# **GAUTAM COLLEGE OF PHARMACY, HAMIRPUR**

# **Lesson Plan**

**Course:** D. Pharmacy 2nd Year

**Subject Code:** ER20-24T

**Subject Name:** Pharmacotherapeutics

**Total Teaching Hours:** 75

**Name of Teacher:**

**Each Lecture:** 1 hour

1. Total no. of Assignment given:

2. Model question paper given: Yes/No

3. No. of extra Lectures delivered:

4. Feedback from student taken: Yes/No

**Pharmacotherapeutics Full Lesson Plan**

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| **No.** | **Learning Outcome** | **Schedule Date** | **Actual Date** | **Type** | **Topic/Focus** | **Pedagogy** | **Remarks** |
| 1 | Reinforce understanding of course introduction, scope, and objectives | 12/08/2024 |  | Tutorial | Seminar: Introduction, Scope, Objectives | Seminar/Group Discussion |  |
| 2 | Define pharmacotherapeutics and its role in therapy | 13/08/2024 |  | Lecture | Introduction to Pharmacotherapeutics | Lecture |  |
| 3 | Explain the scope and breadth of pharmacotherapeutics | 14/08/2024 |  | Lecture | Scope of Pharmacotherapeutics | Class Seminar |  |
| 4 | Identify key objectives of pharmacotherapeutic interventions | 17/08/2024 |  | Lecture | Objectives of Pharmacotherapeutics | Brainstorming |  |
| 5 | Discuss rational drug use, evidence-based medicine, and essential medicines | 19/08/2024 |  | Tutorial | Seminar: Rational Use, EBM, Essential Medicines | Seminar/Group Discussion |  |
| 6 | Apply principles of rational drug use to clinical scenarios | 20/08/2024 |  | Lecture | Rational Use of Medicines | Case-Based Learning |  |
| 7 | Evaluate sources and application of evidence in pharmacotherapy | 21/08/2024 |  | Lecture | Evidence-Based Medicine | Group Discussion |  |
| 8 | Describe the concept and criteria for essential medicines | 24/08/2024 |  | Lecture | Essential Medicines List | WHO Guidelines Review |  |
| 9 | Review STGs and hypertension topics for deeper understanding | 26/08/2024 |  | Tutorial | Seminar: STGs, Hypertension | Seminar/Group Discussion |  |
| 10 | Use and develop standard treatment guidelines for common diseases | 27/08/2024 |  | Lecture | Standard Treatment Guidelines (STGs) | Workshop |  |
| 11 | Explain the causes and mechanisms of hypertension | 28/08/2024 |  | Lecture | Hypertension: Etiopathogenesis | Lecture |  |
| 12 | Identify clinical features and complications of hypertension | 31/08/2024 |  | Lecture | Hypertension: Clinical Manifestations | Clinical Scenario |  |
| 13 | Discuss management strategies for hypertension and angina | 02/09/2024 |  | Tutorial | Seminar: Hypertension Management, Angina | Seminar/Group Discussion |  |
| 14 | Select and justify management strategies for hypertension | 03/09/2024 |  | Lecture | Hypertension: Management | Case-Based Learning |  |
| 15 | Explain the pathophysiology of angina | 04/09/2024 |  | Lecture | Angina: Etiopathogenesis | Lecture |  |
| 16 | Recognize symptoms and signs of angina | 07/09/2024 |  | Lecture | Angina: Clinical Manifestations | Simulation |  |
| 17 | Review management of angina, myocardial infarction, and hyperlipidemia | 09/09/2024 |  | Tutorial | Seminar: Angina Management, MI, Hyperlipidemia | Seminar/Group Discussion |  |
| 18 | Plan rational management of angina | 10/09/2024 |  | Lecture | Angina: Management | Group Discussion |  |
| 19 | Understand MI pathogenesis and management | 11/09/2024 |  | Lecture | Myocardial Infarction | Class Seminar |  |
| 20 | List causes and risk factors for hyperlipidemia | 14/09/2024 |  | Lecture | Hyperlipidemia: Causes and Risk Factors | Group Discussion |  |
| 21 | Discuss CHF, asthma, and COPD topics for deeper understanding | 16/09/2024 |  | Tutorial | Seminar: CHF, Asthma, COPD | Seminar/Group Discussion |  |
| 22 | Outline management approaches for hyperlipidemia | 17/09/2024 |  | Lecture | Hyperlipidemia: Management | Case-Based Learning |  |
| 23 | Explain pathophysiology of CHF | 18/09/2024 |  | Lecture | Congestive Heart Failure: Pathophysiology | Lecture |  |
| 24 | Select appropriate therapies for CHF | 21/09/2024 |  | Lecture | Congestive Heart Failure: Management | Case-Based Learning |  |
| 25 | Discuss diabetes and thyroid disorder topics for deeper understanding | 23/09/2024 |  | Tutorial | Seminar: Diabetes, Thyroid Disorders | Seminar/Group Discussion |  |
| 26 | Describe causes and mechanisms of asthma | 24/09/2024 |  | Lecture | Asthma: Etiopathogenesis | Lecture |  |
| 27 | Apply treatment guidelines for asthma | 25/09/2024 |  | Lecture | Asthma: Treatment Approaches | Group Discussion |  |
| 28 | Explain pathogenesis of COPD | 28/09/2024 |  | Lecture | COPD: Etiopathogenesis | Lecture |  |
| 29 | Discuss epilepsy, Parkinson’s, and Alzheimer’s topics for deeper understanding | 30/09/2024 |  | Tutorial | Seminar: Epilepsy, Parkinson’s, Alzheimer’s | Seminar/Group Discussion |  |
| 30 | Discuss therapeutic approaches for COPD | 01/10/2024 |  | Lecture | COPD: Management Strategies | Workshop |  |
| 31 | Understand disease mechanism of diabetes | 02/10/2024 |  | Lecture | Diabetes: Pathogenesis | Lecture |  |
| 32 | Identify clinical signs of diabetes | 05/10/2024 |  | Lecture | Diabetes: Clinical Features | Clinical Scenario |  |
| 33 | Discuss stroke, migraine, and GI disorder topics for deeper understanding | 07/10/2024 |  | Tutorial | Seminar: Stroke, Migraine, GI Disorders | Seminar/Group Discussion |  |
| 34 | Plan evidence-based treatment for diabetes | 08/10/2024 |  | Lecture | Diabetes: Management | Case-Based Learning |  |
| 35 | Explain pathophysiology and therapy of hypothyroidism | 09/10/2024 |  | Lecture | Thyroid Disorders: Hypothyroidism | Lecture |  |
| 36 | Compare hypo- and hyperthyroidism | 12/10/2024 |  | Lecture | Thyroid Disorders: Hyperthyroidism | Group Discussion |  |
| 37 | Discuss liver, IBD, and anemia topics for deeper understanding | 14/10/2024 |  | Tutorial | Seminar: Liver, IBD, Anemia | Seminar/Group Discussion |  |
| 38 | Describe causes and mechanisms of epilepsy | 15/10/2024 |  | Lecture | Epilepsy: Etiopathogenesis | Lecture |  |
| 39 | Identify symptoms of epilepsy | 16/10/2024 |  | Lecture | Epilepsy: Clinical Manifestations | Clinical Scenario |  |
| 40 | Outline management strategies for epilepsy | 19/10/2024 |  | Lecture | Epilepsy: Management | Case-Based Learning |  |
| 41 | Discuss TB, pneumonia, UTI, and hepatitis topics for deeper understanding | 21/10/2024 |  | Tutorial | Seminar: TB, Pneumonia, UTI, Hepatitis | Seminar/Group Discussion |  |
| 42 | Select appropriate drugs for epilepsy | 22/10/2024 |  | Lecture | Epilepsy: Pharmacological Treatment | Drug Chart Review |  |
| 43 | Explain pathophysiology of Parkinson’s disease | 23/10/2024 |  | Lecture | Parkinson’s Disease: Pathophysiology | Lecture |  |
| 44 | Discuss therapeutic options for Parkinson’s disease | 26/10/2024 |  | Lecture | Parkinson’s Disease: Treatment | Group Discussion |  |
| 45 | Discuss women’s health and AMR topics for deeper understanding | 28/10/2024 |  | Tutorial | Seminar: Women’s Health, AMR, Revision | Seminar/Group Discussion |  |
| 46 | Understand pathogenesis of Alzheimer’s disease | 29/10/2024 |  | Lecture | Alzheimer’s Disease: Pathophysiology | Lecture |  |
| 47 | Outline management of Alzheimer’s disease | 30/10/2024 |  | Lecture | Alzheimer’s Disease: Treatment Approaches | Group Discussion |  |
| 48 | Identify risk factors for stroke | 02/11/2024 |  | Lecture | Stroke: Causes and Risk Factors | Lecture |  |
| 49 | Review and integrate recent topics | 04/11/2024 |  | Tutorial | Seminar: Revision/Practice | Seminar/Group Discussion |  |
| 50 | Plan acute and chronic therapy for stroke | 05/11/2024 |  | Lecture | Stroke: Management | Case-Based Learning |  |
| 51 | Describe causes and mechanisms of migraine | 06/11/2024 |  | Lecture | Migraine: Etiopathogenesis | Lecture |  |
| 52 | Select and justify therapies for migraine | 09/11/2024 |  | Lecture | Migraine: Treatment Options | Group Discussion |  |
| 53 | Discuss migraine, GERD, and peptic ulcer topics for deeper understanding | 11/11/2024 |  | Tutorial | Seminar: Migraine, GERD, Peptic Ulcer | Seminar/Group Discussion |  |
| 54 | Explain pathogenesis and therapy of GERD | 12/11/2024 |  | Lecture | Gastroesophageal Reflux Disease | Class Seminar |  |
| 55 | Understand causes and management of peptic ulcer disease | 13/11/2024 |  | Lecture | Peptic Ulcer Disease | Case-Based Learning |  |
| 56 | Explain etiology and management of alcoholic liver disease | 16/11/2024 |  | Lecture | Alcoholic Liver Disease | Lecture |  |
| 57 | Discuss liver, IBD, and anemia topics for deeper understanding | 18/11/2024 |  | Tutorial | Seminar: Liver, IBD, Anemia | Seminar/Group Discussion |  |
| 58 | Differentiate Crohn’s and UC | 19/11/2024 |  | Lecture | Inflammatory Bowel Diseases (Crohn’s, UC) | Group Discussion |  |
| 59 | Identify causes and management of iron deficiency anemia | 20/11/2024 |  | Lecture | Iron Deficiency Anemia | Lecture |  |
| 60 | Compare with iron deficiency anemia | 23/11/2024 |  | Lecture | Megaloblastic Anemia | Group Discussion |  |
| 61 | Discuss anemia, TB, and pneumonia topics for deeper understanding | 25/11/2024 |  | Tutorial | Seminar: Anemia, TB, Pneumonia | Seminar/Group Discussion |  |
| 62 | List causes and risk factors for TB | 26/11/2024 |  | Lecture | Tuberculosis: Causes and Risk Factors | Lecture |  |
| 63 | Recognize clinical features of TB | 27/11/2024 |  | Lecture | Tuberculosis: Clinical Manifestations | Clinical Scenario |  |
| 64 | Plan standard therapy for TB | 30/11/2024 |  | Lecture | Tuberculosis: Management | Case-Based Learning |  |
| 65 | Discuss TB, pneumonia, and UTI topics for deeper understanding | 02/12/2024 |  | Tutorial | Seminar: TB, Pneumonia, UTI | Seminar/Group Discussion |  |
| 66 | Explain causes and mechanisms of pneumonia | 03/12/2024 |  | Lecture | Pneumonia: Etiopathogenesis | Lecture |  |
| 67 | Select appropriate management for pneumonia | 04/12/2024 |  | Lecture | Pneumonia: Treatment Approaches | Group Discussion |  |
| 68 | Describe pathogenesis and therapy of UTI | 07/12/2024 |  | Lecture | Urinary Tract Infections | Lecture |  |
| 69 | Discuss UTI, hepatitis, and STDs topics for deeper understanding | 09/12/2024 |  | Tutorial | Seminar: UTI, Hepatitis, Gonorrhea, Syphilis | Seminar/Group Discussion |  |
| 70 | Differentiate types and management of hepatitis | 10/12/2024 |  | Lecture | Hepatitis | Group Discussion |  |
| 71 | Explain causes and treatment of gonorrhea and syphilis | 11/12/2024 |  | Lecture | Gonorrhea and Syphilis | Lecture |  |
| 72 | Describe pathogenesis and therapy of malaria | 14/12/2024 |  | Lecture | Malaria | Class Seminar |  |
| 73 | Discuss malaria, HIV, and viral infections topics for deeper understanding | 16/12/2024 |  | Tutorial | Seminar: Malaria, HIV, Viral Infections | Seminar/Group Discussion |  |
| 74 | Understand pathogenesis and management of HIV and OIs | 17/12/2024 |  | Lecture | HIV and Opportunistic Infections | Lecture |  |
| 75 | Discuss current trends and therapy of viral infections | 18/12/2024 |  | Lecture | Viral Infections (SARS, CoV2) | Group Discussion |  |
| 76 | Explain pathogenesis and management of rheumatoid arthritis | 21/12/2024 |  | Lecture | Rheumatoid Arthritis | Lecture |  |
| 77 | Discuss arthritis, osteoarthritis, and psoriasis topics for deeper understanding | 23/12/2024 |  | Tutorial | Seminar: Arthritis, Osteoarthritis, Psoriasis | Seminar/Group Discussion |  |
| 78 | Compare with rheumatoid arthritis | 24/12/2024 |  | Lecture | Osteoarthritis | Group Discussion |  |
| 79 | Describe pathogenesis and therapy of psoriasis | 25/12/2024 |  | Lecture | Psoriasis | Lecture |  |
| 80 | Explain causes and management of scabies | 28/12/2024 |  | Lecture | Scabies | Class Seminar |  |
| 81 | Discuss scabies, eczema, and depression topics for deeper understanding | 30/12/2024 |  | Tutorial | Seminar: Scabies, Eczema, Depression | Seminar/Group Discussion |  |
| 82 | Differentiate eczema from other skin conditions | 31/12/2024 |  | Lecture | Eczema | Group Discussion |  |
| 83 | Identify symptoms and therapy of depression | 01/01/2025 |  | Lecture | Depression | Lecture |  |
| 84 | Explain pathogenesis and management of anxiety | 04/01/2025 |  | Lecture | Anxiety | Class Seminar |  |
| 85 | Discuss anxiety, psychosis, and conjunctivitis topics for deeper understanding | 06/01/2025 |  | Tutorial | Seminar: Anxiety, Psychosis, Conjunctivitis | Seminar/Group Discussion |  |
| 86 | Differentiate psychosis from other mental illnesses | 07/01/2025 |  | Lecture | Psychosis | Group Discussion |  |
| 87 | Explain causes and management of conjunctivitis | 08/01/2025 |  | Lecture | Conjunctivitis (Bacterial and Viral) | Lecture |  |
| 88 | Describe pathogenesis and therapy of glaucoma | 11/01/2025 |  | Lecture | Glaucoma | Class Seminar |  |
| 89 | Discuss glaucoma, AMR, and PCOS topics for deeper understanding | 13/01/2025 |  | Tutorial | Seminar: Glaucoma, AMR, PCOS | Seminar/Group Discussion |  |
| 90 | Understand mechanisms and impact of AMR | 14/01/2025 |  | Lecture | Antimicrobial Resistance: Causes and Mechanisms | Lecture |  |
| 91 | Discuss prevention strategies for AMR | 15/01/2025 |  | Lecture | Antimicrobial Resistance: Strategies to Control | Group Discussion |  |
| 92 | Explain pathogenesis and management of PCOS | 18/01/2025 |  | Lecture | Polycystic Ovary Syndrome | Lecture |  |
| 93 | Discuss PCOS, dysmenorrhea, and PMS topics for deeper understanding | 20/01/2025 |  | Tutorial | Seminar: PCOS, Dysmenorrhea, PMS | Seminar/Group Discussion |  |
| 94 | Describe causes and therapy of dysmenorrhea | 21/01/2025 |  | Lecture | Dysmenorrhea | Group Discussion |  |
| 95 | Identify symptoms and management of PMS | 22/01/2025 |  | Lecture | Premenstrual Syndrome | Lecture |  |
| 96 | Explain hormonal cycles and disorders | 25/01/2025 |  | Lecture | Hormonal Regulation in Women’s Health | Class Seminar |  |
| 97 | Discuss women’s health and therapeutics topics for deeper understanding | 27/01/2025 |  | Tutorial | Seminar: Women’s Health, Therapeutics | Seminar/Group Discussion |  |
| 98 | Select and justify therapies for women’s health | 28/01/2025 |  | Lecture | Pharmacological Treatment Approaches in Women’s Health | Lecture |  |
| 99 | Discuss lifestyle and alternative therapies for women’s health | 29/01/2025 |  | Lecture | Non-Pharmacological Treatment for Women’s Health Conditions | Group Discussion |  |
| 100 | Review latest advances in women’s health | 01/02/2025 |  | Lecture | Current Trends and Research in Women’s Health | Seminar |  |

**Signature of the subject teacher HOD Director cum Principal**