Chapter 1  The Fundamentals of Economics  
Refer Samuelson and Nordhaus (2001)  

A. Introduction  
For whom the bell tolls (toll: cause to ring)  

Overriding reasons  
1. your life  
2. voter  
3. occupation  
4. invest  
5. fascinating field  

修習本課程有助於培養自己欣賞經濟學以及了解生活中所接觸的經濟議題之能力，而且經濟學常為商學相關研究所入學考考試科目。  

Scarcity and Efficiency  

Def. of Economics: (自多種定義歸納而得)  
“Economics is the study of how societies use scarce resources to produce valuable commodities and distribute them among different people.”  

Micro and Macro  
1. Micro -> A. Smith  
2. Macro -> J. Keynes  

The logic of economics  
1. scientific approach  
2. fallacy  
   a. The post hoc fallacy  
      e.g. p and w increase -> expansion (x)  
      military exp increases -> expansion (o)  
   b. Failure to hold other things constant  
      e.g. 1964 Kennedy-Johnson tax cuts  
      tax rate decreases -> tax revenue increases  
      overlooks the fact that economy grew  
   c. The fallacy of composition
We often find that the whole is different from the sum of the parts. 
  e.g. One farmer has a bumper (豐盛的) crop versus 
      all farmers produce a record crop. 
      One person receives a great deal more money versus 
      everyone receives a great deal more money. 
      A high tariff is put on the product of a particular industry versus 
      high tariffs are put on all industries.

Cool heads at the service of warm hearts
  Warm hearts alone will not feed the hungry or heal the sick. 
Determining the best route to economic progress or an equitable distribution of 
society’s output requires cool heads. 
Difficult in the field of health care.

B. The three problems of economic organization
  1. What commodities are produced and in what quantities?
  2. How are goods produced?
  3. For whom are goods produced?

Positive economics describes the facts of an economy, while normative 
economics involves value judgments. 
Positive economics -> Resolved by reference to analysis and empirical evidence. 
Normative economics -> Resolved by political debate and decisions.

Market, command and mixed economies
  1. A market economy is one in which individuals and private firms make the 
     major decisions about production and consumption. 
     Firms produce the commodities that yield the highest profits (the what) by the 
     techniques of production that are least costly (the how). Consumption is 
     determined by individuals’ decisions about how to spend the wages and property 
     incomes generated by their labor and property ownership (the for whom). 
     Extreme case: laissez-faire economy 
  2. A command economy is one in which the government makes all important 
     decisions about production and distribution. 
  3. mixed economy 
     Most societies today operate mixed economies.

C. Society’s technological possibilities
Fact: Goods are scarce relative to wants, an economy must decide how to cope with limited resources.

Inputs

Outputs

Another term for inputs is factors of production.

Factors of production:

1. land
   - land used for farming or for underpinning houses, factories, and roads
   - energy resources e.g. oil
   - nonenergy resources e.g. copper
   - environmental resources e.g. clean air

2. labor
   - human time spent production

3. capital
   - durable goods of an economy, produced in order to produce yet other goods.
     E.g. machine

The Production-possibility frontier (PPF)

Societies cannot have everything they want. They are limited by the resources and the technology available to them.

E.g. Japan allocates one-percent of their national output to their military; the U.S., four percent; North Korea, twenty percent.

The more goes for defense, the less there is available for consumption and investment.

Def of PPF

The PPF shows the maximum amounts of production that can be obtained by an economy, given its technological knowledge and quantity of inputs available.

The PPF represents the menu of goods and services available to society.

How can nation turn butter into guns?

Not physically.

By the alchemy of diverting the economy’s resources from one use to the other.

想像是用錢買所需要生產槍或奶油的機器與原料。

Putting the PPF to work

1. luxuries vs necessities
2. public goods vs private goods
3. capital investment vs current consumption
4. the trade-off of time (economics vs history; grades vs fun)
Opportunity cost: The cost of the forgone alternative is the opportunity cost of the decision.
Example 1: D to C in figure 1-2
Example 2: Opening a gold mine near Yellowstone National Park

Efficiency
Productive Efficiency occurs when an economy cannot produce more of one good without producing less of another good; this implies that the economy is on its production-possibility frontier.

Unemployed Resources and Inefficiency
Example 1: U in figure 1-2

Source of inefficiency:
Business cycles; countries threw off their socialist planning systems and adopted free markets

Why study economics?
To understand how the powerful ideas of economics apply to the central issues of human societies.

英文單字:
toll: cause to ring
bumper: 豐盛的
inoculation: 預防接種
perennial: 終年的、一再的
plague: 瘟疫
taint: decay, infection
wishful thinking: 妄想、如意算盤
lofty: distinguished, noble
ethical: of morals or moral questions 道德的、倫理的
precept: moral instruction 告誡、教訓
laissez-faire: 自由放任
alchemy: 煉金術
electorate: whole body of qualified electors 選民