Savitribai Phule Pune University Second Year of Computer Engineering (2015 Course) 210249: Soft Skills		
Teaching Scheme: **PR: 02 Hours /Week**	**Credit** **01**	**Examination Scheme:** **TW: 25 Marks**

Course Objectives:
- To encourage the all round development of students by focusing on soft skills.
- To make the engineering students aware of the importance, the role and the content of soft skills through instruction, knowledge acquisition, demonstration and practice.
- To develop and nurture the soft skills of the students through individual and group activities.
- To expose students to right attitudinal and behavioral aspects and to build the same through activities

Course Outcomes:

On completion of the course, student will be able to–
- Effectively communicate through verbal/oral communication and improve the listening skills
- Write precise briefs or reports and technical documents.
- Actively participate in group discussion / meetings / interviews and prepare & deliver presentations.
- Become more effective individual through goal/target setting, self motivation and practicing creative thinking.
- Function effectively in multi-disciplinary and heterogeneous teams through the knowledge of team work, Inter-personal relationships, conflict management and leadership quality.

Course Contents	
Unit I	**Self-Development**

Introduction to soft skills, Self-Management: Self-Evaluation, Self-Discipline, Self-Criticism, Self-Awareness, Self-Esteem, Positive Thinking, Perceptions and Attitudes, Values and Belief Systems, Personal success factors, Handling failure, Knowing Yourself, identifying one's strengths and weaknesses, SWOT analysis, Johari's Window, Career Planning & Goal setting, prioritization,   Managing self – emotions, ego, pride, stress; Personality development.

Unit II	**Communication Skills**

Significance of Communication- types, barriers of communication, effective communication, Verbal and non-verbal Communication, Speaking Skills – Importance of speaking effectively, speech process, message, audience, speech. Style, feedback, conversation and oral skills, fluency and self expression, body language phonetics and spoken English, speaking techniques, word stress, correct stress patterns, voice quality, correct tone, types of tones, positive image projection techniques, Public Speaking, Group discussion, Listening Skills: Virtues of Listening, Barriers and filters, Fundamentals of Good Listening, Reading Skills: Comprehension, reading research papers, Communication in a Digital World.

Unit III	Language and Writing Skills

Vocabulary: One - Word Substitutes, Words often Confused - Pairs of Words, Synonyms and Antonyms, Foreign Phrases, Phrasal verbs derived from the dynamic verbs, Business Writing: Note Making, Letter writing, Writing Formal Letters. Technical Report Writing, Memo, Notices/Circulars Agenda and Minutes of a Meeting, E-Mail, Essay writing. Employment Communication: Job Application, Preparation of CV and Resume writing. Presentation skills: Professional Presentation, Nature of Oral Presentation, Planning a Presentation, Preparing the Presentation, Delivering the Presentation.

Unit IV	Leadership and Team Building

Introduction, Leader and Leadership, Leadership Traits, Culture and Leadership: Salient Features of Corporate Culture, Leadership Styles, Leadership Trends, Team Building: Team Development Stages, Types of Teams: Cross-functional Team, Problem-solving Team, Inter- personal relations: Types of feelings, steps to deal with complex feelings. Assertiveness and Confidence building. Types of Conflict and resolutions. Emotions, emotional empathy and emotional intelligence.

Unit V	Stress and Time Management

Introduction, Stress in Today's Time: Identify the Stress Source, Signs of Stress, Ways to Cope with Stress : Healthier Ways to Combat Stress, Steps to be Taken in the Organizations : Open communication, Time Management, Working towards Your Goals, Smart Work, Prioritize your Tasks,4 Ds of Decision Making.

Unit VI	Ethics, Etiquette and Mannerism

Professional Etiquette: Etiquette at Meetings, Etiquette at Dining. Involuntary Awkward Actions, Public Relations Office(PRO)'s Etiquettes, Technology Etiquette : Phone Etiquette, Email Etiquette, Social Media Etiquette, Video Conferencing Etiquette, Interview Etiquette, Dressing Etiquettes : for Interview, offices and social functions, Ethical Values: Importance of Work Ethics, Problems in the Absence of Work Ethics.

Books:

Text:
1. Gajendra Singh Chauhan, Sangeeta Sharma: Soft Skills – An Integrated Approach to Maximize Personality, WILEY INDIA, ISBN:13:9788126556397.

References:

1. Indrajit Bhattacharya, ―An Approach to Communication Skills‖, Delhi, Dhanpat Rai, 2008.
2. Simon Sweeney, ―English for Business Communication‖, Cambridge University Press, ISBN 13:978-0521754507.
3. Sanjay Kumar and Pushpa Lata, ―Communication Skills‖, Oxford University Press, ISBN 10:9780199457069.
4. Atkinson and Hilgard's, ―Introduction to Psychology‖, 14th Edition, Geoffrey Loftus, ISBN-10:0155050699 © 2003
5. Kenneth G. Mcgee, ―Heads Up: How to Anticipate Business Surprises & Seize Opportunities First‖, Harvard Business School Press, Boston, Massachusetts, 2004, ISBN 10:1591392993.
6. Krishnaswami, N. and Sriraman, T, ―Creative English for Communication‖, Macmillan.

Guidelines for Instructor's Manual

The instructor's manual is to be developed as a hands-on resource and reference. The instructor's manual need to include prologue (about University/program/ institute/ department/foreword/preface etc), University syllabus, conduction & Assessment guidelines, topics under consideration concept objectives, outcomes, guidelines, references.

Guidelines for Student's Lab Journal and TW Assessment

The student must prepare the journal in the form of **report** elaborating the activities performed in the lab. Continuous assessment of laboratory work is to be done based on overall performance and lab assignments performance of student. Each lab assignment assessment will assign grade/marks based on parameters with appropriate weightage. Suggested parameters for overall assessment as well as each lab assignment assessment include- timely completion, performance, punctuality, neatness, enthusiasm, participation and contribution in various activities-SWOT analysis, presentations, team activity, event management, group discussion, Group exercises and interpersonal skills and similar other activities/assignments.

Guidelines for Soft skills Lab Conduction

The instructor may frame assignments to enhance skills supporting career aspects. Multiple set of activity based assignments can be prepared and distributed among batches. Every student must be given adequate opportunity to participate actively in each activity. An exercise can be designed to allow multiple skills exposure for example a group task encouraging discussions, team building, value sharing, leadership and role play all at the same time.

Suggested List of Laboratory Assignments

1.	**SWOT analysis** The students should be made aware of their goals, strengths and weaknesses, attitude, moral values, self confidence, etiquettes, non-verbal skills, achievements etc. through this activity. SWOT Analysis, Confidence improvement, values, positive attitude, positive thinking and self esteem. The concern teacher should prepare a questionnaire which evaluate students in all the above areas and make them aware about these aspects.
2.	**Personal & Career Goal setting – Short term & Long term** The teacher should explain to them on how to set goals and provide template to write their short term and long term goals.

3.	**Public Speaking** Any one of the following activities may be conducted : **1. Prepared speech (**Topics are given in advance, students get 10 minutes to prepare the speech and 5 minutes to deliver.) **2. Extempore speech (**Students deliver speeches spontaneously for 5 minutes each on a given topic) **3. Story telling** (Each student narrates a fictional or real life story for 5 minutes each) **4. Oral review** (Each student orally presents a review on a story or a book read by them)
4.	**Reading and Listening skills** The batch can be divided into pairs. Each pair will be given an article (any topic) by the teacher. Each pair would come on the stage and read aloud the article one by one. After reading by each pair, the other students will be asked questions on the article by the readers. Students will get marks for correct answers and also for their reading skills. This will evaluate their reading and listening skills. The teacher should give them guidelines on improving their reading and listening skills. The teacher should also give passages on various topics to students for evaluating their reading comprehension.
5.	**Group discussion** Group discussions could be done for groups of 5-8 students at a time Two rounds of a GD for each group should be conducted and teacher should give them feedback.
6.	**Letter/Application writing** Each student will write one formal letter, and one application. The teacher should teach the students how to write the letter and application. The teacher should give proper format and layouts.
7.	**Report writing** The teacher should teach the students how to write report .The teacher should give proper format and layouts. Each student will write one report based on visit / project / business proposal etc.
8.	**Resume writing-** Guide students and instruct them to write resume.
9.	**Presentation Skill** Students should make a presentation on any informative topic of their choice. The topic may be technical or non-technical. The teacher should guide them on effective presentation skills. Each student should make a presentation for at least 10 minutes.
10.	**Team games for team building -** Students should make to participate in team activity.
11.	**Situational games for role playing as leaders**
12.	**Faculty may arrange one or more sessions from following:** Yoga and meditation. Stress management, relaxation exercises, and fitness exercises. Time management and personal planning sessions.
13.	**Mock interviews-** guide students and conduct mock interviews

202047: Soft Skills

Teaching Scheme:	Credits	Examination Scheme:		
TH: -- hr/week	**Th/Tut:** --	**TH**	**In-Sem:**	--
			End-Sem:	--
PR: **02** hrs/week	**PR:** 01		**PR:**	--
			OR:	--
			TW:	25

Course Objectives:

- To develop students overall personality.
- To understand and aware about importance, role and contents of soft skills through instructions, knowledge aquisitiion, demonstration and practice.To improve his writing and documentation skills.

Course Outcomes:
On completion of the course, learner will be able to–

- Improved communication, interaction and presentation of ideas.
- Right attitudinal and behaviouralchange
- Developed right-attitudinal and behavioral change

Course Contents

Term Work/Assignments
Term work will consist the record of any 6 assignments of following exercises

1. **SWOT analysis**	**(4 Hrs)**

Student should do his/her SWOT analysis & submit the report.
Method of Execution
Explain the meaning & benefits of SWOT analysis to students. Give them time to think on their strength, weakesses, opportunities & threats. Ask them to write their own SWOT anlalysis

2. **Listening Skills**	**(4 Hrs)**

Listen to a short audio book and make notes out of it & make a report.
Method of Execution
Ask every students to download any freely available english audio book of one hour duration. Also ask them to listen it carefully and write it's review on journal paper

3. Oral presentation skills/Speaking Skills   **(4 Hrs)**
Hold the poster of any inspirational personality & speak about his/her life for five minutes.
Method of Execution
The personality can be from the fields like sports, politics, literature, entertainment etc. Ask every students to read & study about therespective personality & deliver the oral presentation infront of his/her batchmates.

4. Resume writing   **(4 Hrs)**
Design a cover letter & resume for yourself.
Method of Execution
Show some of the different resumes according to respective job profiles to students & ask them to prepare their own resume. Also guide them to write a cover letter for any job application.

5. Corporate / Business Etiquettes   **(4 Hrs)**
Apply to any five internship openings over internet by writing an email to the company HR. Students must submit email print.
Method of Execution: Tell students about any five recent internship openings & ask them to apply for same through email with resume as an attachment. Ask students to take a sent mail print for submission record

6. Group Discussion   **(4 Hrs)**
Organize the group discussion on a current topics in a batch of ten students & ask every student to make minutes of meeting & submit.
Method of Execution: Take some of the current topics for group discussion, divide students in two batches of ten students in each, Allot 10 minutes time & one topic for discussion, meanwhile instructor have to assess each student's performance & give feedback to respective student. Also ask students to write the minutes of the meeting from same GD

7. Team Activity   **(4 Hrs)**
Make a 20 minutes english video documentary & post it on a social media. Also provide the link of the same as submission record.
Method of Execution: Make a group of four students & guide them to choose a topic for making a video documenatry. Video can be posted on facebook, twitter or youtube.The video can be recorded on cellphone as well

Books:

Text:
1. Basics Of Communication In English : Francis Sounderaj, MacMillan India Ltd.2
2. English for Business Communication : Simon Sweeney , Cambridge University Press
3. An Introduction to Professional English And Soft Skills : Das , Cambridge University Press

Reference:
1. A course in Listening and Speaking Vol I &Vol II, V.Sasikumar, P. Kiranmai, Geetha Rajeevan, Cambridge University Press
2. Cambridge English For Job Hunting : ColmDownes, Cambridge University Press
3. The Complete Letter Writer :MacMillan India Ltd
4. E Writing – 21st Century Tools for Effective Communication :Booher , MacMillan India Ltd
5. NASSCOM-Global Business Foundation Skills: Cambridge University Press

214449 : COMMUNICATION SKILLS

Teaching Scheme:	Credits	Examination Scheme:
Practical :2 Hours/Week	01	Term Work : 25 Marks

Prerequisites: Basic knowledge of English Language

Course Objectives :
1. Improve students' overall linguistic & communicative competence in English
2. Enhance their pronunciation, vocabulary and LSRW skills
3. Foster their confidence in public speaking and group communication skills

Course Outcomes :
After successful completion of this course, student will be able to
1. Provides an ability to understand, analyze and interpret the essentiality of grammar and its proper usage.
2. Build the students' vocabulary by means of communication via web, direct Communication and indirect communication.
3. Improves Students' Pronunciation skills and understanding between various phonetic sounds during communication.
4. Understanding the various rules and means of written communication.
5. Effective communication with active listening, facing problems while communication and how to overcome it.

Course Contents

Overview

The course has been designed for the students of second year Information Technology for enhancing their linguistic and communicative competence. It attempts to give them exposure to the essential linguistic and communication skills by focusing upon the key areas of immediate significance. Students will also be given a theoretical knowledge through lectures about the fundamental concepts in the English language & communication such as grammar, vocabulary, pronunciation and LSRW skills. At the same time adequate practical exposure to these skills will be provided through laboratory sessions. The course aims at striking a fine balance between theory and practice to ensure the all-round improvement of students in these skills. Students will be able to improve their command over communicative English which will enable them to enhance their academic performance and will contribute to their growth as engineering professionals.

Teaching Methodology in the Language Laboratory

1. Direct Method – Use of English for communication between the teacher and students. Teachers must emphasize on the use of English in the lab. All the instructions and Interactions must be given in English.
2. Theory lectures should also be interactive and the teacher should encourage students' participation in the classroom sessions.
3. Laboratory sessions should be activity based and should be conducted in groups and pairs. Guidelines for conducting laboratory sessions have been given below each activity.

Unit I: ESSENTIAL GRAMMAR AND PHONETICS (5 hrs)

Tenses: Basic forms and use, sentence formation (general & Technical), Common errors, Parts of speech through context, Direct and reported speech structures and voices, stress & intonation, voice modulation, exercises on pronunciation, use of software for exercises on pronunciation.

Activities:-

- The class of students will always have some students with adequate knowledge of basicgrammar and rest with no/poor knowledge.
- The basic grammar exercises can be taught by giving students sentences in their mother tongue and telling them to convert it to English thereby covering parts of speech, tenses, voices, etc
- The students with acceptable understanding of grammar can be engaged in some advanced grammar exercises like the ones in 'word power made easy' or any online exercises mentioned in the references below.
- For intonation, voice modulation, videos by decent orators /movie clips can be shown to the students.
- For pronunciation, exercises based on Homonyms, homophones can be conducted.

Unit II: VOCABULARY ENRICHMENT (5 hrs)

Exposure to words from General Service List (GSL) by West, Academic word list (AWL) by AverilCoxhead (2000) and specific technical terms related to the field of Information technology. Phrases, idioms, proverbs, significant abbreviations, formal (business) vocabulary.

Activities:-

- Students should be given 10 idioms, proverbs and phrases each and should be told to form story using them.
- Students can be divided into teams. Each team should be told to find out 10 new words/phrases the meanings of which should be discussed in the lab. This exercise can be repeated in the last 10 minutes of each lab session so as to add to the students' vocabulary.

Unit III: WRITING SKILLS

Letter Writing - Business letters, Application letters, Covering letters, Report Writing -Academic and Business reports, Technical Project writing, Job application letter and Resume writing

Activities:- students should be made to write letters in formal and informal way like letters, resume, technical report writing.

Unit IV: LISTENING SKILLS (5 hrs)

Types of listening, Levels of Listening, Listening Barriers, Listening Ethics, activities to strengthen students' listening skills

Activity:-Chinese whisper

Audio activity:-students should listen to any audio and try to answer question based on that audio.

Unit V: READING SKILLS

Definition, need for reading Skills, techniques for reading, how to develop fluency in Reading.

Lab Activities:

Students can be given some text to read and answer questions related to that text.

Students can be made to read a passage aloud and others can be asked questions based on the passage read.

Unit VI: SPEAKING SKILLS

Difference between talking and Speaking, Attributes /characteristics of public speaking, barriers to effective speaking, Types of speaking: Technical and Non-Technical speaking.

Activities:

- **Prepared speech** (topics are given in advance, students get 10 minutes to prepare the speech and 5 minutes to deliver.
- **Extempore speech (**students deliver speeches spontaneously for 5 minutes each on a given topic)
- **Story telling** (Each student narrates a fictional or real life story for 5 minutes each)
- **Oral review** (Each student orally presents a review on a story or a book read by them)

2. Power-point Presentations

Students should make a presentation on any informative topic of their choice. The topic may be technical or non-technical

3. Formal Group Discussion

Each batch is divided into two groups of 12 to 14 students each. Two rounds of a GD for each group should be conducted and teacher should give them feedback.

4. Mock Meetings

In order to enhance students' formal oral communication, mock meetings can be conducted. Teacher should give a topic for the meeting and teach students how a notice and agenda for a meeting is prepared. Students will participate in the meeting assuming the roles assigned by the teacher. After the meeting, teacher should guide students on how minutes of meeting are recorded.

6. Reading and Listening skills

The batch can be divided into pairs. Each pair will be given an article (any topic) by the teacher. Each pair would come on the stage and read aloud the article one by one. After reading by each pair, the other students will be asked questions on the article by the readers. Students will get marks for correct answers and also for their reading skills. This will evaluate their reading and listening skills. The teacher should give them guidelines on improving their reading and listening skills.

7. Pronunciation through software or web-based applications

Teachers should make use of software and web-based applications for giving exercises on pronunciation to students.

8. Vocabulary exercises through web-based applications

Teachers should make use of software and web-based applications for giving exercises on vocabulary to students.

9. Letter, Report & review writing

Each student will write one formal letter, one report and a review on the topics given by the teacher.

10. Grammar exercises through web-based applications

Teachers should make use of software and web-based applications for giving exercises on grammar to students. The term work shall consist of 10 activities carrying 10 marks each. The total marks earned by the students out of 100 will be scaled down to 50. The online exam and term work marks will be further scaled down to 50. Students will have to submit journals or files containing record of each activity performed in laboratory, at the term end.

References

1. Rutherford A. J., " Communication skills for Technical Communication", Pearson Education
2. Meenakshi Raman, Sangeeta Sharma, "Technical Communication – Principles and practice", Oxford
3. Kishna Mohan, "Developing Communications Skills", MacMillan Publishers, 2nd Edition
4. M.S. Rao, " Strategies for improving your business communication", SPD
5. Murphy, " Essential English Grammar", Cambridge
6. Duttet.al, " A course in Communication Skills", Foundation Books
7. Priyadarshani Patnaik, " Group Discussion and Interview Skills", 1st edition, Foundation Books
8. Peter Roach, " English Phonetics and Phonology", 4th Edition, Cambridge

9. Lynch, " listening",, Cambridge
10. Malcom Goodale, " Professional Presentations", Cambridge
11. Ham-Lyons & Heasley, "Writing", 2nd Edition, Cambridge
12. "Idioms and proverbs are fun", Wilco books(author)
13. Whitbeck, " Ethics in Engineering Practice and Research", Cambridge, ISBN-9780521897976
14. Chauhan, "Soft Skills: An Integrated Approach to Maximize", Wiley, ISBN-9788126556397
15. Mishra, "Communication Skills for Engineers", 2e, ISBN – 9788131733844, Pearson

Savitribai Phule Pune University
Second Year of Computer Engineering (2015 Course)
210250: Audit Course 1
AC1-I: Road Safety

Road transport remains the least safe mode of transport, with road accidents representing the main cause of death of people. The boom in the vehicle population without adequate road infrastructure, poor attention to driver training and unsatisfactory regulation has been responsible for increase in the number of accidents. India's vehicle population is negligible as compared to the World statistics; but the comparable proportion for accidents is substantially large.

The need for stricter enforcement of law to ensure greater safety on roads and an environment-friendly road transport operation is of paramount importance. Safety and security are growing concerns for businesses, governments and the traveling public around the world, as also in India. It is, therefore, essential to take new initiatives in raising awareness, skill and knowledge of students as one of the ibid stake holders who are expected to follow the rules and policies of the government in order to facilitate safety of individual and safe mobility of others.

Course Contents:

1. Existing Road Transport Scenario
2. Accident Causes & Remedies
3. Road Accident Investigation & Investigation Methods
4. Vehicle Technology – CMVR & Road Safety
5. Regulatory / Legislative Provisions for Improving Road Safety
6. Behavioral Training for Drivers for Improving Road Safety
7. Road Safety Education
8. Road Engineering Measures for Improving Road Safety

References:

1. ―Road Accidents in India Issues & Dimensions" , Ministry of Road Transport & Highways Government of India   (www.unescap.org/sites/default/files/2.12.India_.pdf)
2. ―Road Safety in India- Insights and analysis", http://indiatransportportal.com/wp-content/uploads/2012/11/Road_safety_2012.pdf
3. Road User's Handbook, ROADS & MARITIME PUBLICATIONS
4. ―Improving Road Safety in Developing Countries", The national Academic Press

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202054 B : Road Safety

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Prerequisites:
1. Awareness about traffic rules and road accidents.
2. Understanding the need of studying such topics.
3. Considerations to other, sensitivity and care while travelling/ driving.

Course Objectives:
- To acquire knowledge and understanding of the road environment.
- To inculcate decision making and behavioral skills necessary to survive in the road environment.
- To impart knowledge and understanding of the causes and consequences of accidents.
- To understand roles and responsibilities in ensuring road safety.

Course Outcomes:
On completion of the course, learner will be able to–
- Generate awareness about number of people dyeing every year in road accidents, traffic rules and characteristics of accident.

- Gain information and knowledge about people responsible for accidents and their duties

- Understand the importance of multidisciplinary approach to planning for traffic safety and rehabilitation

- Acquire a certificate of coordination/ participation in compulsory events based on the topic under study

Course Contents

Unit I: Introduction to Road Safety   **(2 Hrs)**
Road traffic accidents scenario in India and in world. Road Safety and its importance. Traffic Rules and Driving Behavior. Characteristics of accidents, accidents vs. crash.

Unit II: Planning for Road safety   **(2 Hrs)**
Awareness about rules and regulations of traffic. Assisting Traffic control authorities. Multidisciplinary approach to planning for traffic safety and injury control. Vulnerable road users: crashes related to pedestrian and bicyclists, their safety, provision for disabled.

Unit III: Responsibility of Road accidents and Safety measures   **(2 Hrs)**
People responsible for accident prevention: Police, Politicians, Community members, Policy makers, Teachers, Parents, Infrastructure authorities, Drivers and Official road safety body. Reasons of students/ children have accidents. 4 E's of Accidents Prevention: 1. Engineering - by altering the environment 2. Enforcement - by imposing laws 3. Encouragement - by the use of publicity campaigns 4. Education - by gaining and using knowledge.

Unit IV: Road Safety Education	**(2 Hrs)**
Introduction to Road Safety Education. 5 P's of Road safety education: 1. Pre-school road safety education 2. Practical rather than theory education 3. Principles of own development as regards to road safety education 4. Presentations on road safety education 5. Place for road safety education in syllabus	

Unit V: Road Safety Events	**(2 Hrs)**
Discussions on efforts done by Government on Road Safety. Celebration of Road Safety week or Workshop on Road Safety week/ Organization of seminar on Road Safety. This is to be entirely organized by students under the mentorship of concerned Head of the Department.	

Books:

Text:
4. Kadiyali L.R., Traffic Engineering & Transport Planning, Khanna Publishers, 2003

5. CROWN AGENTS Ref: TEA/A369, 1995. (Unpublished contractors report for Ministry of Transport and Communications, Ghana). Road safety study and the institutional strengthening of the vehicle examination and licensing division.

6. TRRL OVERSEAS UNIT, 1991. Towards safer roads in developing countries: a guide for planners and engineers. Crow Thorne: Transport and Road Research Laboratory.

Reference:
3. Indian Roads Congress, Highway Safety Code, IRC: SP-44:1996
4. Indian Roads Congress, Road Safety Audit Manual, IRC:SP-88-2010

List of Tutorials/ Assignments:
6. Discussion and presentations on: Road traffic accidents scenario in India. Traffic Rules and Driving Behavior. Characteristics of accidents, accidents vs. crash.
7. Discussion and presentations on: Assisting Traffic control authorities, Multidisciplinary approach to planning for traffic safety and injury control. Vulnerable road users: crashes related to pedestrian and bicyclists, their safety, provision for disabled.
8. Discussion and presentations on: People responsible for accident prevention, 4 E's of Accidents Prevention.
9. Introduction to Road Safety Education. 5 P's of Road safety education
10. Organization of One Day seminar/ workshop by students on Road Safety. Participation for every student is compulsory. They are expected to prepare brief report of about 3 to 4 pages of this event.

Notes: All above 5 tutorials/ assignments are compulsory

Audit Course-I 204192: Road Safety Management

Road transport remains the least safe mode of transport, with road accidents representing the main cause of death of people. The boom in the vehicle population without adequate road infrastructure, poor attention to driver training and unsatisfactory regulation has been responsible for increase in the number of accidents. India's vehicle population is negligible as compared to the World statistics; but the comparable proportion for accidents is substantially large.

The need for stricter enforcement of law to ensure greater safety on roads and an environment-friendly road transport operation is of paramount importance. Safety and security are growing concerns for businesses, governments and the traveling public around the world, as also in India. It is, therefore, essential to take new initiatives in raising awareness, skill and knowledge of students as one of the ibid stake holders who are expected to follow the rules and policies of the government in order to facilitate safety of individual and safe mobility of others.

Course Objectives:

- Provide basic overview on road safety & traffic management issues in view of the alarming increase in vehicular population of the country.
- Insight into the transportation system management (TSM) techniques.
- Overview of the engineering & legislative measures for road safety.
- Discuss measures for improving road safety education levels among the public.

Course Outcomes:

On completion of the course, society will observe –
- Changes in awareness levels, knowledge and understanding
- A change in attitudes / behavior e.g. against drink-drive;
- Casualty Reduction;
- That remedial education for those who make mistakes and for low level
  offences where this is more effective than financial penalties and penalty
  points;
- Improving Road Safety Together

Course Contents

1. Existing Road Transport Scenario
2. Accident Causes & Remedies
3. Road Accident Investigation & Investigation Methods
4. Vehicle Technology – CMVR & Road Safety
5. Regulatory / Legislative Provisions for Improving Road Safety
6. Behavioral Training for Drivers for Improving Road Safety
7. Road Safety Education
8. Road Engineering Measures for Improving Road Safety

Guidelines for Conduction (Any one or more of following but not limited to)

- Guest Lectures

- Visits and reports

- Assist authorities like RTO for audits (e.g. Particular road safety audit as critical on-site assessment of the shortcomings in the various elements of the road)

- Mini Project

Guidelines for Assessment(Any one of following but not limited to)

- Written Test

- Practical Test

- Presentation

- Paper

- Report

Savitribai Phule Pune University
Second Year of Computer Engineering (2015 Course)
210258: Audit Course 2
AC2-III : The Science of Happiness

Everybody wants to be happy. One can explore innumerable ideas about what happiness is and how we can get some. But not many of those ideas are based on science. That's where this course comes in. The ―The subject ―Science of Happiness" aims to teach the pioneering science of positive psychology, which explores the ancestry of a happy and meaningful life. Clinical psychologists have been dealing with miserable feelings since their discipline was established. In the last 30 years, neuroscientists have made major headway in the understanding of the sources of anger, depression, and fear.

Today, whole industries profit from this knowledge—producing pills for every sort of pathological mood disturbance. But until recently, few neuroscientists focused on the subject of happiness. This course focuses on discovering how cutting-edge research can be applied to their lives. Students will learn about the Intra-disciplinary research supporting this view, spanning the fields of psychology, neuroscience, evolutionary biology, and beyond. The course offers students practical strategies for tapping into and nurturing their own happiness, including trying several research-backed activities that foster social and emotional well-being, and exploring how their own happiness changes along the way.

Course Objectives:
- To understand the feeling of happiness
- To study the sources of positive feelings
- To analyze the anatomy of the happiness system
- To study the effect of thoughts and emotions on the happiness system

Course Outcomes:
On completion of the course, learner will be able to–
- Ability to understand what happiness is and why it matters to you
- Ability to learn how to increase your own happiness
- Understanding of the power of social connections and the science of empathy
- Ability to understand what is mindfulness and its real world applications

Course Contents:

1. Happiness: what is it?	2. The secret of smiling
3. The autonomy of positive feelings	4. Positive feelings as a compass
5. The happiness system	6. Foundations: Emotions, Motivation and nature of Well being
7. Subjective well being	8. Love and well being
9. Optimal well being	10. Religion, Spirituality and well being

References:
1. Happier, Stefan Klein , "The Science of Happiness, How Our Brains Make Us Happy and what We Can Do to Get", Da Capo Press, ISBN 10: 156924328X, 13: 978-1569243282.
2. C. Compton, Edward Hoffman, "Positive Psychology: The Science of Happiness and Flourishing", William, Cengage Learning, 2012, ISBN10: 1111834121.

Savitribai Phule Pune University
Second Year of Computer Engineering (2015 Course)
210258: Audit Course 2
AC2-IV: Stress Relief: Yoga and Meditation

The concepts and practices of Yoga originated in India about several thousand years ago. Its founders were great Saints and Sages. The great Yogis presented rational interpretation of their experiences of Yoga and brought about a practical and scientifically sound method within every one's reach. Yoga today, is no longer restricted to hermits, saints, and sages; it has entered into our everyday lives and has aroused a worldwide awakening and acceptance in the last few decades. The science of Yoga and its techniques have now been reoriented to suit modern sociological needs and lifestyles.

Yoga is one of the six systems of Vedic philosophy. The Yoga advocates certain restraints and observances, physical discipline, breathe regulations, restraining the sense organs, contemplation, meditation and Samadhi. The practice of Yoga prevents psychosomatic disorders and improves an individual's resistance and ability to endure stressful situations.

Course Objectives:
- To impart knowledge about the basic technique and practice of yoga, including instruction in breath control, meditation, and physical postures
- To gain an intellectual and theoretical understanding of the principles embodied in the Yoga Sutras, the Bhagavad-Gita, and other important texts and doctrines
- Relaxation and stress reduction ,Personal insight and self understanding, Personal empowerment, Gaining wisdom and spiritual discernment
- Awakening the abilities or powers of the Super conscious mind

Course Outcomes:
On completion of the course, learner will be able to–
- Students understanding of philosophy and religion as well as daily life issues will be challenged and enhanced.
- Enhances the immune system.
- Intellectual and philosophical understanding of the theory of yoga and basic related Hindu scriptures will be developed.
- Powers of concentration, focus, and awareness will be heightened.

Course Contents:

1. Meaning and definition of yoga – Scope of Yoga - Aims and Objectives of Yoga – Misconception about yoga.
2. Ayurveda: an introduction to this system of health care derived from the Vedic tradition Anatomy and Physiology as they relate to Yoga
3. Yoga Philosophy and Psychology

References:
1. B.K.S. Iyengar, ―BKS Iyengar Yoga The Path to Holistic Health", DK publisher, ISBN-13: 978-1409343479
2. Osho, ―The Essence of Yoga", Osho International Foundation, ISBN: 9780918963093

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<mark>202054: Value Education</mark>

Teaching Scheme:	Credits	Examination Scheme:		
TH: --	Tut:01	TH	In-Sem:	--
			End-Sem:	--
Tutorial: 01 hr/ week	TW:--		PR:	--
			OR:	--
			TW:	25

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Course Objectives:
- To enable the students to understand meaning of values and select their goals by self-investigation based on personal values.
- To enable the students to understand value of truth, commitments, honesty, sacrifice, care, unity, team work and relationship.
- To educate and make the young generation students aware of their social responsibilities.
- To increase awareness among students about environment and create attitude towards sustainable lifestyle.

Course Outcomes:
On completion of the course, learner will be able to–
- Understood human values, their significance and role in life.
- Promote self-reflection and critical inquiry that foster critical thinking of one's value and the values of others.
- Practice respect for human rights and democratic principles.
- Familiarized with various living and non-living organisms and their interaction with environment.
- Understood the basics regarding the leadership and to become a conscious professional.

Course Contents

UNIT 1: Introduction of Value Education   **(2 Hrs)**
Value Education: Definition, Need, Content, Process and relevance to present day. Concept of Human Values, self introspection.

UNIT 2: Salient values for life   **(2 Hrs)**
Truth, commitment, honesty and integrity, forgiveness and love, empathy and ability to sacrifice, care, unity, punctuality, Interpersonal and Intra personal relationship, Team work , Positive and creative thinking.

UNIT 3: Human Rights (2 Hrs)

Universal Declaration of Human Rights, Right to Information Act -2005, National Integration, Peace and non-violence, Dr. A P J Kalam's ten points for enlightened Citizenship. The role of media in value building.

UNIT 4: Environment and Ecology (2 Hrs)

Ecological balance, interdependence of all beings – living and non-living. Man and nature, Environment conservation and enrichment...

UNIT 5: Social values & Ethical values (2 Hrs)

Social values - Social consciousness and responsibility, Consumer rights and responsibilities.

Ethical values - Professional ethics, Code of ethics of engineers, Influence of ethics on family life, Leadership qualities and Personality development.

Books:

Text:
1. Dr. N. Venkataiah, "Value Education", APH Publishing Corporation, 2007
2. M. Govindarajan, S. Natarajan, V. S. Senthil Kumar, "Professional Ethics & Human Values", PHI Learning Press, 2013.

References:

1. Chakravarthy S. K., "Values and ethics for Organizations: Theory and Practice", Oxford University Press, New Delhi, 1999.
2. Man Singh Das, Vijay Kumar Gupta, "Social values among young adults: A changing scenario", MD Publications Pvt. Ltd, 1995.
3. Ram Ahuja, "Social Problems in India", Rawat Publications, 2012.
4. Leah Levin, "HUMAN RIGHTS Questions and Answers", UNESCO Publishing, 2012.
5. P D Sharma, Ecology and Environment, Rastogi publications, 2005.
6. Kalam A P J, Arun Tiwari, "Wings of Fire", University Press Publications, 2003.
7. http://www.ncert.nic.in/recent/env_edu.html
8. http://www.unipune.ac.in/pdf_files/Final%20Book_03042012.pdf
9. https://engineering.purdue.edu/MSE/Academics/Undergrad/ethics.pdf

Term Work shall consist of following assignments:

1. Introduce yourself in detail. What are the goals in your life? How do you set your goals in your life? What have been your achievements and shortcomings in your life? (Observe and analyze by student themselves and write outcome.)

2. Visit to Non Governmental Organizations (NGO), charitable trusts working for welfare of people in society and submit visit report.

3. (a) Presentation given by Teacher in the class on the Dr. A P J Kalam's ten points for enlightened Citizenship.

   (b) Conduct Guest Lecturer on: The role of media in value building and Right to Information Act - 2005 - a Tool for Good Governance. (Make report on seminars outcome)

4. Arrange a **Group Discussion** on topics:
   Energy and natural resource depletion, Environmental pollution, Global warming, Ozone depletion, Deforestation, Soil degradation, Drought, Water harvesting etc. Make a report on outcomes.
   (Each batch is divided into two groups of 12 to 14 students each. Two rounds of a GD for each group should be conducted and teacher should give them feedback. Write outcomes.)

5. Make Report on Code of ethics for engineers, Consumer rights and responsibilities and report conclude with role of Value, value Education and its relevance in present days.