

GUJARAT TECHNOLOGICAL UNIVERSITY

MECHANICAL (INDUSTRIAL ENGINEERING) (46)

INDUSTRIAL PSYCHOLOGY

SUBJECT CODE: 2744603

M.E. 4TH SEMESTER

Type of course: Major Elective - V

Prerequisite: Nil

Rationale: The aim of this course is to make students aware about study of people at work in industry and business, their attitudes and how to motivate them to increase the productivity.

Teaching and Examination Scheme:

w.e.f Jan 2016

Teaching Scheme			Credits C	Examination Marks						Total Marks
L	T	P		Theory Marks		Practical Marks				
				ESE (E)	PA (M)	ESE (V)		PA (I)		
		ESE	OEP			PA	RP			
3	0	2#	4	70	30	30	0	10	10	150

Content:

Sr. No.	Content	Total Hrs	Weightage (%)
1	Introduction to Industrial Psychology: Definition, nature and development of work psychology, basis of job related behavior - individual and situational variables, importance of organizational behavior, organizational behavior models	5	11
2	Individual Behavior: Personality: types, factors influencing personality; Attitudes; Perceptions, factors influencing perception, interpersonal perception; Motivation: Concepts and their application, Principles and Theories of motivation- Different Models of Motivation and their effects on work behavior.	8	18
3	Human Fatigue: Nature of fatigue, Fatigue reduction, Rest Pauses, Environmental conditions affecting fatigue. Economic aspects, Psychological aspects, Job methods, Motion study, Time study, Hawthorne study.	6	13
4	Leadership: Concept, Function, Style & Theories of Leadership - Trait, Behavioral and Situational Theories, Vroom-Yetton-Yago Model.	4	9
5	Work stress: Understanding Stress and Its Consequences, Causes of Stress, Managing Stress.	5	11
6	Job Redesign and new technologies: Human factor approach to job design, Job simplification, job enrichment, job enlargement.	5	11
7	Group Behavior: Analysis of Interpersonal Relationship, Group Dynamics: Definition, Stages of Group Development, Group Cohesiveness, Formal and Informal Groups, Group Processes and Decision Making, Dysfunctional Groups.	4	9
8	Dynamics of Organizational Behaviors: Organizational Change: Concept, Nature, Resistance to change, Managing resistance to change, Implementing Change, Kurt Lewin Theory of Change, Factors affecting organizational	8	18

climate, Job satisfaction. Organizational Culture: Concept, Characteristics, Elements of Culture, Implications of Organization culture, Process of Organizational Culture.		
	45	100

Reference Books:

1. Human Resource Management by Aswathappa K, 5th edition, New Delhi, Tata McGraw Hill, 2008.
2. Essentials of Organizational Behavior by Stephen P. Robbins, Pearson Education Inc., Prentice Hall of India.
3. Industrial Psychology by P K Ghosh and M B Ghorpede, Himalaya Publishing House, Mumbai.
4. Industrial Psychology by T W Harrell, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
5. Organizational Behavior by Fred Luthans, McGraw Hill Book Co., 1998.
6. Organizational Behavior: Human Behavior at Work by Newstrom John W., Tata Mc Graw Hill.
7. Industrial Psychology, Its Theoretical & Social Foundations by M L Blum and J C Naylor, CBS Publishers & Distribution, New Delhi.
8. Organization behavior (Text and Cases) by Dr. S S Khanka, S. Chand & Co. Ltd., Delhi.

Course Outcome:

After learning the course the students should be able to:

1. Understand the concepts and importance of industrial psychology in real life.
2. Understand how to apply motivation techniques in different areas of industry.
3. Know how to evaluate employees.
4. They should be able to understand the concept of recruitment and appraisal.
5. Understand the concept of stress management, leadership and occupational stress.

List of Tutorials:

1. Types of personality and perception.
2. Concept of motivation and its application.
3. Factors affecting stress and its remedies.
4. Leadership concept.
5. Job redesign and its concept.
6. Group dynamics and its effect.

Review Presentation (RP): The concerned faculty member shall provide the list of peer reviewed Journals and Tier-I and Tier-II Conferences relating to the subject (or relating to the area of thesis for seminar) to the students in the beginning of the semester. The same list will be uploaded on GTU website during the first two weeks of the start of the semester. Every student or a group of students shall critically study 2 papers, integrate the details and make presentation in the last two weeks of the semester. The GTU marks entry portal will allow entry of marks only after uploading of the best 3 presentations. A unique id number will be generated only after uploading the presentations. Thereafter the entry of marks will be allowed. The best 3 presentations of each college will be uploaded on GTU website.