---------------------------------|
| 10.4 -Course | <p>o—Requirements for grade 5: common name, main effects, adverse effects of medicinal substances. These requirements are included in 50% of the questions.</p> <p>o—Requirements for grade 10: common and commercial name, mechanism of action, pharmacodynamics, therapeutic uses, adverse effects, contraindications, pharmacography of medicinal substances.</p> | Written test with 50 multiple-choice questions (10 variants) with a different degree of difficulty, lasting 120 minutes, including questions on the course topic. | 50% |
| 10.5 -Seminar /laboratory | <p>o—Requirements for grade 5: general rules for prescribing medicines.</p> <p>o—Requirements for grade 10: correct and complete prescription of the treatment regimen for the case</p> | <p>Drafting a medical prescription of a case selected by lot by the student.</p> <p>Writing emergency medications for a case selected by drawing lots by the student.</p> <p>Justification of the therapeutic choice made in both cases.</p> | 40% |
| 10.3. Activity during the year: | | <p>Attendance at classes</p> <p>Degree of interactive engagement</p> <p>Test scores: sample I, II, III and IV</p> | 10% |
| 10.5- Seminar/lab - ratory | Evaluation of the fundamental notions of physiology and pathophysiology | Practical exam – theoretical-online – practical test in the last LP | 25% |
| | Project | Project presentation – online | 10% |



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| | Checking along the way | Online Testing | 15% |
| 10.6 -Minimum Performance Requirement | | | |
| - knowledge of the main classes of drugs - knowledge of the therapeutic indications of each class of drugs - knowledge of the route of administration for each class of drugs | | | |

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| Date: | Signature of the discipline coordinator: | Holder of the seminar activities: |
| 15.05.2025 | Prof. Dr. ATANASE Leonard-Ionut ,MD,PhD  | Associate University Assistant VICOVAN Andrei-Gheorghe ,MD,PhD |
| Date of approval in the Department | | |
| Signature of the Director of Department | | |

Reprezentant legal F.D.M.
Presedinte
Prof. Univ. Dr. POSTĂVARU Nicolae

