POSTURE – PRACTICAL LEARNING ACTIVITIES

1. **Posture Alignment Mapping Exercise Objective: Apply knowledge of postural biomechanics to visualize key connections. Instructions: In groups of 4-5, create a detailed mind map on large poster paper linking gravity line in sagittal plane, optimal joint alignment in AP/lateral views, and muscle/ligament roles in moments. Incorporate at least three deviations (e.g., kyphosis, scoliosis). Present your map to the class in 10 minutes, followed by a 5-minute Q&A. Use class-provided markers and paper; no external resources allowed. Time: 45 minutes (20 for mapping, 25 for presentations). Assessment: Peer evaluation on clarity and relevance (30%), instructor feedback on accuracy (70%).**
2. **Postural Deviation Case Analysis Objective: Analyze clinical indications and risks in postural abnormalities. Instructions: Individually, review a provided case vignette (e.g., adolescent with idiopathic scoliosis). Identify key concepts (e.g., gravity effects, ligament maintenance). Then, in pairs, discuss and propose two physiotherapy interventions (e.g., bracing). Share one key insight with the class. Cases distributed in class; use textbook notes only. Time: 30 minutes (15 for individual analysis, 15 for pair discussion and sharing). Assessment: Written summary submission (50%), class participation (50%).**
3. **Gravity Line Role-Play Objective: Demonstrate understanding of postural mechanics through interactive simulation. Instructions: In groups of 3, role-play optimal posture vs deviations (e.g., lordosis with anterior gravity shift). Assign roles (e.g., physiotherapist, patient, assistant). Incorporate muscle roles and disruptions (e.g., weak erectors). Perform a 5-minute skit explaining implications. Props limited to classroom items. Time: 40 minutes (20 for preparation, 20 for performances). Assessment: Group creativity and engagement (40%), scientific accuracy (60%).**
4. **Muscle vs Ligament Debate Objective: Critically evaluate roles in maintaining posture. Instructions: Divide the class into two teams. One team argues muscles are primary for dynamic**

postural control, while the other argues ligaments provide essential passive stability. Use evidence from unit topics. Each team has 5 minutes to present, 3 minutes for rebuttal. Prepare using class notes; no research time. Time: 35 minutes (10 for team prep, 25 for debate). Assessment: Argument strength (50%), use of clinical concepts (50%).

5. **Posture Alignment Pathway Tracing Workshop Objective: Trace and apply gravity and joint alignment to clinical contexts. Instructions: Working individually then in pairs, draw and label a step-by-step diagram of sagittal gravity line, AP/lateral views, and muscle moments. Discuss deviations (e.g., pes planus). Share diagrams on the whiteboard and explain one clinical implication. Use provided drawing paper. Time: 40 minutes (20 for drawing, 20 for discussion and sharing). Assessment: Diagram accuracy (60%), clinical application insight (40%).**
6. **Scoliosis Problem-Solving Objective: Solve problems integrating postural mechanics with deviations. Instructions: In small groups of 4, analyze a scenario (e.g., patient with hallux valgus and altered gravity line). Identify impact on joints/muscles and propose two physiology-based modifications (e.g., orthotics). Present solutions in a 5-minute pitch. Scenarios provided in class. Time: 45 minutes (25 for analysis, 20 for presentations). Assessment: Problem-solving depth (50%), group collaboration (50%).**
7. **Posture Component Peer Teaching Objective: Teach peers about specific elements of posture. Instructions: Each student is assigned a component (e.g., kyphosis deviation, role of erector spinae) via random draw. Prepare a 3-minute teach-back session explaining its rationale and relevance. Follow with class Q&A. Use whiteboard for illustrations; no slides. Time: 50 minutes (10 for prep, 40 for sequential teachings). Assessment: Clarity of explanation (40%), engagement with peers (30%), accuracy (30%).**
8. **Gravity Effects Simulation Game Objective: Simulate and explain the dynamics of postural control. Instructions: In teams of 5, create a human chain game to model gravity line shifts (e.g., students as spine segments, muscles). Incorporate phases and discuss errors (e.g., lordosis overload). Debrief as a class on implications. Use classroom space. Time: 35 minutes (15 for simulation setup, 20 for game and debrief). Assessment: Team participation (40%), conceptual linkage to unit topics (60%).**
9. **Postural Deviation Concept Application Objective: Apply procedural knowledge to postural**

correction efficiency. Instructions: Individually, jot down notes on how deviations relate to gravity (e.g., pes cavus and moments). Then, in groups of 3, build a flowchart showing alignment assessment linked to one adjunct technique (e.g., exercises for scoliosis). Share flowchart with class. Use paper for flowcharts. Time: 40 minutes (15 for individual notes, 25 for group work and sharing). Assessment: Flowchart completeness (50%), application to physiotherapy (50%).

10. **Integrated Quiz and Reflection Objective: Synthesize unit topics through self-assessment and reflection. Instructions: Participate in a 10-question in-class quiz on core topics (e.g., gravity line in optimal posture, lordosis effects). After scoring, individually write a 200-word reflection on one weak area (e.g., managing muscle moments) and how it connects to physiotherapy practice. Discuss reflections in pairs. Quiz provided by instructor. Time: 45 minutes (20 for quiz, 25 for reflection and discussion). Assessment: Quiz score (60%), reflection depth (40%).**