Labor Economics: study of economic behavior of employers and employees in response to changing prices, profits, wages, and working conditions. It combines two fundamental approaches: microeconomic and macroeconomic.

Definitions:

- **Working Age Population**: the population old enough to take employment, includes persons in the labor force and persons not in the labor force;
- **Persons not in the Labor Force**: working age population, who are not working and are not interested in finding any jobs;
- **Labor Force (Economically Active Population)**: working age population who are able and willing to work. People in labor force are either employed, or unemployed;
- **Unemployed** are persons in the labor force who are actively looking for jobs, but can not find it;
- **Employed** are the rest of the labor force.

Indicators:

- **Unemployment Rate**: number of unemployed divided by the total labor force (\(\frac{UE}{LF}\)).
- **Employment Ratio (Rate)**: the employed fraction of the working-age population (\(\frac{E}{WA}\)).
- **Participation Ratio (Rate)**: the fraction of the working-age population in the labor force (\(\frac{LF}{WA}\)).
Sources & Types of Unemployment

Four sources & types of unemployment:

- **Frictional Unemployment** happens when employees look for better jobs and employers look for better employees (a voluntary unemployment).

- **Structural Unemployment** happens due to a mismatch between requirements or locations of available jobs and qualifications, skills or locations of available workers (partially a voluntary unemployment).

- **Cyclical (Demand Deficient) Unemployment** happens due to business cycles, businesses reduce their demand for labor as production declines during recessions (an involuntary unemployment).

- **Seasonal Unemployment** happens in some industries, due to natural reasons (weather, climate, technological process, etc.) when both supply and demand of goods and services fluctuate with seasons in a year (an involuntary unemployment).
The Natural Rate of Unemployment: Unemployment that occurs even under the full employment in the economy is called the natural rate of unemployment or the full-employment rate of unemployment. (includes frictional and partially structural unemployment).

The natural rate of unemployment changes over time depending on several factors:

- availability of job information: lack of information is a source for frictional unemployment;
- skills and education: mismatch in skills and qualification is a source for structural unemployment;
- degree of labor mobility: the less is mobility, the more chances for both frictional, and structural unemployment;
- flexibility of the labor market: multiple influences restrict ability of the labor market reach and rest in its equilibrium and increase disequilibrium unemployment;
- hysteresis: the lagging of unemployment behind its cause - when workers are unemployed for a long time period they become deskilled and de-motivated and are less able to get new jobs.
**Impacts of Unemployment**

- **Impacts of Unemployment:**
  - **Social Impact:** social & political unrest, abuse and anti-social activities: theft, violence, terrorism and other forms of crime;
  - **Human Psychological Impact:** psychological stresses, loss of confidence and self-respect, illnesses, depression, higher suicide rates;
  - **Economic Impact:** loss of income for individuals and loss of output for the economy (*not produced by unemployed workers*), loss of profits for the producers, loss of tax revenue and increase of expenditure (welfare payments) for the government.

- **Okun’s Law:**
  - for every one percentage point by which the actual unemployment rate exceeds the Natural Rate of Unemployment, there is a 2 to 4 % "GDP Gap“ (gap between potential and actual GDP).
  - thus, for every 1% excess of the natural unemployment rate, an ~2.5% fall in GDP is predicted:

\[ \Delta Q = \frac{Q^P - Q}{Q^P} = 2.5 \times \Delta U \]
Labor Market

- **Determinants of labor demand:**
  - price or demand for output;
  - change in technology;
  - price of another input;
  - number of firms.

- **Determinants of labor supply:**
  - income and wealth;
  - prices of consumer goods;
  - taxes;
  - number of workers;
  - expectations of the above.

- **Voluntary Unemployment:** frictional & partially structural unemployment of workers looking for different kinds of jobs.
  - *Examples:* prefer not to work at the going wage rate, searching for better job, prefer welfare, etc.

- **Involuntary Unemployment:** qualified workers who want to work at the prevailing wage, but cannot find it. *Reason:* Non-clearing labor market - sticky wages:
  - *minimum wage rates* (government & trade unions);
  - *menu costs* - wages not following day-to-day labor market fluctuations, set by contracts;
  - *implicit contracts* - employer-employee relationship;
  - *relative wage concerns* - workers compare their wages to the wages of other workers in other firms;
  - *efficiency wage theory* the productivity of workers increases with the wage rate, which motivates firms to pay wages above the market-clearing rate.
Key Concepts

✓ definition of money
✓ labor economics
✓ measurements of unemployment
✓ the natural rate of unemployment
✓ sources and types of unemployment
✓ impacts of unemployment, Okun’s law
✓ non-clearing labor market
✓ voluntary vs. involuntary unemployment

Course Web Support:
http://www.skylinecollege.info/mosesov/macro/
http://www.mhhe.com/economics/samuelson17/students/Ch31.mhtml