DEPARTMENT OF ECONOMICS

COURSE CATALOGUE

MA ECONOMICS

SEMESTER I

2019-20

Central University Of Himachal Pradesh

Contents

Credit Equivalent: One credit is equivalent to or is defined as given below:

    i.   10 hours of lectures /organized classroom activity /contact hours;

    ii.   5 hours of laboratory work / practical / field work /Tutorial /teacher-led activity;

    iii.   15 hours of other workload such as independent individual/group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.

Credit Requirement
For completing MA degree programme the student is required to accumulate 80 credits. The distribution of credits is as follows:

Course Type		Credit Required
Core courses	Compulsory (50%)	40
	Open (15%)	12
Elective courses	Specialization (20%)	16
	Open Elective (5%)	4
Foundation courses		
	Human making (5%)	4
	Skill development (5%)	4
Total credit requirement (100%)		80

Attendance Requirements
Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria
1. Mid Term Examination: 25 per cent
2. End Term Examination (External): 50 percent
3. Comprehensive Internal Assessment: 25 percent

SEMESTER WISE COURSES OFFERED

SEMESTER   I

Course Code Teacher(s)	Course Name	Credits	
ECN: 403	Statistical Methods	4	AKB
ECN: 450	Microeconomics I	4	HRS
ECN: 404 AKB	Mathematics for Economists*	4	
	or		
ECN: 523	Mathematical Optimization**	4	IVS
ECN 502	History of Economic Thought	4	KS

*Offered for those students who have not studied mathematics in graduation
**Offered for those students who have studied mathematics in graduation

SEMESTER   III

Course Code Teacher(s)	Course Name	Credits	
ECN 440	Evolution of Indian Economic System	4	KS
ECN 423	International Economics	4	KS
ECN 455	Research Methodology for Social Sciences	4	AKB
ECN 521	Macroeconomics II	4	IVS
ECN 522	Econometrics II	4	IVS

FOUNDATION COURSES
Human Making Course

Course Code Teacher(s)	Course Name	Credits	
ECN 449	Issues in Economic Development	2	KS

Skill Development Course

Course Code	Course Name	Credits	
ECN 445	Basic Terms and Concepts in Economics	2	KS

NOTE: HRS- Prof. HR Sharma; AKB- Dr. Amit Kumar Basantaray; KS- Mr. Kamal Singh; IVS- Dr. Indervir Singh

ECN 403 Statistical Methods

Course Code: ECN 403
Course Name: Statistical Methods
Credits: 4
Course objectives:
- to familiarize students with statistical methods;
- to enable students to apply statistical methods in data analysis.

Course Contents

Unit- I   **(12 hours)**
Introduction of Statistics, Evolution & Scope of Statistics, Frequency distribution, Graphical representation of Frequency Distribution: Histogram, Frequency Polygon; Line graph and Scatter Plot; Measures of Central tendency: Mean, Median, Mode; Measures of Dispersion: Range, Quartile deviations (QD), Mean deviation, standard deviation, Coefficient of variation (CV), Decile, Percentiles; Box Plots

Unit-II   **(12 hours)**
Method of Moments; Measures of Skewness and kurtosis; Correlation: Simple correlation, Partial correlation, Multiple Correlations; Index Numbers: Simple index number, Composite index number, Price Index, Splicing.

Unit- III   **(12 hours)**
Random Variable & Expectation, Rules of Expectation; Probability: Basic concepts of probability, Tree diagram; Probability Distributions: Probability distribution for discrete and continuous variables, Joint probability distribution;

Unit IV   **(12 hours)**
Normal distribution, Binomial distribution, Poisson distribution; Central limit theorem; Inference using normal distribution.

Unit- V   **(12 hours)**
Sampling: Sample and population, Random sampling, sampling distribution and standard error; Tests of significance: Hypothesis testing, Z-test, t-test, F-test, Chi square test, Analysis of Variance (ANOVA). Time Series Analysis: Nature of a time Series, Analysis of trends, Moving average.

Prescribed Text Books:
1. Hamilton, Lawrence C. (1990). *Modern Data Analysis: A First Course in Applied Statistics.* Belmont, CA: Brooks/Cole Publication.
2. Nagar, A. L. and R. K. Das. (1976). *Basic Statistics, 2nd edition*. New Delhi: Oxford University Press.

3. Gupta, S.C. and Kapoor, V.K. (2002). *Fundamentals of Mathematical Statistics, 11th Edition.*New Delhi: Sultan Chand & Sons.
4. Koutsoyiannis, A. (1977). *Theory of Econometrics*. New York: Palgrave.

Supplementary Readings:
1. Clark, Megan J. and John A. Randal (2010). *A First Course in Applied Statistics, 2nd edition*. Pearson Education.
2. Dunn, Dana S. (2001). *Statistics and Data Analysis for the Behavioral Sciences.* New York: McGraw-Hill.
3. Hamilton, Lawrence C. (2003). *Statistics with STATA, 8th edition*. Boston: Brooks/Cole, Cengage Learning.
4. Lewis, Margaret (2011) *Applied Statistics for Economists*, Routledge.
5. Marsh, Catherine (2009). *Exploring Data: An Introduction to Data Analysis for Social Scientists. 2nd Edition*. London: Polity Press.
6. Moore, D.S. and McCabe, G.P. (2003). *Introduction to the Practice of Statistics*. New York: W.H. Freeman & Company.
7. Ott, Lyman R and Longnecker, Michael (2008) *An Introduction to Statistical Methods and Data Analysis, 6th Edition*. Belmont, CA: Brooks/Cole Publication.
8. Peck, Roxy, Chris Olsen, Jay L. Devore. (2012). Introduction to Statistics and Data Analysis, 4th edition. Boston: Brooks/Cole, Cengage Learning.
9. Rohwer, Götz (2012) *Models in Statistical Social Research.* Routledge.

ECN 404 Mathematics for Economists

Course Code: ECN 404
Course Name: Mathematics for Economists
Credits: 4

Course objectives:

- to make students capable to understand basic mathematics required for understanding economics.
- to familiarize students with the use of mathematics as a tool to analyze economic phenomena.
- to familiarize students with elementary matrix algebra and its application to econometrics and optimization.
- to understand calculus like optimization of functions of several variables, and be able to apply their knowledge to simple economic problems.

Course Content

Unit- I   **(12 hours)**
Significance of Mathematics in Economics; Real numbers; Set theory; Relations and functions; Economic equilibrium analysis.

Unit- II   **(12 hours)**
Linear models and Matrix Algebra: Matrix operations; Commutative, associative, distributive laws, Transposes, Determinants, Nonsingularity, Laplace expansion, Matrix inversion, Cramer's rule; Applications in Economics: Input-output model.

Unit- III   **(12 hours)**
The derivative: Limit; Continuity; differentiability, Rules of differentiation, Partial differentiation, Total differentials, Total derivatives, Implicit functions.

Unit- IV   **(12 hours)**
Optimization: First and second derivative tests; Derivatives of exponential function and logarithmic function: Applications in Economics: Profit Maximization.Functions of two or more variables: Second order partial derivatives and total differentials; Finding maximum/minimum.

Unit- V   **(12 hours)**
Unconstrained optimization, Quadratic forms, Characteristic roots, Concavity and convexity; Applications in Economics. Constrained optimization: Classical Programming, Lagrange multiplier, Second order condition; Applications in Economics:

utility maximization and consumer demand, Homogeneous function. Rules of integration; Indefinite integrals; Definite integrals; Improper Integrals

Prescribed Text Books:
1. Chiang, Alpha C. and Kevin Wainwright (2005) *Fundamental Methods of Mathematical Economics 4th Edition*. New York: McGraw-Hill/Irwin.
2. Sydsaeter, Knut and Peter J. Hammond (1995) *Mathematics for Economic Analysis*. New Delhi: Pearson Education.

Supplementary Readings:
1. Simon, Carl P. and Lawrence E. Blume (1994). *Mathematics for Economists*. New York: W. W. Norton & Company.
2. Sundaram, Rangarajan K. (1996). *A First Course in Optimization Theory*. New York: Cambridge University Press.
3. Intriligator, Michael D. (2013). *Mathematical Optimization and Economic Theory*. Delhi: PHI Learning Private Limited.
4. Sydsaeter, Knut, Peter J. Hammond, AtleSeierstad and Arne Strom (2008) *Further Mathematics for Economic Analysis 2nd Edition*. Prentice Hall.
5. Vohra, Rakesh V. (2005). Advanced Mathematical Economics. New York: Routledge.
6. Carter, Michael (2001). *Foundations of Mathematical Economics*. Cambridge: MIT Press.
7. Franklin, Joel N. (2003). *Methods of Mathematical Economics: Linear and Nonlinear Programming*, Fixed-Point Theorems. Delhi: PHI Learning Private Limited.

ECN 450 Microeconomics I

Course Code: ECN 450
Course Name: Microeconomics I
Credits: 4

Course Objectives:
- equip students with comprehensive and rigorous theoretical concepts and methodology;
- enabling students analyzing the behavior of individuals, firms and markets using general, static and partial equilibrium approach.

COURSE CONTENTS
Unit-I   (12 hours)

Scope of micro economics, methodology of economics as a positive science, demand analysis, partial vs. general equilibrium, theory of consumer behaviour, cardinal utility theory, ordinal utility theory, and revealed preference hypothesis, applications of ordinal and revealed preference approaches and measurement of consumer surplus

Unit-II   (12 Hours)

Production and cost: Technology and production function, cost minimising equilibrium and choice techniques and scale, expansion path and derivation of long run average cost. Homogeneous production function, sources of various economies and diseconomies of scale. Production cost curves and learning curves. Saucer shaped and L shape long run average cost curves, Saucer shaped average variable cost curves. Relationship between short run and long run cost curves and engineering cost curves.

Unit –III   (16 Hours)

Market Structures and Pricing Process: Equilibrium of firm and industry under perfect competition; Monopoly; bilateral monopoly; price discrimination, and Monopolistic competition; Excess capacity and imperfect competition.

Unit-IV   (10 Hours)

Oligopoly: Definition and meaning, Cournot model, Bertrand model, Stackelberg duoploly model, Kinked demand model, Chamberlin model. Collusive oligopoly: Cartel, Price leadership with dominant firm and low cost firm, Barometric price leadership. Bain's limit price theory. Marginalism versus average cost pricing. Profit maximisation vs Baumal's Sales maximisation hypothesis.

Unit- V   **(10 Hours)**

Factor Pricing: The Marginal Productivity Theory of Distribution. The adding up Problem and Euler's theorem. Modern theory of distribution. Theory of Rent: Ricardian and Modern. Theories of Interest: Classical, Theories of Wages: Wage determination under perfect and imperfect competition; wage determination under trade unionism.

Prescribed Text Books:
1. Koutsoyiannis, A. (1985*), Modern Microeconomics*, Macmillan, London.
2. Varian Hal R (1995*), Intermediate Micro Economics: A Modern Approach*, W.W Norton, New York
3. Pindyck, Robert S. and Rubinfeld, Daniel L. (2009), *Micro Economics (7th Edition),* Pearson Education, New Delhi.

Supplementary Readings:
1. Ferguson, C.E. (1968), *Microeconomic Theory*, Cambridge University Press, London.
2. Stigler, G.J.(1996), *The Theory of Price (4th Edition),* Premier Hall, New Delhi
3. Baumol W. J. (1982), *Economic Theory and Operations Analysis, 4th Ed*, Prentice Hall of India, New Delhi.
4. विलास.ए. विलास *व्यष्टि अर्थशास्त्र*, हरियाणा ग्रन्थ अकादमी, पंचकूला

ECN 502 History of Economic Thought

Course Code: ECN 502
Course Name: History of Economic Thought
Credits: 4

Course Objectives:
- to enable students to understand the development of economic theory.
- to develop the skills of abstract thinking among students.

COURSE CONTENTS
Unit – I   **(8 Hours)**
Pre Adamite Economics: Mercantilism, Precursors of Classical thought, Physiocracy

Unit-II   **(16 Hours)**
Adam Smith: Measurement and Cause of Value, Division of Labor, Cost of Production, Wages, Rent, Invisible Hand.
David Ricardo: Diminishing Returns and Theory of Rent, Theory of Value, The Fundamental Theorem of Distribution, Comparative advantage.
Say's Law and Classical Monetary Theory: Say's Law of Market,
Malthus: Malthus's Theory of Population; Malthus's Theory of Gluts.
John Stuart Mill: Value theory, International trade, The wage fund

Unit-III   **(12 Hours)**
Marxian Economics: Value, Surplus Value, Economic Surplus, Historical Transformation, The Laws of Motion of Capitalism, The Law of Falling Rate of Profits, The Reproduction Schema.

Unit-IV   **(12 Hours)**
The Marginal Revolution: The Emergence of Marginal Utility, Jevons, Menger and Walras; Cournot on Profit Maximization, Duopoly Theory.
Marshallian Economics: Utility Theory, Welfare Economics, Cost and Supply
Marginal Productivity and Factor Prices: The Demand for Factor of Production, Product Exhaustion, The Theory of Profit, Aggregate Production Function, Technical Change and Process Innovation.

Unit-V   **(12 Hours)**
The Austrian School: Bohm-Bawerk's Theory of Interest, Fisher on Interest, Allocation of Resources, Socialism and Freedom.
General Equilibrium and Welfare Economics: Walrasian General Equilibrium, Paretian Welfare Economics.

Prescribed Text Books:
1. Landreth, Harry and David C. Colander (2002) *History of Economic Thought, 4th edition,* Houghton Mifflin Company, Boston.
2. Blaug, Mark (1997). *Economic Theory in Retrospect, 5th ed*. Cambridge University Press, Cambridge.

3. Buchholz, Todd G. (1999). *New Ideas from Dead Economists*, Penguin Group, New York.
4. Heilbroner, Robert L. (2003). *The Worldly Philosophers, updated 7th edition*, Simon and Schuster, New York.
5. Schumpeter, Joseph (1954). *History of Economic Analysis*, Oxford University Press, New York.

Supplementary Readings:
1. Backhouse, Roger E. (2002). *The Ordinary Business of Life*, Princeton University Press.
2. Medema, Steven G., and Warren J. Samuels (2003). *The History of Economic Thought: A Reader*. Routledge, London.
3. Robbins, L. C. (1998). *AHistory of Economic Thought: The LSE Lectures,* Princeton University Press, Princeton NJ.
4. Samuelson, Paul A., and William A. Barnett, ed. (2007). *Inside the Economist's Mind: Conversations with Eminent Economists*, Wiley.
5. Ekelund, Robert B., Jr. and Robert F. Hébert (2007). *A History of Economic Theory and Method. 5th ed*. Waveland Press.
6. डडले डिलर्ड *जॉन मेनार्ड केन्ज का अर्थशास्त्र*,हरियाणा ग्रन्थअकादमी, पंचकूला