1. **Quick Refresh of the Solow Model**
   - Neoclassical Production Function, The Golden Rule
   - Reference: Class Notes.

2. **Introduction to Recursive Methods**
   - Optimal Growth Example, Euler Equations vs Dynamic Programming, the Guess and Verify Procedure
   - Basic Reference: Class Notes.

3. **Math Review and Some Useful Advanced Concepts**
   - Metric Spaces and the Contraction Mapping Theorem
   - Basic Reference: Class Notes.
   - Additional References: SLP, Ch. 3.

4. **The Bellman Principle and Deterministic Dynamic Programming**
   - Definition and Comparison with other Methods. Continuity, Concavity and Differentiability under Bounded Returns
   - Basic Reference: Class Notes.
   - Additional References: AC, Ch. 2 and SLP, Ch. 4.

5. **Introduction to Numerical Methods**
   - Value and Policy Function Iterations, Projection Methods
• Basic Reference: Class Notes.
• Additional References: AC, Ch. 3 and SLP, Ch 4.
• Advanced References: Judd (1998).


• Markov Chains and Stationary Distributions, Dynamic Programming with Discrete and Continuous Shocks
• Basic Reference: Class Notes.
• Additional References: LS, Ch. 2 and SLP, Chs. 7-9.
• Advanced References: Bertsekas (1976).

7. **Investment and Dynamics of Employment Adjustment**

• q-Theory of Investment with Adjustment Costs, Credit Constraint and Irreversibilities
• Basic Reference: Class Notes
• Additional Reference: BB, Chs. 2 & 3; AC, Chs. 8 & 9.

8. **Consumption Theory, and Practice**

• Non Durable Consumption under Rational Expectations, Precautionary Saving; Risk Sharing, Introduction to New Consumption Theory
• Basic Reference: Class Notes.
• Additional References: LS, Chs. 16 & 17; BB, Ch. 1; AC, Chs. 6 & 7;

9. **Introduction to Search and Matching (if time permits)**

• Search Theory, Models of Search and Matching, Wage Dispersions, Search with Asset Accumulation, Unemployment Insurance.
• Basic Reference: Class Notes.
• Additional References: LS, Ch. 6 & 26; AC, Ch. 8; SLP, Ch. 10 & 13.
References


