

Course Syllabi:UHU005: Humanities for Engineers (L : T : P :: 2 : 0 : 2)

1. **Course number and name:** UHU005: Humanities for Engineers
2. **Credits and contact hours:** 3.0 and 4
3. **Text book, title, author, and year**

Text Books / Reference Books

- *Morgan, C.T., King, R.A., Weisz, J.R., &Schopler, J. Introduction to Psychology, McGraw Hill Book Co. (International Student (1986).*
- *N. Tripathi, Human Values, New Age International (P) Ltd (2009).*
- *Krugman, Paul and Wells Robin, Economics, W.H. Freeman & Co Ltd. Fourth Edition (2015).*
- *RubinfeldPindyck. Microeconomic Theory and application, Pearson Education New Delhi (2012).*
- *Samuelson, Paul, A. and Nordhaus, William, D. Economics, McGraw Hill, (2009).*
- *Mankiw, Gregory N. Principles of Macroeconomics, South-Western College Pub., (2014).*
- *Gregory, Paul R. and Stuart, Robert C. The Global Economy and Its Economic Systems, 2013 South-Western College Pub (2013).*
- *Atkinson, R.L., Atkinson, R.C., Smith, E.E., Bem, D.J. and Nolen-Hoeksema, S. (2000). Hilgard's Introduction to Psychology, New York: Harcourt College Publishers.*
- *Berne, Eric (1964). Games People Play – The Basic Hand Book of Transactional Analysis. New York: Ballantine Books.*
- *Ferrell, O. C and Ferrell, John Fraedrich Business Ethics: Ethical Decision Making & Cases, Cengage Learning (2014).*
- *Duane P. Schultz and Sydney Ellen Schultz, Theories of Personality, Cengage Learning, (2008).*
- *Saleem Shaikh. Business Environment, Pearson (2007).*
- *Chernilam, Francis International Buisness-Text and Cases, Prentice Hall (2013).*
- *Salvatore, Dominick, Srivastav, Rakesh., Managerial Economics: Principles with Worldwide Applications, Oxford, 2012.*
- *Peterson H. Craig. and. Lewis, W. Cris. Managerial Economics, Macmillan Pub Co; (1990).*

a. Other supplemental materials

- Nil

4. Specific course information

- a. Brief description of the content of the course (catalog description)

Introduction to Psychology: Historical Background, Psychology as a science. Different perspectives in Psychology.

Perception and Learning: Determinants of perception, Learning theories, Behavior Modification.

Motivational and Affective basis of Behavior: Basic Motives and their applications at work. Components of emotions, Cognition and Emotion. Emotional Intelligence.

Group Dynamics and Interpersonal relationships.

Development of self and personality.

Transactional Analysis.

Culture and Mind.

Practicals:

1. Experiments on learning and behavior modification.
2. Application of Motivation Theories: Need based assessment.
3. Experiments on understanding Emotions and their expressions.
4. Personality Assessment.
5. Exercises on Transactional analysis.
6. Role plays, case studies, simulation tests on human behavior.

HUMAN VALUES and ETHICAL PERSPECTIVE

Values: Introduction to Values, Allport-Vernon Study of Values, Rokeach Value Survey, Instrumental and Terminal Values.

Value Spectrum for a Good Life: Role of Different Types of Values such as Individual, Societal, Material, Spiritual, Moral, and Psychological in living a good life.

Moral and Ethical Values: Types of Morality, Kant's Principles of Morality, Factors for taking ethical decisions, Kohlberg's Theory of Moral Development.
Analyzing Individual human values such as Creativity, Freedom, Wisdom, Love and Trust.

Professional Ethics and Professional Ethos, Codes of Conduct, Whistle-blowing, Corporate Social Responsibility.

Laboratory Work:

Practical application of these concepts by means of Discussions, Role-plays and Presentations, Analysis of Case studies on ethics in business and CSR.

ECONOMIC PERSPECTIVE

Basics of Demand and Supply

Production and cost analysis

Market Structure: Perfect and Imperfect Markets.

Investment Decisions: capital Budgeting, Methods of Project Appraisal.

Macroeconomic Issues: Gross domestic product (GDP), Inflation and Financial Markets.

Globalisation: Meaning, General Agreement on Trade and tariffs (GATT), World Trade Organisation (WTO). Global Liberalisation, and its impact on Indian Economy.

Laboratory Work:

The practicals will cover numerical on demand, supply, market structures and capital budgeting, Trading games on financial markets, Group discussions and presentations on macroeconomic issues. The practicals will also cover case study analysis on openness and globalisation and the impact of these changes on world and Indian economy.

Micro Project: Global Shifts and the impact of these changes on world and Indian economy.

5. Specific goals for the course

After the completion of the course, the students will be able to:

- Improve the understanding of human behavior with the help of interplay of professional, psychological and economic activities.
- Able to apply the knowledge of basic principles of psychology, economics and ethics for the solution of engineering problems.
- Explain the impact of contemporary issues in psychology, economics and ethical principles on engineering.

6. Brief list of topics to be covered

- Perception and Learning
- Motivational and Affective basis of Behavior
- Value Spectrum for a Good Life
- Moral and Ethical Values
- Investment Decisions
- Globalisation, Macroeconomic Issues