**Methods of Pharmacopoeial analysis practical lessons plan**

**2025/26**

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| №  | Date | The name of the topics and their summary | Hours |
|  |  | **V semester** |  |
| 1 | 1.09-6.09 | Photocolorimetry. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 2 | 8.09-13.09  | Spectrophotometry. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 3 | 15.09-20.09  | Spectrometry in the IR and near IR region. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 4 | 22.09-27.09  | Fluorimetry. NMR spectroscopy. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 5 | 29.09-4.10  | Raman spectrometry. X-ray powder diffractometry. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 6 | 6.10-11.10  | **Control of topics 3.4.-3.8** | 4 |
| 7 | 13.10-18.10  | Chromatography on paper, thin layer chromatography, ion exchange chromatography. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 8 | 20.10-25.10  | Gas chromatography. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 9 | 27.10-1.11  | High performance liquid chromatography. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 10 | 3.11-8.11 | Gravimetry. Thermogravimetry. Differential thermal analysis, differential scanning calorimetry. Thermomicroscopy. Theoretical basis. Application in pharmaceutical analysis. | 4 |
| 11 | 10.11-15.11 | **Control of topics 3.9.-3.12.** | 4 |
| 12 | 17.11-22.11 | **Final control of 4 and 5 semesters** | 1 |
|  |  | **Total** | **45** |