**КЛИНИЧНА ТОКСИКОЛОГИЯ**

**CLINICAL TOXICOLOGY**

**СПЕЦИАЛНОСТ „МЕДИЦИНА - АЕО”**

**IV курс, VII семестър**

**ТАБЛИЦИ**

**ЗА ПОПЪЛВАНЕ НА ИНФОРМАЦИОННО СЪДЪРЖАНИЕ В СЕДО**

***Табл. № 1. Информация за структурните единици на дисциплината.***

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| **1. PURPOSE AND OBJECTIVES OF TRAINING** |
| Clinical Toxicology is a specialty that deals with the problem of acute exogenous poisoning - diagnosis, treatment and prevention. Its relevance is growing more and more in the face of the galloping urbanization, computerization and environmental disharmony of the modern world.  This requires students to have a good understanding of the material of Clinical Toxicology, as an independent medical science discipline that has an urgent nature and a multidisciplinary scope.  **Tasks:**   1. Students should get acquainted with the modern aspects of clinical toxicology, the different types of toxic agents with therapeutic, toxic and lethal doses, as well as the routes of penetration of toxic substances in the body, resorption, distribution, biotransformation and elimination. 2. Students should get acquainted with the main therapeutic methods in toxicology - detoxification and depuration of the entry door, of the humoral environment and antidote treatment. 3. Students should master the basic mechanisms of action in emergency situations, such as toxicological patients - resuscitation, organ protective means, symptomatic treatment and rehabilitation. 4. The curriculum includes the most common toxic agents leading to severe intoxications - drug poisoning, inorganic compounds, corrosive poisons, household preparations and agricultural poisons as intoxications with biological agents and plants. |
| **2. TEACHING TEAM (FACULTY TEACHERS)** |
| Assoc. Prof. Dr. Evgenia Barzashka,  Dr. Katerna Stefanova  Dr. Olimpiada Atmazhova  Dr. Ani Alexandrova |
| **3. PROGRAM OF STUDY (CURRICULUM)** |
| The Clinical Toxicology Program of study is developed in the Sector "Toxicology and Pharmacotherapy", Department Pharmacology and Toxicology according to the System of quality of education. The content of the program was initially approved by the Sector and Department council and finally - by the Faculty council. The Clinical Toxicology program includes the thesis plan of lectures and practical exercises. Its content is annually updated in accordance with the latest discoveries in the field.  Program of study… *(Файл 3-УП- АЕО.pdf)* |
| **4. LECTURE COURSE** |
| The lecture course is intended for medical students. The course comprises seven 2 hour-lectures and one 1-hour-lecture. A detailed presentation is given for some of them.  **To the lecture course…***(Файл 4.1-ЛК-АЕО.docx)*  *(Файл 4.2-ГрафикЛК-АЕО.pdf)* | |
| **5. ADDITIONAL MATERIALS** |
| To help students prepare for the Clinical Toxicology exam and to extend the students' learning, the following study materials listed below are recommended.   * Clinical Toxicology Principles and Mechanisms“ - 2nd Ed, Frank A. Barile, 2010 * „Poisoning and Toxicology Handbook“ - 4th Ed, Jerrold B. Leiken and Frank P. Paloucek, 2007 * „Modern Medical Toxicology“, V. V. Pillay, 2013 |
| **6. PRACTICAL EXERCISES (ASSIGNMENTS AND ESSAYS, PRACTICAL EXERCISES)** |
| In order to fulfill the objectives of the curriculum, practical exercises are provided by the assistants in the sector in addition to the lecture course. According to the program 7 two-hours and 1 one-hour exercises should be conducted in the Clinic of Clinical Toxicology at the University Hospital - "Dr. G. Stranski" in accordance to a schedule approved by the Dean of the Faculty of Medicine.  The practical exercises aim to consolidate the taught theoretical material from the lecture course, detailed viewing of the available specific antidote therapy, practical techniques and skills in clinical toxicology, introduction to the contemporary /modern methods of extracorporeal depuration of the body, discussion and demonstration of the most common clinical cases of poisonings with the main groups of toxic substances, viewing of organ toxicity and toxic-allergic reactions.  The acquired knowledge will contribute to the overall development of the modern doctors.  During the seventh semester, students receive a test grade and / or a brief discussion-interview on the material from the previous exercise at the beginning of each exercise. In the student's **evaluation** is taken into consideration the handling of practical tasks during the classes.  The final score is based on the assessments of the written examination, the mandatory day-to-day (current) control and the participation during the exercises. The final evaluation is complex and assesses the overall performance and acquired knowledge and skills during the training at the Department of Clinical Toxicology.  **The theses of the lab topics can be found using the link below:**  Practical exercises – theses… (*Упр 1-Antidotes.pdf*)  *(Файл 6-ГрафикУ-АЕО.pdf)* | |
| **7. EXAMINATION SYNOPSIS (CONSPECTUS FOR THE EXAM)** |
| To finalize the preparation for the course and the semester exam, an exam questionnaire has been developed.  The purpose of the questionnaire is to systematize the acquired knowledge, concentrating on the main issues of the lecture course and the practical exercises. The questionnaire includes only questions that have been addressed in the lecture course and the practical exercises.  The questionnaire includes both lectures and practical exercises topics.  Examination questionnaire … (*7-Synopsis.pdf*) |
| **8. TEST QUESTIONS AND PROBLEMS (TESTS COURSE)** |
| Knowledge control tests are an element that checks the preparation of students after completing the full course of the discipline. They include questions with one or more correct statements. For each individual solving of a certain test, the time that students have to comply with is limited.  Self-assessment test... *(8-Тест-АЕ.docx )* | |
| **9. GENERAL COMMENTS AND RECOMMENDATIONS** |
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| **10. FORUM ON THE DISCIPLINE** |
| The forum on the subject is the place where you can accommodate comments, questions and recommendations on ways of presenting the material. The forum is open to all students and the information in it should be brief and clear in strict compliance with the requirements of academic ethics. Thank you for your understanding. |
| **11. CONSULTATIONS** |
| The conditions for using remote consultations and the time for their conduction are determined by the teacher. They are determined during the lectures and in the other present forms of study or by e-mail.  The Discipline Forum and the e-mail address for contact with teachers should be used for absentee consultations.  Attended consultations are recommended and are conducted in the training department of MU - Pleven according to a schedule announced by the teachers. At these consultations the methodology and the conditions for preparation of the discipline and the peculiarities in solving the practical tasks are explained. |

***Табл. 2. Информация за съдържанието на лекциите и учебните единици към нея.***

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| **Lecture 1: Modern aspects of clinical toxicology. Basic principles of toxicokinetics and toxicodynamics. Basic therapies in poisoning. Antidotes - specific and nonspecific.** |
| Subject and tasks of toxicology as medical science. Types of xenobiotics and specific peculiarities. Classifications of toxic agents. Toxic and lethal dose. Definition of toxicodynamics and toxicokinetics and the interrelation of the two processes during the exogenous intoxication. Pathways of the toxic substances penetration into the body, resorption, distribution, biotransformation, elimination. Toxicodynamics - characteristics of the main damage to the body in poisoning. Types of toxic effects, cell-molecular mechanisms of the toxic action. Regional toxicology centers.  Main therapeutic methods: Detoxification and depuration means and methods - depuration of the entry door, of the humoral environment; antidotes - specific and non-specific; mechanism of antidotes action; resuscitation measures; organ protective therapy, symptomatic treatment and rehabilitation.  pdf-icon Presentation of Lecture 1... (*1-TOX.pdf*) |

***Табл. 3. Информация за учебните задачи (цели, указания, срокове и други)***

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***Табл. 4. Примерна скала за оценяване на тестовете по дисциплината***

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| **Ниво на успеваемост** | **Оценка** |
| 90 – 100 % | 6.00 |
| 76 – 89 % | 5.00 |
| 63 – 75 % | 4.00 |
| 50 – 62 % | 3.00 |
| 0 – 49 % | 2.00 |

***Табл. 5. Приложените тестове се описват в таблицата по-долу.***

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| **Име на теста** | **тестове с въпроси и брой на случайно предлагани от тях** |
| Self-assessment test | (8-Тест-АЕО.docx) брой сл. въпроси -35 |