A list of skills and practical skills from the educational component Work placement in Pharmacy based Technology of Drugs

1. Check single, daily doses of poisonous, psychotropic, potent substances.

2. Define and eliminate physical, physicochemical, chemical and pharmacological incompatibilities.

3. Calculate the amount of medicinal substances for the preparation of simple and complex powders.

4. To carry out basic technological operations for the production of simple and complex powders with medicinal substances prescribed in equal and different quantities, differing in the structure of particles, size and shape of crystals, aggregate state, bulk mass (weighing, grinding, mixing, dosing).

5. To carry out the main technological operations of manufacturing trituration and complex powders with poisonous and potent substances prescribed in small quantities (weighing, crushing, mixing, dosing).

6. To carry out basic technological operations for the production of powders with colored, fragrant and difficult-to-grind medicinal substances.

7. To carry out basic technological operations for the production of powders with extracts (dry, thick, solutions of thick extracts) and semi-finished products.

8. Use means of small mechanization for mixing and dosing of powders.

9. Select the packaging material according to the properties of medicinal substances, prepare the drug before dispensing.

10. Calculate the amount of purified water and medicinal substances for the production of concentrated solutions.

11. Carry out basic technological operations for the production of concentrated solutions (weighing, measuring, dissolving, filtering). Use the burette system.

12. Calculate the amount of medicinal substances, concentrated solutions and water purified for the production of solutions containing up to 3% and more than 3% of dry substances, concentrated solutions of which are not available.

13. Carry out basic technological operations for the production of mixtures using concentrated solutions and medicinal substances (measure, weigh, dissolve, filter).

14. Calculate the amount of purified water, medicinal and auxiliary substances for the preparation of solutions and drops.

15. Calculate the amount of purified water and pharmacopoeial liquids depending on the method of their prescription.

16. Calculate the amount of ethanol and water for the production of alcohol solutions of different concentrations, using the dilution formula and alcoholometric tables.

17. Carry out basic technological operations for the production of non-aqueous solutions (weigh, measure, heat, dissolve, if necessary, filter).

18. To choose and justify the optimal technology of solutions of IUDs and protected colloids according to individual prescriptions.

19. Carry out the main technological operations for the production of solutions of the Navy and protected colloids (weigh, measure, heat, dissolve, if necessary, filter).

20. Calculate the amount of solvent and stabilizer when making suspensions.

21. Carry out basic technological operations for the production of suspensions from hydrophilic and hydrophobic medicinal substances (weighing, dispersing, mixing, measuring).

22. Select the appropriate emulsifier depending on the physical and chemical properties of medicinal substances included in emulsions.

23. Calculate the amount of oil, emulsifier and purified water for making an emulsion.

24. Choose and justify the method of making an emulsion depending on the nature of the emulsifier.

25. Carry out basic technological operations for the production of oil emulsions (weighing, measuring, dissolving, heating, mixing, emulsifying).

26. Enter medicinal substances with different physical and chemical properties into the composition of the emulsion.

27. Calculate the amount of medicinal plant raw materials and purified water for making infusions and decoctions.

28. Carry out basic technological operations for the production of infusions and decoctions (shredding, sifting, weighing, measuring, extracting, cooling, filtering, bringing to volume).

29. Use means of small mechanization in the process of making water hoods (infusion device with electric heating, etc.).

30. Calculate the amount of extracts-concentrates and purified water for the production of liquid dosage forms (LPF).

31. To carry out the main technological operations for the production of RLF with the help of extracts-concentrates. Make water extractions from medicinal plant raw materials containing mucus.

32. Add medicinal substances with different physical and chemical properties to the composition of infusions and decoctions.

33. Calculate the percentage content of medicinal substances with different physicochemical properties for the production of homogeneous and heterogeneous ointments.

34. Carry out basic technological operations for the production of liniments and ointments of various types of dispersed systems (weighing, mixing, grinding, dissolving, emulsifying).

35. Calculate the amount of medicinal and auxiliary substances for the manufacture of suppositories.

36. To choose and justify the optimal technology option, taking into account the properties of the ingredients included in the recipe.

37. Carry out basic technological operations for manufacturing suppositories by pumping and pouring (weighing, grinding, dissolving, mixing, emulsifying, dosing, rolling out, melting, preparing suppository molds, pouring into molds, cooling).

38. Use the means of small mechanization for the production of suppositories by the method of pumping and pouring (pill machine, machine for grinding cocoa butter, device for heating and melting bases, molds for casting, etc.).

39. Calculate the amount of medicinal and auxiliary substances for the manufacture of injection solutions.

40. Select a stabilizer and justify the need to stabilize a medicinal substance in a solution according to an individual prescription.

41. Calculate isotonic concentrations of injection solutions using the sodium chloride equivalent, depression values, etc.

42. Choose the method and mode of sterilization of solutions for injections, eye drops, depending on the properties of the active substances.

43. Make eye drops depending on the solubility of the ingredients and their thermal stability.

44. Carry out organoleptic control of solutions for injections and eye drops for the absence of mechanical impurities.

45. Make a base for eye ointments and ointments with antibiotics.

46. List the units of action of antibiotics in weight quantities according to their activity.

47. Check the doses of poisonous, potent substances in children's medicinal forms depending on the weight and age of the child.

48. Use means of small mechanization for clogging solutions for injections and eye drops.

49. Prepare solutions, suspensions for injections, eye drops, ointments, dosage forms with antibiotics, children's dosage forms before release.