I． Population Dynamics (Clark, Chapter 1)

A. Exponential Growth Model

B. Generalized logistic Growth Models

1. Pure compensation

2. depensation

3. Critical Depensation

C. Yield-Effort Curves

1. Pure Compensation

2. Depensation (Hysteresis)

3. Critical Depensation (Irreversibility)

II. Resource Management Models (Clark, Chapters 2, 3)

A. Open-access Model

1. Gordon`s Model of the Open-Access Fishery

2. Bionomic Equilibrium

B. Sole Manager Model

1. Infinite Elasticity of Demand for

Resource (linear model)

a. Most Rapid Approach Optimal Control

Problems(MRAP)

b. Single-shot and Continuous Price

Changes

2. Finite Elasticity of Demand For Resource

(nonlinear models)

a. Econ. Interpretation of Optimal Control

Theory (Dorfman)

b. Nonlinear Fisheries Model (Clark,

Chapters 4, 6)

3. Current Valued Optimal Control

III. Non-Fisheries Applications

A. Forestry Models (Clark, Chapter 8)

1. Single-shot Management

2. Rotational Management (Faustian formula)

B. Exhaustible Resource Models (Clark, Chapter 5)

1. Perfect Competition

2. Monopoly

3. Taxes

C. Predator-Prey Models (Clark, Chapters 6, 9)