1. **Introduction to Econometrics:**
    - Definition and scope of econometrics
    - Importance and applications in economic analysis
    - Distinction between economic theory and empirical analysis
2. **Data Collection and Descriptive Statistics:**
    - Sources of economic data
    - Types of data (cross-sectional, time series, panel)
    - Descriptive statistics: mean, median, variance, skewness, kurtosis
3. **Simple Linear Regression:**
    - Understanding the regression model
    - Estimation of the slope and intercept
    - Interpretation of coefficients
    - Assumptions of the simple linear regression model
4. **Multiple Regression Analysis:**
    - Extension to multiple independent variables
    - Interpretation of coefficients in multiple regression
    - Multicollinearity and its effects
5. **Hypothesis Testing in Regression Analysis:**
    - Testing the significance of individual coefficients
    - Overall model significance (F-test)
    - Understanding p-values
6. **Model Specification and Diagnostic Testing:**
    - Checking for model specification errors
    - Residual analysis
    - Heteroscedasticity and autocorrelation tests

7. **Endogeneity and Instrumental Variables:**
    - Dealing with endogeneity issues
    - Introduction to instrumental variables
    - Instrumental variable estimation
8. **Time Series Analysis:**
    - Introduction to time series data
    - Autoregressive and moving average models
    - Stationarity and unit root tests
9. **Panel Data Analysis:**
    - Understanding panel data
    - Fixed-effects and random-effects models
    - Panel data regression analysis
10. **Econometric Software and Applications:**
    - Introduction to software (e.g., R, Python, Stata)
    - Hands-on application of econometric techniques
11. **Advanced Topics in Econometrics:**
    - Limited dependent variable models (e.g., logit, probit)
    - Time series econometrics (e.g., ARCH/GARCH models)
    - Causal inference and program evaluation
12. **Review and Case Studies:**
    - Recapitulation of key concepts
    - Application of econometric techniques to real-world cases
13. **Final Assessment and Evaluation:**
    - Examination or project to assess understanding
    - Feedback and discussion on performance