Social Engineering EG 2201 SH

Year: II Total: 2 Hrs./week
Semester: II Lecture: 2 Hrs./week
Tutorial: Hrs./week

Lab: Hrs./week

Practical: Hrs./week

Course Description:

The main objective of social engineering course is to introduce about the Nepal in different aspect. This is an integrated course for diploma engineering level students comprising of social, cultural, history, geography, political, economy, religion, moral science subjects in general.

Course Objectives:

The diploma engineering students will be familiar in the following topics:

- 1. Introduce social science and social study
- 2. Understand economy condition of Nepal
- 3. Know the social and cultural change in short description
- 4. Understand the history of engineering
- 5. Know the professional ethics
- 6. Introduce briefly to the environment, social service, social development and social research

Course Contents:

Unit 1:Introduction to sociology, social study and social science

[5 Hrs]

- 1.1. Introduction, scope and importance of social study, community
- 1.2. Relationship of sociology and social study
- 1.3. Relation between sociology and social science
- 1.4. Difference between social study and social science
- 1.5. Society: meaning, definition and characteristics
- 1.6. Introduction to sociology and rural sociology
- 1.7. Interrelation between social science and physical science
- 1.8. Interrelation between social study and other subjects
- 1.9. Science and engineering
- 1.10. Science and technology
- 1.11. Science and society
- 1.12. Science and religion
- 1.13. Applied sociology

Unit 2: Economy condition of Nepal

[3 Hrs]

- 2.1. How an economic system functions, The theory of demand and supply
- 2.2. Importance of trade, Industry, Agriculture, transportation and communication
- 2.3. Features of economy, agro economy, mixed economy, common economy and phase wise development

Unit 3: Social and cultural change

[6 Hrs]

- 3.1. Meaning of social and cultural change, Theory of origin of society, Culture: meaning, definition and characteristics
- 3.2. Social Norms & Values: meaning, definition and characteristics
- 3.3. Principle of social and cultural change, Theory of social and cultural change cultural values, norms, Discovery, Innovation, Diffusion, Acculturation & Modernization.
- 3.4. Characteristics of social change, Technology and social change, social movements
- 3.5. Factors causing social changes, Type of social change
- 3.6. Impact of Culture Change on Individuals and Communities
- 3.7. Industrialization and social change
- 3.8. Influence of technology in rural social life
- 3.9. Characteristics of industrial and rural society
- 3.10. Concept of urbanization and urban development

Unit 4: Introduction of Social development and services

[4 Hrs]

- 4.1. Meaning and objectives of social development project
- 4.2. Concept of Social development program
- 4.3. Introduction of Social development and community participation in development activities, types of participation, Important of community participation
- 4.4. Social service: definition, types, characteristics and objective
- 4.5. Social worker: definition, types, characteristics and role
- 4.6. Position of women in society social inclusion

Unit 5: Concept of Social survey

[4 Hrs]

- 5.1. Definition, characteristics, Methods, types and objectives
- 5.2. Steps of social survey
- 5.3. Social report writing: Introduction, definition, purpose, formats

Unit 6: Ethics and Moral

[8 Hrs]

- 6.1. Definition of Ethics, Concept of ethics, Major religions of the world
- 6.2. Introduction of Engineering Ethics, Code of ethics
- 6.3. Introduction of Moral and immoral, Meaning of religion, Major religions of the world
- 6.4. Definitions of Utilitarianism, Duty Ethics, Right ethics, Virtue Ethics,
- 6.5. Definitions of Personality Tort, Social Responsibility, Plagiarism & Cheating, Whistleblowing
- 6.6. Ethic and Engineering
- 6.7. Ethics and social responsibility, negligence, tort and duty and liability
- 6.8. Professional Practice in Nepal

Evaluation scheme

The questions will cover all the chapters in the syllabus. The evaluation scheme will be as indicated in the table below:

Chapter	Title	Hrs.	Mark distribution
1	Introduction to social study and social science	05	6
2	Economy condition of Nepal	03	4
3	Social and cultural change	06	8
4	Introduction of Social development and services	04	6
5	Concept of Social survey	04	6
6	Ethics and Moral	08	10
Total		30	40

Textbooks

- 1. Rao C. N. Shanker (2005), Sociology, S. Chand, New Delhi
- 2. Schaefer, Richard T. and Robert P. Lamm (1999), Sociology (6th edition), Tata McGraw-Hill, New Delhi.
- 3. Dominelli, Lena (1997), Sociology for Social Work, Palgrave, London.

References

- 1. Berger, Peter (1963) An Invitation to Sociology, Anchor Books, New York.
- 2. Beteille, Andre (2002) Sociology: Essays on approach and Method, OUP, New Delhi.
- 3. Calhoun, Craig (2002) Dictionary of Social Sciences, OUP, Oxford.
- 4. Giddens, Anthony (2001) Sociology (4th edition), Polity Press, Cambridge.
- 5. Dr. Rajendra Adhikari, "Engineering Professional Practice- Nepalese and International Perspectives" Pashupati publishing house, Kathmandu, Nepal
- 6. Er Santosh Kumar Shrestha and Er Ram Kumar Shrestha 2ndEdition, (Aug2016) "Text book of Engineering Professional Practice" Heritage Publisher and distributors Pvt. Ltd., Kathmandu, Nepal
- 7. M. Govindarajan, S. Natarajan, V.S. Senthil Kumar, (Jan 2015) "Engineering Ethics includes Human Values", PHI Learning Pvt. Limited, New Delhi-110092,
- $8. \ \ \, \underline{https://resources.saylor.org/www.resources/archived/site/textbooks/OpenStax\%20} \\ \underline{Sociology.pdf}$